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THE

MEDICAL TIMES:

A JOURNAL

OF

MEDICAL AND CHEMICAL SCIENCE,

LITERATURE, CRITICISM, AND NEWS.

VOLUME THE NINETEENTH.

OCTOBER 14TH, 1848, TO JUNE 30TH, 1849.

BOSTON, M.A

2003

LONDON:
PUBLISHED BY WM. S. ORR AND CO., 147, STRAND;
AND SOLD BY ALL BOOKSELLERS.

MDCCCXLIX.

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ORIGINAL LECTURES—

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ORIGINAL LECTURES.

LECTURES ON THE RACES OF MEN.

By ROBERT KNOX, M.D., F.R.S.E.,

Lecturer on Anatomy, and Corresponding Member of the French Academy of Medicine.

(Continued from vol. xviii., p. 366.)

HISTORY OF THE CELT IN SCOTLAND CONCLUDED.

A desire to avoid offence, in as far as is consistent with notorious facts and truth, has induced me to prefer offering the opinions of others to my own in respect of the character of this section of the Celtic race. I knew that they progressed not: the hovels they chose to call farmhouses I had visited; the almost indescribable condition of the peasantry was perfectly well known to me; respecting the unalterable character of the people in their present condition I had never for an instant doubted. But, as most of my observations were made several years prior to the date of my first public lecture on the Celtic race, I felt it proper to allow others to speak, whose observations of a much more recent character might refute or confirm my own. I was also aware that the schemers for the education and improvement of the Highlands and Islands of Scotland would attack any one who denied the thriving state of their scheme. The men who translated Bunyan's "Pilgrim's Progress" for the edification of the dreamy, indolent, semi-savage Celt, were just the men to let loose their well-written calumnies against any truth-speaking person. I knew well that haters and despisers of humbug were sure to be assailed by schemers and mob-plasterers. Accordingly, although it was easy to predict that the Scottish Celt would follow, to a great extent, the Free-Church movement, which he did; that he would resort to violence on every occasion of clerical settlement, which he did; that he would be found totally destitute whenever his Irish brethren declared themselves to be so, which happened almost to a day; that, on the slightest scarcity occurring, the Celtic population of Scotland would require to be fed by the Saxon part of the community, which happened as foretold; that he would prefer fourpence a day and nothing to do, to two shillings and sixpence and a fair day's work,—a fact now notorious wherever the Celt is to be found, in Scotland, in Ireland, in France: yet I prefer allowing others to speak on these points, and, for this reason, beg leave to republish the following report from the *Scotsman* newspaper,—a report, I believe, which has never been refuted:—

"INQUIRY INTO THE DISTRESS IN THE HIGHLANDS AND ISLANDS.

"(*From our Commissioner.*)

"LETTER IX.

"Dunvegan, Feb. 3, 1847.

"I am much mortified at there being very little chance of my being able to see the outer islands. The regular packet was wrecked and sunk at Lochmaddy on Sunday week, and at the time I write I cannot learn whether another will be put in its place in time for my purpose. You would suppose that the loss of the established connection between not only Skye, but the whole mainland of Scotland and her group of islands, 'placed far amid the melancholy main,' would create a sensation; but, with the exception of my single self, I cannot find anybody here who considers it a matter worth a moment's thought or a moment's regret that the inhabitants of the Long Island should be as effectually isolated by the ocean from the rest of Scotland as they are from America.

"This day I have seen far more than realized all that reading or hearing had led me to conceive of the deep wretchedness and the extraordinary filthiness of Skye, and more than ever I had been led to conceive of any wretchedness or filthiness existing amongst any tribe of human beings. In company with Mr. Lachland Macdonald, who is catechist in Duirnish, and well acquainted with the abodes of destitution, I visited a number of huts spread over the hills at a place called Roag (you will see the name in Black's excellent travelling map). There are plenty of these huts—by far too many—and plenty of human beings inside of them. In all of them which I entered, the front division—that which has most benefit from the air—is occupied by the cow, and the apartment into which the mother and her family of five or six are huddled is not an adjunct to the cow's byre by a side division, as I had seen before, but is back from it. The dung of these byres had been recently taken out. I shall not offend delicacy by any description of the process of removal, farther than to say that it was not by the use of spade or shovel, or anything resembling spade or shovel, that the work was done. But no farther than the outside of the door is the filth removed, and there it is spread about, as if it were the intention of the people that, except through filth, no access from without should be open, either for themselves or others, to their unhappy dwellings. I happened to arrive after a general emptying; but when the byre is at its fullest, with such a redoubt of filth in front, the little hole in which the human inhabitants are confined will, I should think, fairly bid defiance to Saxon invasion.

"It must not be thought that I have judged of Roag by a solitary case, or an insufficient number of instances: the case is universal. I visited nine or ten cottages, and all of them were in this condition. No breath of air can ever enter the place in which the mother and five, six, or seven young children are immured, until it has first passed through the cow's apartment, which, being nearest to the door, is the roomier, the lighter, and the airier of the two into which these wretched huts are divided. All this is at this moment to be seen by any one who will take the trouble to see it, within between four and five miles of the princely castle of Dunvegan. It is impossible to see it without being filled with melancholy, but it is also impossible to see it, and to know that within the memory of man it has always been the same, and neither better nor worse—for, if it had ever been known to be either better or worse, there would be more hope of its removal—it is impossible to see and know this without being convinced that public subscriptions of the most unbounded liberality will never cure the wretchedness of this country, because that wretchedness is the fruit of no temporary calamity, but of the degradation, the deep ignorance, and the real barbarism of the people. It is impossible to see what is to be seen here without being thoroughly convinced that all that is said about the intelligence and the good principles of the inhabitants is calculated, though not intended, to deceive the public in the civilized parts of Scotland as to their real state of barbarism, and as to the means that must be used, if success is to be hoped for, to raise them above their habitual wretchedness. Of degradation, and ignorance, and barbarism, I have seen here with my own eyes what I would have read with amazement — perhaps with incredulity — in a narrative of travels through countries which we complacently call uncivilized; and, had I learned by information at second hand what I have here seen of the condition of any portion of my countrymen, my unbelief would have prevented me from putting the statement upon paper. Here, huts are erected as if the great object which the builders had in view had been to exclude the air of heaven, and the light of heaven—except in so far as to make darkness visible. Round and round the rude walls no hole is left to let in either of these blessings — the light either coming down the narrow hole in the roof above the fire, or through a skylight of the smallest dimensions. I am heartily sorry to appear to detract from the virtues which more acute inquirers, with perhaps better opportunities of arriving at sound conclusions, have discovered in these unhappy islanders. I am indeed not well able to see what virtues a family sitting in smoke and darkness behind a heap of dung are in a condition to exercise. I am unable to see how, with any honesty or regard for truth, a line of demarcation can be drawn between the character and condition of this portion of my countrymen and the character and condition of the most savage tribes dwelling beyond the bounds to which Christian or even Pagan civilization has reached. They have been described as a grateful people—and I believe they are grateful for kindness received from their fellow-creatures. But surely it is no piece of sentimentality to accuse them of something like an ignorant ingratitude to Heaven, when we find them positively refusing the benefits which are offered as liberally to the beggar as to the prince—which are showered on them by 'free nature's grace.' Here we find the people deliberately, with their own hands, fortifying themselves against both air and light; and while the water is at their feet and around them on every side, and falling from the

mountains and the rocks above them, absolutely refusing to let a drop of it come in contact with their skins. I cannot charge it to poverty but to great ignorance that a man in erecting a hut does not leave a hole in at least one side of the wall, to let in a little light or a little air. I do think that when the byre, which is the front room in these huts, is emptied, that the contents might, by the exertions of the large family that dwell behind the cow, be carried to the back or the end of the cottage at least, and not laid down, in fair front of the door, as a most to defend the approach. I am told by those who know and who love these people that neither precept nor example, neither soft persuasion nor harsh rebuke, will draw or drive them out of these horrible habits; that all these means have been tried, and that all have completely failed. I should still think that it would be a Christian and a philanthropic attempt, and it is an experiment for which a very trifling outlay would be necessary, if two or three cottages were erected in such places as Roag, in which families of cleanly and industrious habits were placed, or even families of ordinary dirtiness, and anything like ordinary idleness—in order, by example and by instruction, to teach the poor creatures around them that air and light are blessings which it is good for the human race to enjoy, and that some cleanliness is better and more comfortable than utter filthiness. I think that this is a small experiment which it might be worth the while of a proprietor, of even limited means, attempting in some of the destitute districts of the Highlands and Islands.

"The parishes hereabout have the reputation of being unhealthy, and a long catalogue of diseases is enumerated as being well known in the district. This is not to be wondered at. With one fact, which I learned incidentally in the course of inquiry into the distress of the cottagers, I was much struck, and I mention it without wishing to draw any positive conclusion from it. In one of the cottages at Roag I found a blind woman with a family; and, in speaking about her condition, I found that no fewer than seven blind women and one blind man were known to my companion in the parish of Duirinish—none of whom had been born blind, and none of whom had lost their sight by smallpox. I wish to press no conclusion of mine on this subject on anybody; but it may surely be a conjecture that a woman who sits from morn to night in a dark hole, enveloped in smoke and gazing into a strong peat fire, is certainly putting herself in the way of injuring her eyesight.

"Returning in the evening from Roag, I saw, about a mile and a half from Dunvegan, a sight at once very singular and not uninteresting. Two separate groups of persons, eighteen or twenty in each, partly men and partly girls, were busily engaged in fishing with rods. The two companies were separated some yards from each other—each standing close together on two points where the shore stretched forward into the deep water. The fish which they catch is the young of the sythe, a fish neither very delicate nor, I believe, very nutritious. In the use of them, however, the poor people show a creditable good management. Some of them are roasted, while others are boiled in a pan, and a drink or gruel is made by the addition of a handful of meal to the water after the fish is taken out. This is not a pleasant beverage, but there is something of contrivance in it. One is more inclined to sympathize with the destitution of Duirinish after seeing these groups of fishers, male and female, actively engaged in their meritorious labour, than by the sight of never so many creatures sitting in filthy huts staring upon burning peats; and I am told that of late these men and girls have been at this work pretty constantly both by daylight and moonlight.

"I should mention that my belief that the women of the Highlands and Islands are less devoted to idleness than the men has been confirmed by several things that I have seen here. I found one mother of a family in Roag weaving on a loom some sort of cloth or blanketing; I have seen others carding wool; and one old woman employing herself in working with what I believe is the spindle of the ancients—an instrument of industry which I had never before had the pleasure of seeing. The operation is both easy and graceful, and would well become the hands of an elegant lady. The time was when princesses took a hand at it in preference to a hand at whist.

"Having felt it necessary, from the strongest conviction of the truth, and the strongest conviction of the advantage of no longer concealing or disguising that truth, to charge the wretchedness of this people on their own debased habits—their indolence, ignorance, and real barbarism—it is but justice to them that I should quote, while at the same time it is but justice to myself that I should venture candidly to criticise, those testimonies which have been borne by persons, who have lived amongst them and known them intimately, to the state of intellect, morals, and religion amongst the people of Skye.

"And to begin with the metropolis, Portree. Of the people there the Rev. Coll Macdonald, who had been minister there for thirty or forty years, tells us—in the New Statistical Account—that 'they are powerfully under the influence of moral principle, so much so, indeed, that heinous crimes are seldom or never seen or heard of amongst them. They are attached to their superiors, obedient to the laws, dutiful and loyal to their sovereign, charitable to the poor, and hospitable to strangers.'

"Now, this a fair catalogue of virtues, and yet Mr. Coll Macdonald admits every special vice which may fairly be charged on the people of Skye as applicable to his parishioners of Portree. He admits every fact upon which I have founded in representing them as vicious and degraded. He fully admits their great filth and great destitution. 'The poor tenants,' he says, 'are almost invariably under the necessity of having their cattle under the same roof with themselves, without partition, without division, and without a chimney; their houses, therefore, are smoky and filthy in the extreme; and having little either of day or night clothing, and their children nearly approaching to absolute nakedness, they are fully as much without cleanliness in their persons as they are in their houses. No people on earth live on more simple or scanty diet than those in this parish. The greater number of them subsist on potatoes of the worst kind, sometimes with, but oftener without, fish.' It is perfectly clear that Mr. Coll Macdonald is no believer in the pithy maxim that 'cleanliness is next to godliness;' nor does he appear duly to have considered the import of many passages in Scripture in reference to the sin of indolence.

"With regard to Bracadale, the Rev. Roderick Macleod, its minister in 1841, and now the popular Free-Church clergyman in Snizort, meets us half way. He rather liberally acknowledges the intellect of the people, but he, at the same time, honestly and fairly condemns their filth, and honestly and fairly admits their perpetual destitution; and, with better logic than most of his clerical brethren, declines to compliment them on their morals or religion. 'The people in general,' he says, 'are shrewd and sagacious, and manifest a good degree of intellect as to the ordinary affairs of life; as to morality and religion, it is yet but a day of small things.' . . . 'The habits of the people are far from cleanly. In their dress they are not different from the other inhabitants of the Hebrides; and as to their food, they are generally considered not ill-provided who can feed on potatoes and salt; and during the last season (1840), even that would have been a luxury to many of them. Regarding their comforts as to clothing, it may be sufficient to mention that, when it was apprehended the cholera would spread to these quarters, inquiries were directed to be made on this point, and there were one hundred and forty families found in the parish who had no change of night or day clothes.' The admissions made here are valuable, coming from a Macleod. I should mention, while speaking of Bracadale, that this is a parish with a decreasing population; that there are both old bachelors and old maids in it—objects of vast rarity in the Highlands and Islands—and that the average number of children in a family is only four. The decrease of the population has been effected by the simple and summary mechanical means of ejection and clearing out, and turning a crowd of little farms into one large piece of grazing pasture.

"Of Kilmuir the Rev. Mr. Macgregor tells us that the people are 'orderly, peaceable, and distinguished for general good conduct. In no place can a population be found more hospitably inclined in their own humble way, or more kind and attentive to strangers. They are naturally shrewd and sensible, and possess considerable acuteness and vivacity of intellect. They are certainly a temperate people, and tainted with few vices.' Yet the extreme wretchedness and the extreme aversion to improvement manifested by this shrewd, and sensible, and acute, and vivacious people are admitted by Mr. Macgregor—who is Celtic enough to believe in the genuineness and to admire the beauty of Ossian's poems.

"Of Duirinish the Rev. Mr. Clerk, now of Kilmalie, tells us that 'the intellectual character of the people is good'—and that their morals are better than those of the people in the Lowlands—though they are getting worse by their intercourse with these Lowlands, which he says is demoralizing the young women, and increasing the number of unbaptized and uneducated children. When, however, we come to Mr. Clerk's particulars, we find that these people who are superior to the people in the Lowlands 'generally live on the poorest and scantiest fare, and many of them for a part of the year are supported mainly by shellfish;' that, 'when every other resource fails them, they live on their wealthier neighbours, some by begging and some by stealing;' that, 'were they enlightened, they would not submit to extortion or to want;' that they are 'deplorably ignorant,' 'destitute of the true spirit of independence, and of the proper ambition to better their circumstances'—'utterly careless regarding the future'—'the reckless slaves of low passions'—'giving themselves up to robbery and rapine;' and that a rural police has been thought of as a thing necessary amongst them—a measure completely unprecedented in the history of the Highlands—(no proof certainly that the history of the Highlands did not require such a measure); that the people—meaning, I presume, the males—do not shave oftener than once a week, and sometimes not so often; that the people seldom wash their faces, and rarely change their clothes; that they only clean out the filth from their cottages twice a year; that you have to climb over a heap of filth before you get to the inmates of these cottages; that they sit on stones, and sleep on the floor; that they do not care how wet their cottages are, provided that the air is excluded; that they place the window-hole where it will admit least light, and when a fresh breeze blows, they stuff it up with a clout and sit in the dark; that the young men spend six months in the year 'in utter idleness,' and that the old men work only in June, July, and August; that, though they are not atheists, 'they are very ignorant of the religion taught in the Bible;' that, for eleven years previous to 1840, the sacrament had not been dispensed in Duirinish; that there were in 1840, two hundred unbaptized children in the parish, and that many of the people regard 'sealing ordinances as of very little importance;' that the parents do not care about having their children sent to school; and that many people apply for parochial relief 'who have no title to it.' This is an abstract of Mr. Clerk's evidence regarding a people of 'good intellectual character'—who are better than the people in the Lowlands, but who are rather suffering some deterioration by intermixture with the vile Saxon. I should like to hear Mr. Clerk describing the morals of a Saxon parish, which must be truly dreadful if they are capable of corrupting Duirinish.

"It is really the fact that here we have a very

degraded people, physically and morally. Stealing is far from uncommon. The other day a shop was robbed while the merchant was 'over the hill;' and the disappearance of sheep and poultry is a matter of ordinary talk, and of no particular abhorrence.

"I might proceed farther with remarks on the strange manner in which the clergymen of Skye have dealt with the character of their parishioners; but the quotations which I have made will suffice to show that, while a general certificate of virtuous and religious conduct is given them, a fair cross-examination forces from the prejudiced and reluctant witnesses—the 'Macleods, Mackenzies, and Macgregors'—the real truth that the people of Skye are an indolent, ignorant, and dirty race; steeped in such wretchedness as never yet fell on a whole people, though it might on individuals, but as the consequence of their own vices; that they cannot be said to be under the influence either of Christianity or of civilization, and that it is only from a vast moral and intellectual reformation that we may hope to see their poverty alleviated in any sensible degree. At such a conclusion I hardly think that it would have been rash to have arrived without the aid of any native testimony. It is surely no great presumption to say that an idle and dirty people are not a moral and religious people; and that a people who have lain for a century in dirt, darkness, and sloth, with full contentment and without shame, while all around them their neighbours were stirring, and labouring, and advancing in comfort, have not been a very intellectual, industrious, energetic, acute, and vivacious people. To speak of the intellect and the virtues of such a people, is to abuse the public ear by using common terms in a sense completely opposed to their plain and universally-received meaning. It is a more laudable work to set about making them, if possible, intellectual and virtuous."

CLINICAL LECTURE ON A CASE OF RENAL CALCULUS.

By Dr. LEES, Physician to the Meath Hospital, and Lecturer on Theory and Practice of Medicine in the Original School of Medicine in Peter-street.

GENTLEMEN.—As I have had under my charge in this institution several important affections of the kidney, I purpose to make a few clinical remarks on those cases which present the most interesting and instructive features for our consideration; and, as in some of these the diagnosis was confirmed by the subsequent autopsy, I am enabled to exhibit to you the morbid specimens and drawings, which will serve further to illustrate the brief remarks I am about to submit for your instruction.

I purpose to call your attention to-day to the case of Clarke, who, you recollect, suffered under calculus in the kidney of long standing, the history of whose disease I will first detail to you; I will then, *seriatim*, examine the symptoms and their causation, explain the treatment to be pursued, and direct your attention especially to those points which should guide you in the diagnosis; and by referring occasionally to authorities on this subject, and also to similar cases which have occurred to me in private practice, I hope thus to remove, in some degree, the obscurity which rendered the real nature of this poor man's affection, at first, doubtful.

CASE.—W. Clarke, aged forty-eight, a car-driver, was admitted under the care of my colleague, Dr. Stokes, for bronchitis, and from him was transferred to me. He states that, when a soldier in Africa, he contracted fever about twenty years ago, and at that period he suffered from some urinary affection, causing occasional retention, with severe pain in the loins and region of the bladder. He was discharged from further service in the army, and, gradually recovering, remained in good health until about six years since, when the pain in the lumbar and pubic regions returned with increased severity, accompanied by obstinate vomiting, which persisted for three days, when, after violent straining, he voided a minute calculus by the urethra. The urgent symptoms immediately subsided, and he again experienced relief from his sufferings until about three months since, when the symptoms manifested themselves which existed on his admission into hospital. He complained of a constant dull pain in the right lumbar region, severe pains in his feet, cough, and morning vomiting; he passed his water without difficulty; the urine is large in quantity, of a pale colour, alkaline when secreted, albuminous, sp. gr. 1·007; a copious deposition of white gravel subsides to the bottom of the vessel, while an iridescent pellicle floats on the surface. On microscopic examination of the sediment, it disclosed the characters of the triple phosphate. He was ordered dilute nitric acid, with generous diet. Under this treatment he was progressing favourably, when, unfortunately, he was attacked with erysipelas of the face and fauces, which subsided under the usual treatment. It, however, reappeared on the head and face, and, although the most active treatment was used, he gradually became comatose and died.

Autopsy.—The usual morbid appearances were visible which present themselves in cases of death from erysipelas of the head and face; and here, gentlemen, are the kidneys. You perceive that both present evidences of considerable congestion and enlargement; the right has been laid open, and in it, you observe, is a calculus about the size of a lozenge, elongated, curved at the extremity, firmly imbedded in the substance of the kidney; and the whole organ is evidently passing through the stages of granular degeneration. The bladder presents nothing remarkable; but the mucous membrane lining the pelvis of the Kidney and commencement of the ureter is of a dull-white colour, and slightly thickened.

Now, gentlemen, you may recollect that my attention was first directed to this man by observing him vomiting as I passed through the ward—a symptom of which he complained but little on his admission, as he stated that he was quite accustomed to it, and attributed its presence to the exertion used in coughing. However, this well-marked incident induced me to investigate his case minutely; and combining this with the constant pain in the lumbar region, the alkalinity of the urine, the copious phosphatic deposition, I concluded, and justly as the event proved, that these signs and symptoms were to be referred to the existence of a calculus in the kidney.

I will now proceed to examine the symptoms *seriatim*, and amongst the most prominent is vomiting. This, I have no doubt, arose from the mechanical irritation of the tubular structure of the kidney by the phosphatic crystals; and in this irritation the stomach participated through influence of the splanchnic nerves, from which both the renal and gastric plexuses are derived. Hence these two organs are intimately associated in their sympathies during disease, and, mutually reacting on each other, afford an easy explanation of the cause of vomiting in renal irritation. This symptom is, further, of great utility in assisting us to distinguish the irritation of a calculus from the effects of simple chronic nephritis. Here there is languor, a cachectic appearance, perhaps pain in the loins; the urine pale coloured, alkaline, often albuminous, but without vomiting. And here I may digress, I think, with advantage, to mention that Rayer conceives the alkalinity of the urine, when secreted, as particularly diagnostic of chronic nephritis; therefore I would impress on you not to rest satisfied with testing the urine, even though but a brief interval has elapsed since its excretion, but desire the patient to pass water, and then test it as it flows from the urethra. There is another affection with which it might also be confounded: I allude to that derangement usually connected with a gouty diathesis, evidenced by the formation of lithic-acid gravel; but by the previous history, the age of the patient, and the microscopic examination of the deposit, you will be sufficiently guided in the diagnosis.

The symptom which we will next examine is pain in the loins. On this subject Sir Benjamin Brodie truly observes, "that there is nothing in practice which you will be so often consulted about as pain in the loins;" therefore I would advise you to be slow in concluding that a patient has diseased kidney, simply because he complains of pain in the back, as this can only assist us when in combination with other symptoms. The gouty debauchee, the married female, the hysterical girl, the athletic man, the victim of lumbago, all complain loudly of pain in the back, although there may not be slightest organic change in the kidney; but by a little attention these may be easily diagnosed. Thus the pain in lumbago is usually situated on both sides, aggravated by motion; there is an absence of urinary irritation.

Again, pain in the back is a prominent symptom in aneurism of the abdominal aorta, also in rheumatic inflammation of intervertebral cartilages and vertebræ; and, to prove to you the difficulty of arriving at correct conclusions occasionally, I may observe that Sir Benjamin Brodie, with great candour, mentions a case which he and Dr. Prout diagnosed and treated as calculus, which ultimately proved to be caries of the vertebræ; and, further to show you how fallacious and deceptive those sympathetic pains about the back and loins may prove, Dr. Prout mentions that he has seen the whole pain and uneasiness referred to the side opposite to that in which the disease existed, and has actually known more than once a seton inserted over the sound kidney.

I have now, gentlemen, disposed of the local symptom under which the patient laboured, and, proceeding to the analysis of his constitutional symptoms, I would particularly direct your attention to the general cachectic condition of his system, combined with the great nervous irritability he evinced. His temper was peculiarly fretful, irritable, and morose—in fact, highly expressive of what is termed a phosphatic diathesis. The nurse and even the patients bitterly complained that nothing would satisfy him—that he was always grumbling. The bronchitis, which was his sole source of complaint, if not caused by, at least was intimately connected with, this irritable state of the nervous system; for there was no proportion between the apparent suffering caused by the bronchitis and the physical evidences discoverable by auscultation—the former being excessive, the latter being trivial. Nor did the symptoms yield to the usual treatment with the facility which we would anticipate in simple bronchitis.

Dr. Prout truly observes, with respect to nervous irritability, that "It is displayed in various ways, according to the idiosyncrasy of the patient. In some individuals it assumes the form of spasm of the respiratory organs, more or less resembling asthma; in others it shows itself in the form of spasmodic and irritable action of the bowels, accompanied by borborygmi, flatulence, and sometimes by copious, exhausting, semifluid stools. In all instances there is more or less of a sense of debility and of sinking or exhaustion, with fatigue and pain in the back on the slightest exertion." He also states that he has several times seen in the same individual a severe asthmatic affection suddenly cease on the appearance (generally from local exciting causes) of the phosphates in the urine.

I will now pass to the physical characters of the urine, which materially assist us in diagnosis. And here there existed important characters which deserve especial attention. The secretion was in quantity excessive, alkaline when passed, of a low specific gravity, albuminous, and depositing a copious white gravel, soluble in acids, precipitated by heat, of a palish white colour—in fact, presenting all the characters of phosphatic urine, and affording a good example of the coexistence of those deranged actions by the influence of which the phosphates are deposited and albumen appears as a morbid product in the urinary secretion, and exhibits one of the numerous complications which may accompany albuminous action. This coincidence involves some nicety in the examination of the urine; for, as the

fluid was alkaline, the albumen was not coagulable by heat, which merely rendered it turbid, by causing a deposition of the phosphates; but I have frequently shown you the means of distinguishing the turbid state of phosphatic urine induced by heat, from albuminous urine in the progress of coagulation, by the addition of dilute nitric acid, which at once dissolves the phosphates; but in this case the coincidence of albumen with phosphates compelled me to adopt the following expedient, which I am sure was quite intelligible even to the most junior student amongst you:—I first precipitated the phosphates by heat; then dissolved them in acetic acid, which has no effect on albumen; and finally coagulated the albumen by dilute nitric acid, proving by demonstration the existence of both abnormal elements in the urine.

The urine was also peculiar in depositing a copious sediment; for this is a rare circumstance when the urine is abundant and of low specific gravity, although, on the application of heat, it may become turbid and deposit phosphates. Now, in this case, you may recollect that every morning the bottom of the vessel was covered with a white stratum of variable thickness, forming an exception to the general rule, as the urine was here large in quantity, with a low specific gravity.

The importance of the microscopic examination of the deposit I can only briefly allude to. Crystals were clearly visible, and consisted of the triple phosphate, varying somewhat in form, but all more or less of the prismatic character. By casting your eye on the diagram before you, an enlarged view may probably facilitate your recollection of the form of the triple phosphate under the microscope. In this case an amorphous powder, consisting of phosphate of lime, also increased the deposit. Well, gentlemen, the presence of earthy sediments is highly important, as they always indicate serious functional, if not organic, mischief progressing in the system, particularly so if, as in this case, the urine be alkaline and the deposit constant, as this is strongly expressive of profound depression of the nervous system. But, on the other hand, I wish to acquaint you with the fact that a copious deposition of the phosphates may accompany some forms of dyspepsia; but here the deposits are not constant, disappearing and recurring in the course of a few days; the urine is acid, of a deep colour, and high specific gravity; but in this case the secretion was quite the reverse, and so constant and well marked that I stated to you, at the bedside of the patient, that he suffered from phosphatic calculus, causing chronic inflammation of the mucous membrane of the pelvis of the kidney, and also of the calices, with, probably, granular degeneration. The examination of the body confirmed my diagnosis, as we found a calculus of triple phosphate impacted in one of the calices extending into the pelvis. Chronic inflammation of the mucous membrane and its effects were quite evident, and also a yellow deposit involving the cortical structure of the kidney.

In concluding my remarks on the symptoms in this case I must mention that the characters considered generally as symptomatic of calculus were absent, namely, pain in the course of the ureter, retraction of testis and bloody urine; but it is probable that the fact of the calculus not having entered the ureter sufficiently accounts for the absence of pain in this direction, and, the calculus being smooth and free from asperities, satisfactorily explains the absence of hæmaturia. It is, indeed, the large phosphatic calculi that may form in the kidney without the occurrence of hemorrhage or symptomatic irritation, as long as they remain confined to the kidney. Thus in the case of a young man, whose kidneys I exhibited at the Pathological Society, both were filled with calculi, so that scarcely a vestige of the normal structure of the kidneys remained; and yet he never passed blood with his urine, and remained free from any symptomatic irritation except a dull pain in the back, until a few days before his death, when the stomach became irritable, but without retraction of the testicle.

The chemical examination of the calculus in Clarke's case was satisfactory, as when reduced to powder it readily fused into a white enamel, proving thus that it was composed of triple phosphate and phosphate of lime. Now, renal calculi composed of the phosphates are not of common occurrence, and almost always contain, when present, a large proportion of phosphate of lime, usually secreted from the mucous membrane of the pelvis of the kidney, and is not, therefore, of urinary origin; whereas the triple phosphate (which is of urinary origin) is an induced state—the result of diseased function; and hence we derive important indications for our treatment; for though you might suppose, from the alkaline state of the urine, that a vegetable and acescent diet should be enforced, yet, as we know that the deposition of phosphates indicates a depressed state of the system, so we find that nutritious diet—solid animal food, cider, and wine—is the most suitable under the circumstances. With respect to medicines, acids appear to be chiefly indicated, but even they often appear powerless to restore the acidity of the urine. I used the dilute nitric acid in this case, and I usually prefer it, as it generally agrees well with the stomach, and is most likely to restore the natural features of the secretion. To allay irritation, I gave him at night camphor and hyosciamus, with an occasional anodyne of acet. opii, and applied a belladonna plaister to the loins: in fact, the treatment was palliative and preventive, as I desired, first, to improve his general health, and thus correct the tendency to the phosphatic diathesis, before proceeding to the adoption of those means calculated to promote the expulsion of the calculus from the kidney by the ureteric canal into the bladder. The means adopted to induce this change I will defer until I have an opportunity of directing your attention practically to it in the wards.

LECTURES ON THE ASIATIC CHOLERA.

No. I.

Its History, Mortality, and Geographical Route, with a General Comparison of the present with the former Epidemic.

By GEORGE ROSS, Esq., Author of "Papers on Typhus Fever," and "Essays on the Processes of Digestion and Nutrition," &c.

(Continued from vol. xviii., page 368.)

The epidemic did not appear in the metropolis, with the exception of one or two stray cases, until the first week in February, which is generally in this country the coldest season of the year. At the onset it was extremely fatal: most of the cases that occurred died. According to the report of the Central Board of Health, dated March 28, 1832, the ratio of deaths to cases was, on the north side of the river, as high as 60 per cent. In Shadwell, out of 20 cases, 17 died; in Limehouse, 19 out of 25; in Chelsea, 21 out of 27; in Whitechapel, 42 out of 62. In Southwark not less than 616 cases had occurred up to that date, out of which there were 295 deaths, in the ratio of 47·8 per cent. We may observe, as we proceed, that the per-centage of deaths to cases was much lower on the Surrey side of the river than on the Middlesex side—a point that will command our attention at a future time. The whole number of deaths from cholera that happened in the metropolis during the sojourn of the epidemic, so far as I have been able to collect them from the reports of the Board of Health, a report by Mr. De Graves for the city of London, and "A Report on the Capabilities of the Metropolitan Workhouses for the Reception and Treatment of Cholera Cases" (recently published) amounted to 9008, in the ratio of 1 case to every 177 persons.

The cholera, however, nowhere fell with such desolating intensity in any part of the British empire as in Ireland. Poor Ireland! evermore the victim of every kind of physical or social scourge! It is scarcely possible to depict the dread with which that susceptible people were agitated by the devastating progress of the pestilence in their principal towns. Sligo, Cork, Dublin, Belfast, Coleraine; all were ravaged by it with more or less severity. The accounts of the epidemic at Sligo are exceedingly afflicting. People died so rapidly that there was no time to make them coffins, and forty or fifty were huddled together in one pit. Tarred canvas was at the same time a shell and a winding-sheet; the hollow ceremonial of a funeral procession among the most affectionate and superstitious people on the earth's face was reluctantly dispensed with; the cholera-cart passed by, and the corpse was thrown into it to be deposited in the general grave. Seven medical practitioners out of thirteen died within a few days. Sixteen thousand from among 18,000 inhabitants fled from the city to the adjacent heaths and hills; many carried their goods and chattels with them, and either fitted up a temporary tent, or sought refuge in distant towns and villages; others, without furniture, bedding, or money, were glad to live in the woods and sleep under the hedges; and hundreds, flying from the cholera, escaped to die of starvation. Rich and poor, educated and ignorant, alike yielded to the general terror. Even in those towns where the pest had not yet raged the consternation was scarcely less vivid; hospitality and mirth had given place to fasting and sorrow; a universal gloom extinguished the natural gaiety of the people. Dr. Howison, a writer of the period, has graphically described the situation of Ireland at this time. He says, "The melancholy state of the streets, deserted by the inhabitants, most of the few who remained being in mourning; hearses passing continually by day, and the noise of the wheels of cholera-carts rattling at a gallop over the causeway, under the windows, in the night-time, carrying individuals to the hospital, appalled the strongest minds." "The master of the house," where he stayed at Londonderry, "a very sensible literary man, actually wrote his will, brought it down stairs before we sat down to dinner, and gave it to his wife in my presence, and before his family, informing us that his feelings were that as soon as the disease had made progress in the town he would be attacked." However, the disease did not come, and he was spared. Londonderry stands on a hill, is a fine clean town with broad and airy streets, and is washed by the Foyle—a broad limpid river, running over a stony bed; hence the immunity of this fortunate city.

If such was the spoil of the pestilence in Ireland during its first visitation, we cannot expect that its ravages will be less extensive on its next invasion. Circumstances have prepared its path, and lent it the weapons for a wide-spread devastation. It is well that the cry of former sufferings should be recalled, that men may be roused from their insensibility to a full appreciation of the horrors of this appalling scourge.

This brief sketch will probably be deemed sufficient to place before the mind a faithful picture of the progress of this eventful epidemic. An absence of sixteen years has almost obliterated the remembrance of its terrors; and yet in every respect, in extension, virulence, and fatality, it is the same pestilence that rages in Europe at this moment, and that, according to the reports in the public papers, is agitating the spirits of the burgomasters of Hamburg more than the losses of commerce or the afflictions of war. Its presence will revive our alarms; let us be prepared to meet it.

COMPARISON OF THE FORMER WITH THE PRESENT EPIDEMIC.

I have collected a large number of facts relating to the two epidemics, and I have no reason to think that, on the present occasion, it is in the slightest degree milder than it was in 1831-2: on the contrary, grave apprehensions may be felt of its prevailing now with even greater intensity. The epidemic has not yet finished its havoc in Russia, yet according to the official reports, during the four months from April to August, there have been 505,328 cases, and

210,836 deaths; and there still remain under treatment 69,344 persons; which, assuming that those remaining under treatment will die nearly in the same proportion as the others, will give a ratio of about 46 per cent. of deaths to cases. But there can be no doubt that these numbers merely approximate the truth. Tens of thousands die whose cases are never recorded in official documents. Even in St. Petersburg, under immediate governmental inspection, this is stated to be the fact; and, from what we know of men and administrative systems, we may conclude that the statement is true. However, according to these official accounts, in one month, from the 30th of June to the 31st of July, 19,772 cases occurred in St. Petersburg alone, among which there were 11,068 deaths, in the ratio of 55·9 per cent! This is a high mortality—a terrible devastation! St. Petersburg lies on a low level—a swamp; and it now pays the penalty of Peter the Great's vaunted sagacity. He chose a site adapted for the purposes of war and commerce, and left an inheritance of misery to his people. When will medicine have a seat at the councils of princes? Soon! The Roman fable of their second king and his mystical nymph Egeria had a latent meaning which will be realized in the governments of Europe after a period of three thousand years! So slow is the progress of civilization; so wide the interval between philosophy and fact!

At Stettin the number of cases from the 8th of August to the 5th of September has been 652; the deaths, 433; remaining ill, 109; and, assuming that the deaths among the latter will bear the same proportion as before, it will give a mortality of 78 per cent.! At Berlin the number of cases up to the 8th of September has amounted to 784; deaths, 484; remaining ill, 205; and, calculating in the same manner as before, we get 77·6 per cent. as the ratio of deaths to cases! This mortality is enormous, and from among the same number of cases in Germany, at least, was not approached during the last epidemic. The accounts from Asia Minor rival the most appalling relations preserved of the last visitation. Smyrna is desolated; the shops and bazaars are closed; there is an entire stagnation of business and social movements; 40,000 persons have fled from the city, and the rest are dying daily by hundreds. Robbers, indifferent to the danger, scour the city, and make a prey of all that fear or cupidity neglected to remove. The dead lie unburied and infect the living; the robber will speedily surrender the tombs to the hungry jackal. Do not these facts call out in a tone of thunder to us, who are now slumbering in the midst of this awful devastation? Our isolation seems to make us self-confident and insensible to the coming danger.

THE GEOGRAPHICAL MARCH OF THE EPIDEMIC.

The steady and regular progress of the epidemic on both occasions is a subject of singular interest, and is pregnant with matter for philosophical research. It partakes of the character of a law. What agent is it that thus traverses the world with such uniform pace, route, and intensity? It is no chance child of local pollution; it is not the peculiar denizen of the marsh and the jungle; it is not generated in filthy cities; it is the common enemy of mankind in city, camp, and field, in the Indian jungle and the English pasture; in the hot calcareous plains of Persia, the burning sandy deserts of Arabia, and the cold larch forests that clothe the hills of Siberia. It has advanced steadily against the Indian monsoon, and has neither been killed by the meridian heat of the tropics, nor by the chilling frosts of a northern winter. It luxuriates, however, in a damp atmosphere, and in a temperature hot, but not too elevated. It prevails in Bengal chiefly during the rainy season, from June to October.

The geographical route of the epidemic, as indicated by the course of the great mountain ranges, affords matter of great interest to the scientific practitioner. It seems to have emerged from Hindostan towards the West by two channels, one to the north, through the defiles of the mountains of Caubul, conveying it to Bucharia and the Caspian Sea, and the other to the south, over the plains of the Indus, introducing it to Persia and Arabia. The latter stream, pursuing the valley of the Euphrates, approached Mount Taurus, then bent its course between this chain and the coast of the Levant, attacking the towns of Asia Minor on the one hand, and by the valley of the Tigris to the towns on the Black Sea, on the other. This stream, sweeping along the southern shores of the Euxine, and entering Europe, crossed Turkey, bounded to the north by the Carpathian Mountains, and to the south by the great Illyrian ridge and the Adriatic Sea. Its greatest havoc in this direction has been along the centre of this course in the deep valley of the Danube, by which route it reaches Vienna.

The upper stream, spreading along the northern shores of the Caspian Sea, runs up the valley of the Volga for a short distance, to near the spot where the river approximates the Don, and then shoots across the centre of Russia to the northern declivities of the Carpathian Mountains, encircling Europe as by a belt between the 48th and 55th degrees of latitude. The high land, running diagonally to the north-east through the centre of Russia, is less affected than the southern plains between the Volga and Dnieper, though it is not exempt from the ravages of the pestilence as, Moscow proves.

The streams of the epidemic seem to run in channels formed by these great geographical valleys. In Europe another great stream runs from north to south in the direction indicated by the Norwegian mountains and the ridges of Northern Russia, and along the course of the Baltic Sea, whose waters fill the bed lying between these high natural boundaries. This stream descends from St. Petersburg to the Vistula, where it unites with the central stream, and they fall together with aggravated intensity upon the cities of the Baltic and the towns of Germany. Its greatest virulence is exerted between the 52nd and the 55th degrees of latitude, embracing in this course the most violently affected parts of Russia, Warsaw, Dantzic, Berlin, Stettin, Hamburg, Sunderland, Newcastle, Liverpool, Sligo, &c., in which towns the former and the present epidemics have exhibited their greatest malignity.

Can philosophy afford us no explanation of these observations? What are the mineralogical peculiarities of these huge belts of the earth? In England the epidemic fell with its greatest violence on the coal and iron districts, for example, independently of the northern towns, the mortality in England was highest at Bilston in Staffordshire, a town filled with forges for ironworks? Merthyr Tydvil, in Wales, was also conspicuous for its high mortality in comparison with the adjacent towns. Is it not so, also, in Berlin? May there not be a mineralogical strata taking this course in the interior of the earth, and evolving electrical conditions productive of this disease? This is a mere inquiry? The notion is crude. Similar notions have been elaborated into the flimsy texture of subtle hypotheses. We want facts. Mere theories are contemptible. We may rely upon it that we shall never understand the caprices, nay, the laws of epidemics, until geological and the physical sciences generally are more closely associated with the study of disease. Curious statements have been recently made in reference to the power of the magnet in St. Petersburg during the prevalence of the epidemic? Are these statements facts? And, if facts, are they mere accidents, or universal concurrents of the pestilence? If universally concurring, are they then the causes of the malady? There are many observations to be made, many facts recorded, and many questions to be answered, before the lucubrations of theorists will deserve any respect.

(To be continued.)

ORIGINAL CONTRIBUTIONS.

EXCISION OF THE PROXIMAL END OF THE FIRST PHALANX OF THE GREAT TOE.

By H. HAYNES WALTON, Esq., F.R.C.S., Surgeon to the St. Pancras Royal General Dispensary, and to the Central London Ophthalmic Hospital, &c.

The following details, although of a very minor surgical operation, embody a point of practical importance that renders them worthy of record:—

William Russell, aged fifty-two, a plasterer, admitted at the St. Pancras Dispensary, May 30, 1848.

Symptoms.—The great toe, inner and anterior portion and instep of left foot, are considerably swollen. Corresponding to the under part of the metatarso-phalangeal articulation is an aperture about the size of a crow's quill, through which is detected carious bone. He suffers much pain, and is unable to put his foot to the ground.

History.—Last September, after a hard day's walk, the great toe swelled, inflamed, and became very painful. Then the other parts of the foot were included in like disturbance. On applying to an hospital, a puncture was made where the sinus now exists; only blood escaped at the time, but subsequently there was a purulent discharge, which has continued, more or less, ever since. For eight months he has been obliged to relinquish his occupation. A few days before his admission he observed a small fragment of bone in the discharge.

Under the impression that the caries was very limited, and probably existed in the articular end of the metatarsal bone, I determined to cut down to that part and remove as much as seemed diseased. The operation was performed on the 10th of June. I discovered, however, that the metatarsal bone was healthy. It was the proximal end of the first phalanx of the great toe that was carious, about a third of which I excised.

Considerable hemorrhage ensued, and, after fruitless attempts to secure all the bleeding vessels, compresses were resorted to. The wound, which was rather large, healed kindly, though slowly, the process extending over a period of eight weeks. Neither splints nor bandages were required during the after treatment; a proper position of the toe was naturally maintained without such appliances.

Present Condition, Sept. 28.—The foot has nearly returned to its natural size, a little swelling in the sole only remaining. The toe is shortened, but not altered in its direction. There is intimate connection between the metatarsal bone and the reduced phalanx; probably true anchylosis. He walks with a limp, there being yet tenderness when the weight of the body is transmitted to the end of the foot, but each successive week renders his walking better.

REMARKS.

It is evident, therefore, that a portion of the proximal end of the great toe, when diseased, can be removed with advantage; it being unnecessary to sacrifice the remainder of the toe. I am not aware that, hitherto, such a procedure has been resorted to. If, as I first thought, the disease had been in the metatarsal bone, the greater part or the whole of its head might have been removed and the toe saved—the operation being justifiable, and, therefore, useful; but the result would not have been so favourable as in the case under consideration, since the main support of the anterior portion of the foot must have been lost.

Mr. Liston states, "Practical Surgery," edit. 4, page 375:—"Disease is often situated in the articulation of the proximal phalanx, more especially of the great toe, which is not to be wondered at, considering its exposed situation, and its liability, from the immense strain and weight thrown upon it, to be wrenched or twisted; on that account it is often necessary to remove part of the metatarsal bone along with the toe."

There is some obscurity in the latter part of this sentence, but it does not destroy what I wish to show, that, with disease of the proximal phalanx, the author would remove the remaining portion of the toe, and so would any good surgeon, were the entire phalanx implicated; but since no allusion is made to extent of disease, whether part or the whole of the bone be affected, I presume that he would have adopted the same measure in the case under consideration.

We possess full evidence that, with disease of the articular surfaces of the metatarsal bone and the phalanx, much of the toe can be saved and rendered useful. Dr. Pancoast, of America, has removed the joint under such circumstances; the patient made a good recovery, anchylosis ensuing.

Of course, were it necessary to take away much more than the head of the metatarsal bone, it must not be expected that a portion of, or the entire, toe could be of any use, if saved. It would, indeed, be worse than useless; for, independently of having lost its support, the action of its muscles would greatly destort it. Much of the usefulness of the operation must, I think, depend on the parts anchylosing; and, therefore, this point should be looked to during the treatment, and such means adopted as will prevent motion of the toe; and although in this case I did not use a splint, and, notwithstanding, anchylosis was the result, I should in future employ one. I have to thank my friend Mr. John Deane Baker for attending to the patient from the time of the operation to his discharge.

13, Bernard-street, Russell-square, Sept. 29.

ON SCARLATINA.

By J. W. TRIPE, M.D., M.R.C.S., and L.A.C., London.

(Continued from vol. xviii., p. 372.)

I have been thus particular in quoting the above at length, as Simon was the first to describe these cylinders, although he did not know the true meaning of them. I rather doubt the fact of their being tubes, as I never have been able to discover any signs indicative of endosmose, which must have happened had they been tubes containing a more or less solid material. The outline is certainly frequently very sharp, but the addition of acetic acid, which dissolves the matter binding the cells together, does not show any indication of a membrane: liquor potassæ will also act as a solvent, and more quickly than acetic acid. If we carefully watch the action of acetic acid on those cylinders which present well-marked cells, we shall see that after a time the outline of the cylinder becomes gradually less distinct, either by the solution of the membrane, if such exists, or of the albumen binding the cells together. The small cells now become more distinct, when, if a slight current is set up by inclining the stage, or, better still, by adding a little more acetic acid, we shall most probably be enabled to float one or two away from the others, when we shall find that what we had previously considered to be the cells themselves are in reality only the nuclei of larger cells. These cells have a diameter which is often nearly as great as the width of the cylinder, and they possess exceedingly thin translucent walls, so that it requires a good glass to distinctly define them. After a short time the cell-wall, which is amorphous, dissolves in the acid, or, at least, becomes so diaphanous that it can no longer be seen. The nuclei are very obvious even whilst the cells remain in the cylinders, and are rendered more so by acetic acid; they frequently contain a nucleolus. The most ready way to detect these cells is to add the acetic acid and leave the object uncovered, so that the cells will then more readily rotate on themselves when they are set free.

In scarlatina maligna the urine is much altered, being usually albuminous, and more or less bloody; the blood corpuscles are mixed more or less with those of mucus and of pus, and with epithelial scales. The blood in the urine is not to be considered simply as an indication of renal disease, but rather of severe prostration, and of an alteration in the nutritive processes of the whole system, inasmuch as similar hemorrhages occur from the intestinal canal. From my limited experience, I am inclined to say that the chance of recovery is, *cæteris paribus*, in an inverse proportion to the amount of the blood and the albumen. In other words, the greater the quantity of blood and albumen in the urine, the smaller will be the chance of recovery; the diminution of these two morbid constituents of the urine during the progress of a case is, therefore, a favourable sign. These observations apply chiefly to the eruptive stage, as the appearance of albumen and of blood in the urine at a subsequent period is not of such importance, as then it indicates disease of the kidney alone, whilst in the former it is a sign of general disease.

The cylindrical casts of the convoluted tubes which have been just described as occurring in the urine after an attack of S. anginosa are also frequently found during the eruptive stage of S. maligna. I consider their presence a decidedly bad sign, more especially if they are formed early in the disease. In one case which has happened since this *résumé* of my cases was drawn up they were detected on the fourth day of the eruption; the urine was specific gravity 1·026, pale in colour, acid, highly albuminous, and contained a large quantity of uric acid. The urine was apparently healthy up to the third day of the eruption, when it became slightly albuminous. The patient sank on the evening of the fourth day, apparently from the severe impression produced on the organic processes, as there was not any coma or sloughing of the fauces.

In addition to the blood and mucous corpuscles, fibrinous cylinders, epithelial cells, and albumen, we usually meet with urinary salts in a crystalline form, especially the phosphates and lithates; in two instances I have met with lithate of soda, which presents itself as large globules of a dark outline, yellowish in the centre, with a number of projections like spikes protruding all round; they somewhat resemble the pollen grains of the dahlia. These crystals are usually met with in conjunction with lithate of ammonia and lithic acid, and afford a rather favourable prognosis.

Secondary Affections.—Under this head are classed certain affections which appear to constitute an integral part of the disorder, viz., the inflammation of the mucous membrane of the fauces, pharynx, &c., to which I venture to add also that of the renal canals. The result of the inflammatory action varies according to its intensity and the part attacked. In the cutis it terminates in simple desquamation; occasionally, however, it leads to the formation of secondary abscesses. In the fauces, where the cellular tissue is very loose, it usually induces ulceration, sloughing, the formation of abscesses, &c.; whilst in the kidney it generally produces only a congestion of the gland and desquamation of the epithelium, with occasionally the other results of inflammation. The other canals and ducts which open into the mouth and pharynx are similarly diseased, viz., the posterior nares, Eustachian tubes, the œsophagus, pharynx, together with Steno's and Wharton's ducts, and the glands formed by their ramifications. Those most commonly attacked are the two latter and the œsophagus; next the Eustachian tubes, then the posterior nares, and lastly the larynx.

We must particularly bear in mind the last complication, as, when the inflammatory action is once set up in the larynx, it rapidly descends along the membrane of the trachea and bronchi to their ultimate ramifications, without producing any very marked symptoms, except the stethoscopic. This affection is by no means to be considered as an essential ingredient of scarlatina.

The affection of the alimentary canal plays a most important part in the history of this disease, as the affections of the mouth, fauces, pharynx, &c., and of the ducts of Steno and Wharton, are included under this category. That these parts are affected but few will dispute; but that the inflammatory action involves the œsophagus, stomach, and intestines, many will be inclined to doubt; yet that this really is the case, any one may satisfy himself by making a *post-mortem* examination of those who die from the disease. The diarrhœa, vomiting, and excoriations of the anus are so many witnesses of the truth of this statement. The quotations which have been previously given from Craigie, Cazenaave, &c., show that many authors are fully aware of the fact.

It has already been stated that I consider the affection of the alimentary mucous membrane as essential for the perfect preservation of the individual against a second attack; my reasons for this conclusion will be hereafter fully considered, whilst part of the cases on which it is founded will be briefly related here. If, then, we allow that the inflammation of the mucous membrane of the fauces, tonsils, alimentary canal, and probably also of the kidney, form an integral part of the disease, we must also allow that if a patient contracts the disease, and suffers only the inflammation of the skin, he must be liable, on a subsequent exposure to the virus, to have the disease in the membranes formerly spared.

It is well known that a person who has had an attack of scarlatina (simplex?) may have an attack of cynanche, without the eruption, if he is exposed to the intense virus of the disease. Dr. Bateman, who denies that scarlatina attacks the same person a second time, says, *op. cit.*, note, p. 71:—"The poison may operate locally, and even excite some secondary constitutional indisposition, in persons who have previously gone through the fever. Thus such persons, if much exposed to the contagion of scarlatina, are liable to severe affections of the throat, unaccompanied by the rash in the skin." So far this is granted; and I believe that there now exists little opposition to the admission of "scarlatina sine eruptione" into the nosology. If we admit this term, we ought to add the word *cutis*.

As the matter now stands, we say that a person cannot have scarlatina a second time, and yet admit that such a disorder as S. sine eruptione exists. Is not this a direct contradiction? Dr. Willan states that he never saw scarlatina attack a person a second time out of two thousand cases; but we must bear in mind that Dr. Willan considered scarlatina to consist in the appearance of the cuticular eruption, with more or less fever, and that the cynanche was rather a concomitant than an essential part of the disorder.

It seems to me to involve a direct contradiction, to admit, as most persons do at present, that a patient may suffer from an attack of the cynanche, and may infect another with the disease, although the former has had an attack of scarlatina (simplex?) previously, and yet to say that the disease attacks the same person but once during life. As I have stated at first, I have not met with any satisfactory evidence to show that the same membrane is ever severely attacked a second time, yet that patients may contract the disorder after having had it once, and may propagate it to others, the following cases will prove.

Mrs. M. and her eldest daughter had scarlatina simplex of Bateman, some years since. Whilst Mrs. M. was attending on her son, who died from S. maligna, she felt very weak, languid, and feverish, with pains of her limbs and back. On the third day she was attacked with severe cynanche, the tonsils ulcerated, and the fauces and pharynx assumed the appearance met with in S. anginosa. She was in great danger until the seventh day of the cynanche, when her recovery commenced, and progressed as speedily as the attack came on. Date of attack, 16th of June. On the 2nd of July her eldest daughter (who had been brought home from the country, contrary to my wish) was seized in a similar manner; the disease took the same course, and she recovered. Her sister, who had not had scarlatina, complained of the premonitory symptoms on the 11th. The eruption appeared on the third day, and was not attended with cynanche of the tonsils, but with sloughing of the membrane of the posterior nares, fauces, &c. She died

on the eighth day. Other similar cases which came under my notice, and have irresistibly compelled me to believe that the cynanche forms an integral part of the disease, which, if once had, is not more likely to recur than the cuticular eruption. If, therefore, it is not had at the same time with the rash, the patient will be liable to its invasion on any future exposure to the infection. So convinced am I of the truth of this, that I always inquire of those who are attending a scarlatina case, whether they have had the cynanche as well as the eruption, or not; if the answer is in the negative, I warn them against the cynanche, and have in several instances, as before mentioned, observed its invasion in these persons.

(To be continued.)

CASE OF DUPLEX MONSTER.

By J. JAKIN, Esq., London.

In the afternoon of Monday, July 24, 1848, I was called to attend Mrs. B., aged twenty-two, in her first accouchement, about the eighth month of gestation, of good general health, tall in stature, and in whom pregnancy had produced no unfavourable symptoms. On my arrival I found the pains natural and steadily increasing. On examination the os uteri was found dilated to about the size of a crownpiece; membranes entire. Head presentation. A pelvis of moderate dimensions. On calling again after a few hours I found matters much in the same state; parturition progressing very slowly. The bowels not having been relieved for the last eighteen hours, and the rectum feeling distended, I ordered a gentle aperient, and at midnight I left the patient.

On visiting her the next morning (Tuesday), I found the bowels had been relieved slightly; pains had been regular through the night, and still continued so, but not expulsive. On examination I found the progress to be very slight since the previous visit. I again left my patient, but returned about nine in the evening. The bowels had been freely relieved; pains very regular, progress of parturition slow, but patient very comfortable, though complaining slightly of fatigue. After waiting an hour, and finding scarce any advance, I ruptured the membranes, when at least three gallons of fluid were discharged with great force, swamping the room, and finding its way into the floor below. The pains now ceased altogether, and the patient was enabled to have some sleep, from which she was greatly refreshed. About twelve o'clock I gave her ten grains of pulvis. secale cornutum, which in the course of twenty minutes induced strong expulsive pains. The head gradually descended, and in a short time was pressing on the soft parts, and by one in the morning was fairly expelled; pains continued vigorous, yet the further expulsion of the fœtus was retarded. On passing up my finger to detect the cause, I found the vagina plugged up with an enormous mass, presenting no clue as to form that could in any way guide my prognosis as to what it was. I, therefore, did as I have done in other very obscure cases—nothing, and waited the issue of several severe pains; I then carried up my finger again and readily detected a shoulder, the arm of which I soon brought down, and then another; still no great advance was made. A third hand was now distinctly felt hanging from the vagina, and then a fourth; the pains at this time were truly distressing, and had I possessed any chloroform I think I should have been induced to have applied it. The mass still continuing to clog up the vagina, and no material advance having been made, I turned aside the bedclothes to see, if possible, what was the matter; I found the posterior parts of the shoulders and back of a fœtus protruding from the external opening, and which, by gentle assistance, I succeeded in bringing down, followed by the two lower extremities. Upon again introducing my fingers I discovered other two legs, which I brought down, the body and upper extremities soon followed; and thus I succeeded in giving birth to a second fœtus, the time occupied being about two hours and a half. Within half an hour the placenta was expelled; the patient had a good night, and not a single circumstance arose to interrupt the progress of convalescence, so that at the end of a fortnight she left her room, and has been doing well ever since.

The cause of the delay in this case appears to have been owing to the children being united together perfectly from the top of the sternum along its whole length, and to an inch below the umbilicus; the heads, which were nearly of the same size, but not quite of normal dimensions, as well as the necks, were quite free, as were also the lower portion of the abdomen and the lower extremities. Both males. Weight, seven pounds; length, fifteen inches.

The two fœtuses were joined together, or had coalesced, along the entire extent of the sternal region and the anterior part of the abdomen, to about an inch below the point of insertion of the common umbilical cord. The greater portion of the common abdominal parietes was imperfectly developed; there being a large oval space with the umbilical cord attached to its centre, and its circumferential margin formed by the edges of the separated abdominal muscles, where the tegumentary coverings were thin and semi-transparent.

The lower part of the abdomen, and the inferior extremities, were quite distinct from each other, nearly normal, and well formed; likewise the head, neck, and upper extremities. The right-side fœtus was somewhat larger and plumper than its fellow.

An incision was made along the line of junction of the thoraces, and the integuments and investing muscles dissected back from the ribs of each fœtus. These were in all respects normal, only the cartilaginous ends of the ribs in one fœtus, instead of terminating in a sternum, met those of the ribs in the other fœtus, and seemed to be fused together, giving the appearance of an indistinctly formed common sternum. The clavicles in each child were normally developed. At this part of the dissection it became a point of much interest to ascertain whether there was any distinct separation or septum between the thoracic cavity of one and that of the other. The cartilages on each side of what may be called the common sternal region being divided across, first longitudinally and then transversely, a free opening was made into each thorax; on passing the finger in on each side a small shrivelled lung was felt, and occupying the central space was the pericardium covered with the descending lobes of the thymus gland, and a mediastinum extending from the surface of the pericardium to the sternal line of junction of the costal cartilages. When the pericardium was laid open it was found to contain a single heart, much broader than it was long, and presented the appearance as if two hearts had coalesced or been fused together. On taking it out, by dividing the large vessels by which it was held *in situ*, the following appearances were observed. There was one large auricle, situated anteriorly, and into which two venæ cavæ, one from each fœtus, entered, and which, when laid open, exhibited strongly marked orifices (each of which was provided with its valve), leading, the one into a right and the other into a left ventricle. The right ventricle was nearly three times as large as the left one, and its parietes were of corresponding thickness. From each cavity there proceeded an aorta, and, besides this vessel, on the right side there was also the trunk of a common pulmonary artery, which was also found to communicate with this ventricle, but no trace of pulmonary artery communicating with the left one was seen. Thus the right ventricle seemed to have acted the double purpose of a systemic one to the right-side fœtus, and also of a pulmonary one to both. The lungs were much contracted, and shrunk within the thoracic cavities.

Opportunity was not given for examining with minuteness the state of the abdominal viscera. All that could be distinctly ascertained was, that there was a single, very large liver, occupying the entire portion of the common abdomen above the insertion of the umbilical cord.

CASE OF TWINS OF DIFFERENT SIZES, WITH PLACENTA TO EACH.—TURNING OF THE FIRST CHILD.

By W. T. BARKER, M.D. Edin.

On Saturday, the 9th of September, 1848, I was called to Mrs. B., aged about forty-five, to attend her in her tenth accouchement. On my arrival she had slight pains occurring pretty regularly every half hour; she said they had been present for three weeks, but not confined to any particular region till now, when they were in the loins; her tongue was white, and the pulse 90. I gave her hydrarg. c. creta gr. iv., and pulv. rhei gr. xiv., to be taken at bedtime, with ol. ricini ʒvj. in the morning. She continued much the same till the 13th, when the eruption of smallpox made its appearance; but all this time the pains continued regularly every half hour. On the 15th I was requested to be with her as quickly as possible, as the pains had been regularly occurring every five or six minutes since the forenoon. At three o'clock p.m. I found the os uteri fully dilated, and a shoulder presenting, with the waters discharged nearly an hour. I immediately proceeded to turn, which being accomplished, she was soon delivered (at half-past four o'clock p.m.) of a small male child, weighing four pounds and a half, and having all the appearance of a child of eight months. On again examining I found the membranes of a second child presenting. The pains continued steadily, and were more severe than before; but the second child was not born till five minutes before six o'clock p.m. This child, also male, was rather above the average size, weighing eight pounds. The placentæ were removed about fifteen minutes after; they were distinct, but connected by membrane at a distance of about an inch and a quarter from each other; both were natural and alike in size. There was a good deal of hemorrhage, but both the mother and children are doing well.

Dumfries, Sept. 21.

PROGRESS OF MEDICAL SCIENCE.

ACADEMY OF MEDICINE.

Meetings of Sept. 21 *and* 26; M. VELPEAU in the Chair.

ORTHOPŒDIC SURGERY.—Our readers will doubtless not have forgotten the stormy debates which arose in the Academy of Medicine during the year 1843, on this subject. M. J. Guérin, who had obtained, in the Hôpital des Enfans Malades, in the year 1838, a ward for the treatment of distortions of the spine and extremities, published, in 1843, a statistical account of his practice. The results were so startling, the numbers of patients treated and stated to have been cured were so considerable, that doubts were entertained of the correctness of the assertions brought forward. A debate ensued, in which M. Malgaigne, Professor Velpeau, M. Bouvier, and others, took a prominent and somewhat acrimonious part. It was, however, concluded, as it frequently happens in similar cases, without any decision being adopted by the academy, either to vindicate or to disprove the statistics. M. Guérin brought against M. Malgaigne an action for defamation, and gained the suit, but the small amount of damages awarded caused this victory to assume the appearance of a defeat. At the same time, and but ill satisfied with the results of the trial, M. Guérin solicited from the administration of hospitals the nomination of a commission, instituted for the purpose of investigating the results of his practice. This commission, after a diligent inquiry which lasted five years, have at last published a report in every respect favourable to M. Guérin. MM. Blandin, Dubois, Jobert, Louis, Rayer, Serres,

and Orfila, the members of the commission, in their joint report, of which we will furnish an abstract, confirm, in a great measure, the former statements of M. Guérin; and this report will probably become the text of an animated debate, —a circumstance which has induced us thus briefly to recal to our readers the outline of the facts which have called it forth.

GUNSHOT WOUNDS.

M. Huguier stated that it was often extremely difficult to distinguish, from a comparison of their relative size, the wounds made by a ball at its entrance and at its exit from an injured part. The wounds, however, might be asserted to be equal in dimensions to each other when the tissues perforated were of equal consistency, and that the speed of the projectile was undiminished. The wound at the point of entrance was larger when the shot struck a bone immediately upon penetrating. With regard to the more or less irregular aspect of the lesions, the depressed edges at the entrance of the ball, and the protrusion of the lips at its exit, these characters existed, it was true, but were soon effaced by the elasticity and retraction of organic tissues.

M. Jobert, after giving an account of the cases which had fallen under his notice, thought himself justified in drawing from them the following pathological and practical inferences:—After 1830, in a paper which he had published on gunshot wounds, M. Jobert had, like all writers, described the orifices made in a limb as being round, regular, and with depressed edges, at the point of entrance of the projectile; broad, irregular, and with projecting lips, on the contrary, at its exit. All writers also, with the exception of John Hunter, admitted that, in its transit, the ball occasioned a degree of attrition upon internal textures, perfectly similar to that observed at the external wounds. Hunter demonstrated that this opinion was erroneous, and observed frequently the obliteration of this transit without suppuration or gangrene. It was only when an aponeurosis or a tendon was deprived of its means of nutrition by the local injury, that necrosis and exfoliation of these parts were the necessary consequences of the wound, and also when the cellular tissue was crushed by a flattened bullet.

Since the year 1834, M. Jobert has had numerous occasions of ascertaining that the ideas he had hitherto entertained with regard to the shape of gunshot wounds were anything but correct. The melancholy experience acquired in civil strife and personal encounters permitted him to state that the shape and dimensions of such wounds varied infinitely. Two causes might account for these irregularities of form and size: the first resulted from the shape and dimensions of the projectile, the second from the direction of the shot.

A flat and broad bullet always occasioned wounds in proportion with its volume; a round projectile formed a round wound; a bullet flattened by previous contact with any substance occasioned an injury of a form analogous to the deformation undergone by the projectile.

When a shot struck a limb at right angles, it perforated the soft parts, causing at its entrance and exit similar wounds; if it encountered a bone, in its spongy textures, it might also simply perforate it; when, on the contrary, a bullet met the skin at an oblique angle, it might, before penetrating the limb, work a groove on its surface, and at its exit cause a regular and round orifice. If the ball encountered superficially a bone, it might merely carve a groove in its surface; if it penetrated into its substance, the shot caused a broad injury of the bone at its point of entrance, leaving, at its exit, a hole in exact proportion with its own dimensions. If the diaphysis of a long bone was very obliquely struck, a superficial layer was removed; the blow, less oblique, would shiver the bone into splinters.

Another question connected with the same subject was that relating to foreign bodies. The presence of foreign bodies in gunshot wounds had been considered as a circumstance of so unfavourable a nature, that their immediate extraction had been made a precept. The principles laid down by Celsus had been, since that remote period, those adopted by surgeons. They had even been exaggerated in their application. Thus Guérin is said, in "The Memoirs of the Academy of Surgery," to have enlarged a wound received in the elbow, for the purpose of instituting, for the extraction of a ball, researches, which proved fruitless. The projectile was found three weeks later lying between the skin and the internal condyle of the humerus. In the same work a surgeon is stated to have made painful and useless efforts to remove a musket-ball from the foot. The projectile was eliminated only two years after by spontaneous inflammation. In England the same practice prevailed, and John Bell laid down exactly the same principles as Celsus, with regard to the extraction of foreign bodies. The illustrious John Hunter did not admit the absolute necessity of their removal: indeed, he added that he did not consider their presence so injurious to the soft parts as it was generally believed. M. Jobert would go further, and did not hesitate to denounce the immediate extraction of foreign bodies from gunshot wounds as a useless and dangerous practice.

Out of seventeen cases, M. Jobert had removed the balls only three times immediately, and only because they were lying under the skin; in the other fourteen patients the bullets remained buried in the organs. Two reasons had induced him to adopt this line of conduct: the first was his belief in the innocuity of these foreign bodies; the second, was the difficulty of discovering their precise situation. When, after a certain time, the swelling and inflammation subsided, it became very often easy to ascertain the seat of the ball—a piece of information which at an earlier period it was impossible to attain on account of the tumefaction of the part. The results had been most favourable in his practice, and in seven instances the wounds had healed perfectly, the balls remaining in the limbs. Most surgeons had seen instances of these projectiles remaining for many years, perfectly harmless, imbedded in the tissues. Murat stated that a bullet had remained in the superior part of a lung without ever occasioning any inconvenience; a ball was known to have sojourned three years in the walls of the heart without causing suppuration. M. Jobert had dissected the arm of a man which contained a bullet, received twelve years previously at Waterloo. In visiting Holland, M. Jobert had been shown, in the Museum of Leyden, a series of preparations, all of them presenting projectiles which had sojourned for a long time without producing any alteration of the bones.

The treatment of gunshot wounds had long been entirely empirical. Even at the present day exclusive methods were brought forward and praised by some surgeons. M. Jobert considered these methods as rational as would be the precept of submitting to the same course of treatment acute and chronic disorders.

Three distinct periods might be said to exist in gunshot wounds, requiring evidently three different medications. The first period was marked by local and general stupor, and imperiously demanded the exhibition of stimulants. During the second period inflammation of the wounded parts was the leading feature, and required blood-letting—of course proportioned to the constitution of the subject and the importance of the wounded organs—antiphlogistic medicines, and cooling applications, amongst which M. Jobert specially recommended cold poultices. The third period was that of suppuration, during which tonics and warm local dressings consituted the chief treatment.

These general views established, M. Jobert proceeded to inquire into the propriety of scarification—a method which had acquired much celebrity, and the discovery of which had been purely accidental. Dilatation of the orifices of gunshot wounds by incision had been for many years a perfect mania with French surgeons; in England the same practice prevailed for many years. Mr. B. Bell substituted for it the incision of the wound in its entire length; and John Hunter, on the contrary, adopted an opposite practice, which, unfortunately, did not become generally in use.

M. Jobert rejected absolutely the dilatation of these wounds with the knife, because it was both useless and dangerous; but he considered as necessary and indispensable, incisions of the skin and aponeurosis, when the limb became much distended by inflammation.

A very important question now remained to be examined: it was that of compound fractures occasioned by war-projectiles.

Formerly the frightful mortality, after amputations performed under these circumstances, induced surgeons to endeavour to preserve limbs thus mutilated. It was then that Boucher published his celebrated memoirs, in which he showed that extremities had been sacrificed which might have been preserved. At a subsequent period, the removal of limbs shattered on the battle-field was looked upon as a safer practice, and constituted, in M. Jobert's opinion, an exceptional method, which, doubtless, might be necessary, but which should not form the basis of a scientific decision. In our own times—times of civil strife—the question was again agitated, and a considerable degree of uncertainty prevailed in the profession. For his part, M. Jobert was not at all disposed to sacrifice a limb, merely on account of the presence of compound fracture. Thus he had successfully treated, without operation, fractures of the elbow, shoulder, arm, thigh, knee, and leg. The treatment formerly adopted by surgeons desirous of preserving limbs in these conditions, consisted of dressings, venesection, incision of the limbs, and the removal of splintered portions of bone—a method which naturally brought on violent inflammation, abundant suppuration, shortening, and deformity. M. Jobert placed the limb in a well-padded groove, employed repeated venesection, performed incisions, but avoided any interference with the splintered portions of bone.

But when the soft parts had been extensively injured, when the large vessels were opened, or the joints exposed by a broad laceration, then, indeed, amputation was necessary; the question afterwards remained to be decided, of immediate or secondary amputation; in these cases, M. Jobert was for removing the limb not exactly immediately after the infliction of the wound, but after the general stupor had passed away, when the functions had resumed their equilibrium, and before inflammation had set in with any degree of violence. He would conclude by saying that he preferred amputating in the joints, and performing flap operations, to the opposite methods.

Extract of a report presented to the administration of hospitals on the value of the orthopedic treatment adopted by M. J. Guérin, during the years 1843, 1844, 1845, at the Hôpital des Enfans Malades, by MM. Blandin, Dubois, Jobert, Louis, Rayer, Serres, and Orfila:—

"In the month of June, 1843, M. Guérin was requested to furnish a statistical account of the cases of deformity treated in hospital. M. Guérin presented a list of 1394 cases of various deformations, 377 of which were stated as having been completely cured, and 296 considerably improved. Amongst these cases were numbered 155 instances of strabismus, in 100 of which complete success had been obtained; of 155 deviations of the spine, 24 had been cured, and 28 improved; 314 rickety deformations of thorax and limbs, 66 of which were entirely removed; 14 lumbar abscesses, four of which were completely cured, &c. Not only in the debates of the academy was the practice of M. Guérin considered as dangerous, but the reality, and even the possibility, of the alleged results were doubted. The commission, therefore, in order to arrive as nearly as possible to the truth, demanded that the cases presented for investigation should exclusively belong to those various categories already enumerated in M. Guérin's previous

statistics, and not only examined carefully each case before and during the treatment, but also months after its conclusion, thus avoiding, as far as it was possible, the chances of error. . . . . Thus, five cases of strabismus, primary in three instances and secondary in the other two, were successfully treated before the commission; also five cases of wry neck: in all these the results obtained had persisted for several months without relapse. Of nine cases of deviation of the spine, seven of which continued the treatment a sufficient time, the spine was three times completely straightened, and in two cases considerable improvement took place. In all cases the deviations required active treatment. Mechanical means had in all proved inefficient, and in all the subcutaneous section of the muscles of the back produced immediate results of a remarkable nature. The commission, however, remained convinced of the necessity of using mechanical measures, either as preparatory or as auxiliaries to the operation. . . . . Of six cases of lumbar abscess, three were completely cured, two presented for a long time considerable improvement, and the sixth died during treatment, from the spontaneous opening of the abscess. . . . . The commission thought it necessary to say, that none of the operations performed by M. Guérin had given rise to any dangerous complications."

D. M'Carthy, D.M.P.

REVIEWS.

On the Nature and Treatment of Stomach and Renal Diseases: being an Inquiry into the Connection of Diabetes, Calculus, and other Affections of the Kidney and Bladder, with Indigestion. By William Prout, M.D., F.R.S., Fellow of the Royal College of Physicians. Fifth Edition, revised. London: John Churchill, Princes-street, Soho. 1848. Pp. 505.

(Continued from vol. xviii., page 339.)

Degenerated Kidney.—Our author next proceeds to the consideration of serous urine,—the kidney in a state of degeneration. Before entering, however, upon the immediate subject, he explains his views of organic disease, which he considers may be supposed to arise from two separate, but frequently co-operating, causes, which, for the sake of distinction, may be termed degeneration and inflammation. Of the former our author thus speaks:—"By degeneration is understood those slow and indefinable changes occurring in all living structures, which appear to be connected with, or to result from, the gradual decay of the vital processes in general, and particularly of the processes of assimilation. Degeneration, therefore, is the natural and universal consequence of age; but it may arise in early life from a variety of causes, among which the most frequent are—first, an inherited and innate weakness of the vital powers, either as they exist in the system generally, or as they exist in particular organs, as, for instance, in the kidneys; secondly, an acquired weakness of the vital powers in general, or as regards the vital powers of particular organs, produced by a variety of slowly-acting causes, such as long-continued errors in eating and drinking, long exposure to the influence of unhealthy situations, or of occupations unfavourable to the general health, &c.; and thirdly, an acquired weakness of the vital powers, either general or local, produced by the operation of acute causes, as acute inflammation, severe accidents, &c."—P. 127.

Dr. Prout employs the term inflammation in its "admitted sense," but makes three kinds, or grades—the acute, the most active form, as "it occurs in healthy subjects and in healthy structures;" the chronic, or "that obscure form of activity which, for want of a better term, we designate inflammation, and which is almost exclusively limited to degenerated structures;" and lastly, the congestive or adynamic form, "such as occasionally follows acute inflammation in healthy subjects, but much more generally takes place in unhealthy subjects, or succeeds to the chronic inflammation of degenerated structures."(a)—P. 127.

Our author was induced to draw and define these distinctions from foreign authors, and especially those of France, referring every form of organic disease to inflammation as the cause. For instance, M. Rayer arranges the various diseases of the kidney under the different heads, nephritis, pyelitis, perinephritis, &c., according as the secreting portion of the kidney, or the membrane lining its interior, or that investing its exterior, &c., be found after death to present the appearances of recent inflammation. "Now to me," says our author, "this view of the subject has always appeared unsatisfactory. That inflammation is the immediate cause of death in most of these diseases is not denied; but, granting this, does the term inflammation, even when qualified by the epithet chronic, or otherwise, rightly designate that comparatively quiescent state of the kidneys which immediately preceded the fatal inflammatory attack? In other words, cannot the deranged structure and obliteration of an organ by foreign deposits take place, or, at least, having taken place, exist independently of inflammation?—and is not the presence of such morbid deposits in the intimate structure of an organ sufficient to account for its functional derangements? That there is such a condition as chronic inflammation, and that such a state of chronic inflammation does in some instances exist in the kidneys previously to the more acute and fatal attack, is not doubted; but my decided opinions are, that in a large number of cases the previous quiescent state of the kidneys cannot, by any justifiable latitudinarianism, be designated by the term chronic inflammation; that the epithet structural degeneration more aptly expresses the condition of these organs; and, finally, that this structural degeneration and the peculiar condition of the system which originally produced, and is now in turn aggravated by, it, are quite sufficient to account for all the morbid phenomena of a purely chronic character."—P. 128.

The foregoing views are followed by certain inferences which are based upon them: such are degeneration attended with quiescence, or inflammatory action, and which may alternate with each other. But for details we refer to the original work. As already stated, the object is to show that degeneration is not necessarily the effect of inflammation, or of inflammatory action only. Thus we find the following observations:—

"The degenerating operations terminating in the disorganization of living structures are very numerous; but for all practical purposes (at least as far as we are at present concerned) they may be classed under two general heads or divisions, viz., degenerating processes connected with, or resulting from, anœmotrophy; and degenerating processes connected with, or resulting from, hœmotrophy. By the terms anœmotrophy and hœmotrophy it need scarcely be mentioned that we intend to convey the notions of a deficiency and of an excess of sanguineous nourishment, which deficiency and excess may be supposed to depend either on the expansion and contraction, or on the greater or less number, of the bloodvessels supplying the degenerated organs, or on the richness and poverty (*i. e.*, on the profusion or comparative absence of the red particles) of the blood, or on both of these causes variously associated."—P. 130.

We must confess that we feel at a loss to understand the conditions intended under the terms "anœmotrophy" and "hœmotrophy." They are said to convey the notions of deficiency and excess of sanguineous nourishment; and such deficiency and excess may depend upon either the expansion or contraction, or the greater or less number, of the bloodvessels supplying the degenerated organs. A permanent or passive expansion of the vessels, whether arterial or venous, coloured or limpid, we should suppose already designated by the term congestion; while the more active forms of congestion probably give rise to the phenomena of inflammation. A contracted state of the vessels may be looked upon as an approach to obliteration, which may arise, either in the contracted or passively expanded state, from stagnation and consequent solidification of the blood, as happens in that part of an artery intercepted between a ligature and the next branch nearest the source of circulation. It is well known the arterial trunk in such cases degenerates into a sort of ligamentous cord.

The auther further states that anœmotrophy and hœmotrophy are intended to designate conditions essentially different from atrophy and hypertrophy, which, "as commonly understood, include the idea of diminished and increased magnitude; and do not, therefore, exactly express the meaning intended to be conveyed."(a) Neither are the conditions in question properly expressed by the terms, anæmia or hyperæmia, which "have reference only to the quantity of blood present, without regard to its nutritive qualities."(b)

We here find a number of conditions excepted, as in no way essential to constitute anœmotrophy and hœmotrophy; and yet in the text we find expansion and contraction of the vessels mentioned as capable of giving rise to the phenomena of the new conditions. Again, we find that the number of the vessels supplying the degenerated organ may be either augmented or decreased. We cannot well understand how the number of bloodvessels traversing an organ can be increased, and, in fact, we know of no mode of spontaneous generation; that the vessels may decrease in number by obliteration or other similar means, is reconcileable upon known and familiar principles.

Again, the qualities of the blood circulating through the organ is looked upon as capable of inducing anœmotrophy or hœmotrophy; that is, the richness or poverty—in other words, the profusion or comparative absence of the red particles in the blood. For ourselves, we consider such qualities as more intimately associated with excitation and power, or torpor and languor. An organ—the heart, for instance—supplied with rich blood has its excitability increased and its powers greatly invigorated; on the contrary, an impoverished blood reduces the excitability, enfeebles its powers, and the motions become languid and weak. These qualities of the blood, therefore, we should rather say would give rise to excitement and power, or excessive irritability, or to languor and depression; and these, upon principle, should pervade the entire system and the whole frame.

Our author offers the following as an excuse for the use of these terms. He says, "That some such distinction is requisite for describing the condition of degenerated structures is evident from the fact that an organ may be anœmotrophied or hœmotrophied without being diminished or increased in bulk, or without the presence of anæmia or hyperæmia; and *vice versa*. It may be proper also to remark, that in all instances of anœmotrophy and hœmotrophy, the nourishment of textures is probably not only deficient in degree but in kind (cacotrophy)."(c)

Here there seems to be a contradiction or perversion of principle; for how nourishment is to be deficient in hœmotrophy appears to us irreconcileable with the definition of the term. That these terms may designate conditions and phenomena familiar to Dr. Prout, we have not the least doubt; but we regret that it has not been possible so far to explain, as to render them intelligible to the generality of readers.

Upon the causes of these conditions the au-

(a) The reader will find some peculiar remarks upon morbid vascularity, and the varieties of inflammation, congestion, &c., in Dr. Venables's "Essay on the Nature and Treatment of Asiatic Cholera." These observations will be found more particularly at pp. 17 and 18, and from p. 41 to 43.

(a) Footnote, p. 130. (b) Ibid. (c) *Ubi ante.*

thor makes the following remarks:—"Of all the general causes predisposing to anœmotrophy or hœmotrophy of organs, those alone arising from age are necessarily active. The age of the patient, therefore, constitutes a natural boundary or landmark among the phenomena of degeneration, and particularly among the phenomena of nephritic diseases. Before the age of forty there is no natural reason why the kidneys in a perfectly healthy individual, who has lived regularly, should in any degree or mode suffer degeneration. But about the age of forty, many causes often co-operate with the natural tendency to degeneration which then begins to take place, and thus to induce or accelerate a change in the condition of organs, and particularly of the kidneys. Among such causes may be mentioned the existence of long-continued habits unfavourable to health, but sanctioned by the usages of society; as the daily use of a full and stimulating diet, the free use of wine, &c. Of all other causes, however, particularly in large towns, venereal affections and their remedies lay the foundation of kidney diseases in every class of society, and perhaps at all ages, more frequently than any other cause. Few in early life so situated escape these loathsome affections in some form or other; and what with the excitement of fermented liquors, and, among the lower classes, the constant use of ardent spirits, the wonder is, not that the urinary organs suffer, but that they do not suffer even more severely than at present. And even if the effects of youthful excesses sometimes subside, as they do for the time, they are often felt when the vital powers become enfeebled in advanced life, and thus contribute to render old age miserable."—Pp. 130, 131.

We concur most fully in the doctrines laid down here. It has often fallen to our lot to witness advanced life the victim of the most excruciating and inveterate renal affections, clearly traceable to the delinquencies of youth, especially those which have entailed upon the votaries all the consequences of excessive mercurialization. But upon this we have already dwelt at sufficient length.

To the head of causes may be referred hereditary tendencies, as well to urinary affections in general as to renal ones in particular. But, as observed by our author, we must not expect that the children of parents subject to urinary affections will, as a matter of course, invariably suffer; "but," says Prout, "I have seen repeated instances in which they have suffered from urinary disorders at an age and from exciting causes under which a perfectly healthy individual would probably have escaped with impunity."

Amongst the causes predisposing to urinary diseases at all ages, but more particularly in early life, our author mentions the strumous diathesis. "Where any cause," he says, "whether of a predisposing or exciting character, co-operates with the strumous tendency, its effects in general are much more decidedly marked and obstinate."—Pp. 131, 132.

Affections, too, of the urinary organs are frequently complicated with gout and rheumatism, or a predisposition to these affections; and in the treatment, therefore, of such complications the prevailing tendencies must be kept in view.

"The general inferences," observes our author, "deducible from these remarks, are—First, that when diseases of the kidneys occur before the age of forty, they may almost always be considered as resulting from an inherited predisposition, or from a strumous diathesis, or as acquired in some way *de novo*. And, secondly, that when they occur for the first time after forty, they are generally referable to the natural decay of the vital powers incidental to age, accelerated and aggravated in most cases by long-continued habits unfavourable to health, and inducing gout, &c. In other words, premature disease and consequent imperfect assimilation are usually connected with anœmotrophy; whilst the diseases of middle life are frequently the result of an habitual stimulating regimen, producing plethora and hœmotrophy."—P. 132.

With regard to the secretion itself of the kidneys, our author observes:—"The properties of the urine in the diseases of anœmotrophy and hœmotrophy accord generally with the preceding inferences. Thus in the simple anœmotrophy of early life the urine is usually pale coloured, of moderate specific gravity, and rather copious; while in the simple hœmotrophy of middle and advanced life, the urine is generally deeper coloured, of higher specific gravity, and less copious."—P. 132.

As regards the general relations between anœmotrophy and hœmotrophy, according to our author, hœmotrophy may be supposed to pass into anœmotrophy, but not anœmotrophy into hœmotrophy. Also the hœmotrophy of early life, and the anœmotrophy of middle and advanced life, are seldom identical with the hœmotrophy of middle and advanced life, and the anœmotrophy of early life; for the reasons that in the hœmotrophy of early life and the anœmotrophy of advanced life the kidneys have usually become already visibly disorganized.

With respect to the properties of the urine under these circumstances, our author observes:—"This secretion in the early hœmotrophied kidney is often deep coloured, of high specific gravity, and deficient in quantity; but, as the early hœmotrophied kidney is usually more or less disorganized, the other properties of the urine become likewise deranged; and the practised eye will readily discriminate, by the presence of such derangements, between the urine of the disorganized hœmotrophied kidney and the urine of simple hœmotrophied kidney. In like manner the anœmotrophied kidney of middle and advanced age is almost always disorganized; and, as the urine suffers a corresponding change, it may, by such changes, in most instances be distinguished from the urine secreted by the simple anœmotrophied kidney."—P. 133.

(To be continued.)

Arguments against the Indiscriminate Use of Chloroform in Midwifery. By S. W. J. MERRIMAN, M.D. Cantab.; Licentiate of the Royal College of Physicians, &c. &c. London: John Churchill. 1848. Pp. 27.

Practical Observations on the Administration and Effects of Chloroform, especially in its Application in Cases of Natural Labour. By J. H. STALLARD, Esq., M.R.C.S., &c. London: John Churchill. Leicester: J. S. Crossley. 1848. Pp. 22.

English obstetric practitioners have been slow to adopt the practice of their northern brethren in administering chloroform in almost every species of labour. Dr. Simpson has certainly been eminently successful, in nearly every case in which he has employed the anæsthetic agent, in assuaging maternal sufferings without impeding the process of Nature, or endangering the life of the mother. His experience in reference to chloroform in obstetrics has been extensive and encouraging; and it appears, when judiciously administered, to have produced in very few instances any symptoms to excite alarm. Dr. Merriman, who has had ample opportunities also of testing the value of chloroform in midwifery, has given to the world his opinion on so powerful an agent.

In the first part of the pamphlet the author gives a brief sketch of the progress of midwifery; then offers some general remarks on the nature of anæsthetic agents, so far as our present knowledge is concerned; and finally lays down rules to guide the accoucheur in employing chloroform in parturition.

As regards the effects of anæsthetic agents on the system, Dr. Merriman adopts the opinions entertained by Dr. Snow. As these have been already published, we shall not now enumerate them, but simply remark that the third stage, when the powers of the mind are gone, but there is not perfect insensibility to pain, is supposed to be the stage most adapted for parturition, except at the moment of actual delivery.

The third part of the essay, which gives rules to guide the accoucheur in the employment of chloroform, is worthy of especial attention. The author thinks it does not possess any particular value in midwifery, except to alleviate suffering. It becomes a question of importance, then, whether the pain endured or the remedy administered to assuage it is calculated to produce the most injury to the patient. It is certain that even extreme sufferings, in the majority of births, do not produce any permanent injury to the mother; but we have yet to learn whether chloroform is equally exempt from such a tendency. We do not yet sufficiently understand its action on living beings, though we are aware that under certain conditions it destroys life quickly. In midwifery, if given as a sedative, it may be useful at difficult labours. The cases, however, requiring its employment are very few, and with this opinion we coincide.

Dr. Merriman says—

"Where the labour is more tedious, extending to twenty-four hours or more, or if the patient has, from the occurrence of false pains previously to the commencement of her true labour, or from other causes, been deprived of her rest, and thereby rendered unequal to bear with impunity a recurrence of pains for many hours, chloroform may not improbably become a fit medicine to administer, to obtain that repose which other measures have failed to procure; but these other measures ought invariably to be tried first. Gentle reasoning is very powerful in restraining anxiety, and this power increases in proportion to the confidence of the patient in her accoucheur. Attention to the natural functions of the body is very important. Irritation is frequently set up by costiveness, which should, therefore, be obviated by such aperients or other appliances as are suited to the exigences of the case, and not be quieted by the overpowering influence of chloroform. The secretion of the kidneys must be attended to, for distention of the bladder may prove a mechanical impediment to the birth, and is to be guarded against, or removed by proper means if it has occurred. Change of position, the omission of endeavours to assist the efforts of nature by voluntary exertions, cooling medicines to obviate feverishness, especially if produced by improper food or drinks, and many other small details well known to the accoucheur, are of great service occasionally in tedious labours.

"The possibility of one or more of these occurrences should, therefore, always be considered, and appropriate treatment be adopted to remove them if present or impending; but if neither of these conditions be present, or if the nervous excitement, or exhaustion from want of rest, continue unabated after the employment of these plans of treatment, recourse may be had to the chloroform: it should be given, in small doses, just previously to the onset of a pain, and may be intermitted between the pains, or continued until the patient is fully under its influence, as may be judged most appropriate; if one exhibition of it is not enough, it may be repeated. A convenient plan is to administer the chloroform as each pain begins; this will lessen the suffering, and only render the patient insensible for a moment. Every case, however, must be studied by itself; no rigid laws can be laid down for the administration of medicines of any kind; for in every instance the power any remedy exerts upon the patient must be carefully noted, and the dose regulated accordingly. In the administration of every medical agent the duty of the physician is to imitate Nature as far as possible; to watch her methods of acting; how she occasionally, by leaving her ordinary path, and acting irregularly, produces disease; and how she returns from her diseased to her healthy action. The more medical men study the minutiæ of these several actions, the better are they able to follow Nature's steps, or to direct them when wandering.

"No treatment can be really good which does not act upon this principle; experience every

day proves the truth of this, and, perhaps, in no branch of the profession is it more clearly shown than in the practice of midwifery. The more the the powers of nature are studied in the act of childbirth, the less necessity will be found for the use of medical applications to relieve the suffering; so that I firmly believe that the administration of chloroform will be confined eventually to instrumental or very tedious labours. When the presentation of the fœtus is such as to require manual assistance before the birth can be effected, or where, from failure of the pains, or malformation of the pelvis, the pains are unable to accomplish their task, chloroform will frequently be found of great service; and, if the patient's health be sufficiently good, the accoucheur will do well to recommend the inhalation. But even here he will not unfrequently find the artificial completion of the labour so easy, that inhalation seems superfluous; in some instances it would complicate, in appearance, a simple operation, and ought, therefore, to be avoided. A recent author has supposed that chloroform on some occasions has been recommended by the practitioner as a means of making himself of more importance as an assistant in the labour. If such has ever happened, it is very much to be regretted. The medical profession in this country is ever looked up to as composed of men of the highest probity, who would scorn to descend to such meanness; the same care will, therefore, be expected of them, that they should not, in their own practice, or by their writings, induce others to resort unnecessarily to any practices capable of producing serious injury, if misapplied, or incautiously employed.

"With the best intentions, our exertions will occasionally be insufficient to prevent a fatal consequence; they may even appear to have hastened it. If, then, a practice has been resorted to, the employment of which was not imperatively called for, and death ensues, whether arising directly from the treatment, or from other causes, how awful is the reflection that we have in even the slightest degree hastened the termination of life. Let us bear incessantly in mind, that ordinary cases require only ordinary means of relief, and that extraordinary remedies can only be properly employed in extraordinary cases, where ordinary means are inapplicable or insufficient."

The pamphlet abounds with judicious observations.

In the essay of Mr. Stallard the employment of chloroform in midwifery is spoken of in very high terms; neither retarding the parturient paroxysms *so long as absolute insensibility was not induced*, producing no tendency to flooding, nor exercising any baneful influence on the child.

THE MEDICAL TIMES.

SATURDAY, OCTOBER 14, 1848.

THE PRESENT POSITION AND FUTURE PROSPECTS OF UNIVERSITY COLLEGE.

The short-comings of public institutions, as of individuals, are more severely felt in proportion to the greatness of their pretensions. The ruin of a private medical school, as of a private member of society, is easily overlooked and soon forgotten—its recollection effaced by newer and more important objects of interest—at the utmost there is a nine days' wonder, and then an end. The downfal of such an institution as University College, from which so much was expected, and by which so little has been performed—established at so great an expense, and putting forth such munificent pretensions—is, on the contrary, a fact to be remembered for years, to be chronicled as a warning to future ages, and to be inquired into fully and openly, as a means of saving other establishments from a similar fate.

University College consisted of two great schools—a faculty of arts and a faculty of medicine—under the auspices of an ultra-liberal party. Of the former of these schools—the faculty of arts—we have nothing to say at present, except that it has never even approached success, and is kept open at a serious expense. Of the other—the faculty of medicine—we may safely say that it bid fair, under moderately good management, to become one of the most famed medical schools in this country. Even twelve months since the number of students was much larger than that of any school in the metropolis, and an immense majority of the honours granted by the different examining bodies were carried off by those educated at University College. How changed do the recent lists appear! Twelve months since the college boasted a Liston, a Cooper, and a Williams among its professors—names, as time has shown, that commanded the presence of the great majority of the students. Of Liston we shall be forgiven when we say that his few surgical errors were the errors of his genius, and not the bungling blunders of mediocrity,—errors the more glaring from his high position, his dashing style, his entire confidence in himself, and his usual great success. Liston never wounded the rectum in lithotomy, although he operated on ten cases to his colleague's one, nor the intestine in relieving a constricted hernia; these are the unskilful faults of an *ordinary* surgeon. During his lifetime we never shrouded his errors from the profession; we may now pronounce that, with all his faults, he was a great surgeon; that his name attracted many students towards the institution with which he was connected is beyond a doubt. He has been taken from us in the pride of his strength and manhood by one of the inscrutable decrees of an all-wise Providence. His loss is not the less severely felt.

Deep-laid and disgraceful plotting has been successful in causing the retirement of Samuel Cooper from the chair of surgery in University College. The rabid desire of increased emolument and private aggrandizement, like

> "Vaulting ambition that o'erleaps itself,
> "And falls on t'other side,"

forgetful of its true interests, has driven from the institution a man whose name—known and venerated wherever our art is practised as a science—was the solid foundation of the reputation of the school. Samuel Cooper, the author of "The Dictionary of Surgery"—the text-book of students, and the book of reference of practitioners, without a rival for the third of a century!—to drive him from the college was only worthy of an idiot. Mr. Syme, too, summoned from Edinburgh, returned, disgusted with a few weeks' sojourn. The announcement by Dr. Williams of his intended resignation has completed what Liston's death, Cooper's forced retirement, and Syme's flight, had begun. Who is to succeed Dr. Williams? Is another job to be perpetrated, and a *protégé* provided for? We trust not; but fear there is no unattached physicion to be found in this city, willing to undertake the office, who is qualified to succeed Dr. Williams.

And now let us look at the present staff of teachers at University College. Mr. Arnott, the successor to Liston, as senior surgeon in the hospital, and to Cooper as lecturer on surgery, has his surgical reputation to make. We look in vain for any important contributions to surgical science—the result of his researches, a few scattered cases, with a paper on phlebitis, constitute the whole we can find. Mr. Quain, who keeps his old place in the hospital, and takes the place of Liston as teacher of clinical surgery in the college, rests his claims to notice on a work on the arteries, the great merit of which consists in its beautiful plates, drawn by another. The difficulty of the descriptive portion was much alleviated by Tiedemann's previous publication. Of Dr. Sharpey what can we say? He seems to consider that his inquiries respecting ciliary motion justify a life of well-paid ease. Dr. Grant, the worst paid professor in the college, has a high and deserved reputation. Mr. Graham is a profoundly scientific man, but, unfortunately, cannot communicate the information he possesses. His lectures are as distressing to his hearers as they must be painful to himself. Dr. Thompson, if our information be correct, has been already marked as a victim to the restless intriguers. Dr. Murphy has written a book; we will not be harsh with him; we need only refer our reader to his publication, and let him judge. Professor Fownes has twice been compelled to leave England on account of ill health. The exertion of teaching is more than his delicate system can bear. From Dr. Walshe much is to be expected—as yet he requires experience. Mr. Ellis, the newly appointed underpaid assistant professor of anatomy, was most laborious as a dissector, as his "Demonstrations" will prove. His style as a writer is, however, verbose, unreadable, and incomprehensible; what he may be as a lecturer time will show.

We have thus, with much pain to ourselves, reviewed the present lists of professors at University College. The question, "What is the state of the school?" naturally suggests itself. We are compelled to reply, that the unfortunate death of Liston, the forced retirement of Cooper, the flight of Syme, and the announced resignation of Williams, have given it a blow, the recovery from which, we fear, will require years of good management, patience, and perseverance. The first was unavoidable; the second was the result of intrigue and chicanery; the third the result of disgust; and the fourth may, perhaps, be in some measure the sequel of the same causes. The profession have lost confidence in the school and its teachers, as is shown by the reduced number of entries this session. We fear that, after the disclosures we have made, such confidence will never be regained, so long as the authors of the mischief possess their present influence, or, indeed, are in any way connected with the institution. Never did a collegiate establishment commence under brighter auspices than University College; never, after such a short career, were the future prospects of any institution darker or more gloomy.

ASIATIC CHOLERA.

The event which has been so long anticipated has at length occurred, for well-authenticated cases of cholera have been reported in London and one or two other places. The first note of alarm was sounded at Hull, where some sailors died in a few hours "with all the symptoms of the Asiatic disease." Edinburgh was shortly after seized with terror from the report of five cases having occurred there; and while we were looking with some degree of consternation towards the northern capital, "Great Babylon" herself was invaded

by the erratic pestilence. Upon a close investigation of the Hull cases, however, it is evident that the mortal symptoms resulted more from the violation of hygienic rules than the direct attack of an epidemic pestilence. Beer and plums taken in immoderate quantities by individuals exposed to atmospherical vicissitudes, and called to undergo a considerable amount of bodily fatigue, will at any time set up a gastric irritation not easily allayed; and it would be an insult to science to assert that these cases were produced by contagion or infection. Medicine has made too much progress within the last few years to be panic-stricken by such occurrences as these, for it is an attribute of ignorance to feel alarm where there are no just grounds for it. Even the first Edinburgh cases have been considered of a doubtful character; and we must, therefore, conclude that as yet only a few cases of true Asiatic cholera have occurred in our country.

To what cause, then, are we to attribute these cases? Has the disease been imported, as we are compelled to believe, if we adopt the theory of its being contagious? We have no proofs whatever that this is the case; and facts connected with the history of Asiatic cholera, furnished by men who have had the most extensive opportunities of studying it, prove incontestably that it is not what we commonly understand to be a contagious malady. We have here all the analogies of an epidemic,—originating in the East, extending from one country to another, till people of almost every language have felt its power. When it visited this country seventeen years ago the profession was unprepared for its attacks; it was supposed to be a malady which gave its victims no warnings of its approach, and, like the plague which once swept off its tens of thousands in this metropolis, threatened destruction to all who touched the sick. Viewed through the mists of ignorance, it assumed the most horrible forms, and men, frightened out of all propriety, adopted the most extraordinary expedients to escape its attacks. The armies of some European countries were drawn up in battle array against it; their bristling bayonets were passed as easily and as swiftly as the wind. Quarantines were established in vain; and pesthouses, to which the victims were removed, offered no security to those in health by their isolated positions. Wherever the disease appeared it bade defiance to all human efforts; and, when it seemed wearied with slaughter in one place, it passed on to another to execute there the work of death.

Since 1831 we have become better acquainted with cholera, and it is found not to be half so terrible as was supposed. Instead of making its attacks suddenly, it gives warnings of its approach; instead of being contagious, it is simply an epidemic; instead of resisting the judicious application of medicine, it is amenable to treatment.

There is one well-ascertained fact, in reference to cholera, which is calculated to remove all improper fears, and with them the barbarous precautions which have been adopted to arrest its progress, and that is its non-contagiousness. Acting upon this doctrine, the Board of Health has not thought fit at the present time to recommend the establishment of cholera hospitals, though the Government still appears disposed to put in force, to some extent, the quarantine laws. If cholera is not contagious, then quarantine, should be dealt with in the same manner as pesthouses—done away with.

The following observations have been published by the Central Board of Health, Dublin:—

"It seems to be a well-established fact, and one that cannot be too strongly impressed upon the minds of the people generally, as upon this fact depends the best hope of successfully contending with the disease, that in nearly all cases of cholera there are two stages of the disease, the first being merely diarrhœa, or simple looseness of the bowels; the second being the stage of collapse, or blue cholera, marked by cramps, failure of the circulation, lividity of the skin, cold, clammy perspiration, and all the other well-known symptoms of the disease. In the first stage of the disease medical treatment is frequently successful; in the second stage too often of no avail.

"The first stage, diarrhœa, or mere looseness of the bowels, may be of only a few hours' duration, or may continue from one to several days. It is most important to bear in mind that this diarrhœa may be entirely without pain; indeed, it most frequently is without pain, or merely accompanied with trifling griping or uneasiness. This absence of pain, or the little accompanying uneasiness, has too often thrown the patient off his guard, who has thus neglected the warning of his danger, and has allowed the time for cure to pass by.

"It may be safely asserted that, during the prevalence of an epidemic of cholera, diarrhœa, or looseness of bowels, which is free from pain, is more dangerous, more likely to be the first stage of the disease, than diarrhœa accompanied with griping or pain. Let it, then, be clearly understood that, when the epidemic is prevalent, mere looseness of the bowels, with or without pain, may be the commencement or first stage of cholera—that the disease is generally curable in this stage, and that not a moment should be lost in applying for relief.

"To afford this immediate relief, the commissioners of health recommend that every existing medical institution, whether hospital or dispensary, should be open day and night during the prevalence of cholera to all applicants, without distinction, where all who apply should obtain, without a moment's delay, advice and medicine; and from which all the poor who may be unable to leave their dwellings may be visited with promptitude, and supplied with medicine at home, or transferred, if requisite, to hospital.

"To effect these objects the following arrangements are recommended:—

"1stly. The prescribing-room of every medical institution, whether hospital or dispensary, should be open day and night, without intermission, during the prevalence of cholera, and a medical officer should be in constant attendance to prescribe for all applicants.

"2ndly. Each hospital and dispensary should have a certain district allotted to it, and the attending porter or clerk should keep a book in which he should enter the names and residences of all applicants for relief within the district who are unable to leave their homes. The book should show the time of application, and the name and residence of the patient.

"3rdly. A second medical officer should be constantly in readiness to receive the names of all such applicants, and to proceed without delay to visit them. The visiting physician, instead of writing a prescription at the residence of the patient, should be provided with a small portable pocket medicine-box, containing the medicines most generally required made up in such a form as to render their administration as speedy and as simple as possible. Such portable medicine-boxes can be procured at a very small cost, or may be made up, on an emergency, of pasteboard, or thin board, or tin, in the form of a book about seven inches long, four inches broad, and one inch deep, with one of the sides to fold back or open on hinges. The services of an apothecary will be required to keep up a constant supply of the medicines required, made up ready for use. The medical officers will generally give formulæ for the medicines they may deem best. The following may, however, serve as an example of what should be generally provided in the pocket medicine-boxes. The most portable forms for the medicines are selected; the directions should, as far as practicable, be printed.

"Powders.—Carbonate of ammonia, in waxed papers, each paper containing forty grains, with the following printed directions on the outside:—'Dissolve this powder in half a pint of water; give two tablespoonfuls every hour.'

"Powders.—Compound powder of chalk with opium (pulv. cretæ c. opio), in packets each containing six papers, each paper containing ten grains of the powder, with printed directions:—'One powder every half hour until the looseness ceases.'

"Pills of powdered opium, each containing one quarter of a grain of opium, and two grains of powdered ginger, made up with oil of peppermint. The pills to be in boxes, each box containing six pills, with a printed label:—'Opium pills, one every half hour until the looseness ceases.'

"Pills of mercury and opium, each containing one quarter of a grain of calomel, two grains of hydrargyrum c. creta (mercury with chalk), and a quarter of a grain of opium, made up with oil of caraway (which will serve to distinguish them from the plain opium pills), in boxes, each containing six pills, with a printed label:—'Mercury and opium pills, one every half hour.'

"Bottles (one or two ounce phials, with cork stoppers),

1. Containing tincture of opium (laudanum).
2. ,, Hoffman's liquor.
3. ,, tincture of rhatany.
4. ,, creasote.

Along with the box should be carried a small jar of strong brown mustard.

"The visiting physician should also be furnished with printed forms, for the removal to hospital of patients who are destitute of assistance in their own dwellings; in short, every measure should be adopted that will obviate the least delay. It may be necessary in some instances to establish temporary district dispensaries; but it is most desirable, for reasons already given, that the permanent institutions should be first made available.

"It is not within the purpose of a communication such as this to go into details of treatment. There are, however, two points on which the commissioners of health feel it will not be out of place to give an opinion, viz., the employment of frictions and the allowance of drinks to the sick. The commissioners cannot recommend that fluid applications of any kind should be employed in frictions on the body or limbs, as the cold consequent on prolonged exposure and evaporation more than counterbalances any supposed good effect from friction, which, if at all used, should be made merely with the warm hand without disturbing the bedclothes. The commissioners also advise that when patients suffer from thirst they should in general be permitted to drink freely, as experience shows that the denial of drink does not check vomiting, while it increases very much the suffering of the patient from the burning thirst that so often accompanies the disease."

THE EDUCATION OF IDIOTS.

Amongst other things which will render the nineteenth century illustrious in the annals of time is the establishment of institutions for the education of *idiots*. Fifty years ago an individual would have been considered an idiot who believed the doctrine that imbecile persons were capable of improvement under physical and moral training. For more than three thousand years the idea was ridiculed, and neither schoolmen nor statesmen considered it worth their while to reason or legislate on the matter. The great founders of the Grecian Republic, who well understood the influence of early education in forming the manners and elevating the condition

of a people, viewed those individuals only as capable of instruction in whom no congenital obstacles existed. Others were placed beyond the pale of law and benevolence, unless we consider their destruction as an act of kindness.

It was not to be expected that European kingdoms, when in a semi-barbarous condition, would make any efforts to benefit the mentally afflicted; but it is singular that the revivals of the fifteenth century conferred no benefits on them. Convulsions which then overturned systems that had reigned triumphant for a thousand generations did not shake the errors which prevailed in reference to diseases of the mind. The insane were left in their dungeons and their chains, because philosophy esteemed them human brutes, if not worthy of death, at least of stripes and imprisonment. The dawn of a better day, however, has broken upon the world which will scatter the darkness that till lately had never been penetrated.

It has been satisfactorily ascertained that the condition of idiots is capable of improvement. The world, however, has been slow to believe this truth. Half a century ago the experiment was tried in France upon a boy found wild in the woods, and proved successful. Nearly thirty years, however, passed away before a systematic attempt was made to convert the idiot into a being fitted for the ordinary occupations of society. In 1828 Dr. Ferriers, at the Hôpital Bicêtre, commenced instructing a few of the more intelligent idiots, with some beneficial results; but M. Seguin conceived and executed a method of instruction which has been attended with the most surprising results. His example has been followed in other continental kingdoms, and in the United States of America; and lately we have had established in our own metropolis "an Asylum for the Education of Idiots."

It is now just a year since a public meeting was held at the London Tavern for the purpose of founding this institution, when the Lord Mayor observed that, while charities almost of every kind abounded in the metropolis, there was not one for reclaiming and protecting those whom Providence had not blessed with the entire use of their faculties. To show how much such an asylum is needed, we mention the fact that, since it was first opened, there have been no fewer than 160 applications for admittance. There are at present 38 idiot children in the house; and there are actually 103 candidates for the third election, which is to take place on the 26th inst., while only 10 can be received. Every true philanthropist must, therefore, feel gratified that such an institution has been established, and can only regret that the accommodation is too inadequate to receive all those for whom admission is sought.

From the experience of M. Seguin it appears that, while the education of idiots may be attempted at any age, there is not much prospect of success unless it be attempted while the pupil is yet young. Treatment and education are possible only on two conditions:—1, the treatment must be hygienic and moral; and 2, the education must be applied to the development of the functions, of the aptitudes, of the faculties, and of the instinctive and moral tendencies. A careful physiological and psychological examination of each case is necessary to ascertain these, and after this the education is commenced upon—"1, the moving power; and is followed up by 2, the senses; 3, the perceptive faculties; 4, by gymnastics of comparison; 5, by gymnastics of invention; 6, excitement of sentiments and instincts by moral necessities; 7, special excitation of the faculties of spontaneousness; 8, incessant provocation to regular action, to speaking, and to the exercise of faculties then developed. The aptitudes thus created are then applied to different specialities, according to the circumstances of the patient, the occupation being such as to keep the muscular system and mental faculties in action." This course of treatment rarely fails; and, if nothing more be accomplished, M. Seguin asserts that the repulsive symptoms of idiocy, which are the result of habit, and not imposed by Nature, may at least be removed.

It is necessary at the commencement of the moral instruction to inspire in the bosom of the pupil a respect for the teacher, and the duty of obedience towards him. This cannot be accomplished by severity, but by firmness, gentleness, sympathy, and justice.

A gentleman who visited the asylum under the superintendence of M. Seguin thus speaks of his success:—

"I have seen, with no less gratification than astonishment, nearly one hundred fellow-beings, who, but a short time since, were shut out from all communion with mankind—who were objects of loathing and disgust—many of whom rejected every article of clothing, others of whom were not able to stand erect, crouched themselves in corners, and gave signs of life only by piteous howls; others, in whom the faculty of speech had never been developed; and many whose voracious and indiscriminate gluttony satisfied itself with whatever they could lay hands on, with the garbage thrown to swine, or with their own excrements. These unfortunate beings, the rejected of humanity, I have seen properly clad, standing erect, walking, speaking, eating in an orderly manner at a common table; working quietly as carpenters or farmers; gaining by their own labours the means of existence; storing their awakened intelligence by reading one to another; exercising toward their teachers and among themselves the generous feelings of man's nature, and singing in unison songs of thanksgiving!"

We would earnestly press this subject on the attention of all the members of our profession. There is scarcely a town or village in the kingdom where some idiots are not to be found; and it is the duty of medical men to employ means for their good. The public look upon idiocy as incurable, because the profession has not yet informed them to the contrary. When it becomes generally known that it is possible to restore congenital mental imperfections, there will be a desire to bring such cases under medical treatment. We hope that asylums like the one recently instituted in London will be established speedily in every county throughout Great Britain, and that they will be as successful in reclaiming idiots as those in Switzerland, Berlin, and Paris.

A SHEFFIELD QUACK SURGEON'S MODE OF TREATING PERIOSTITIS.—DEATH OF THE PATIENT.

QUACKERY appears to reign triumphant in England; but, alas! for science and humanity, we have continual proofs afforded us of its disastrous results. Medicine is usually that department of our profession where impostors abound, from the facilities afforded of deceiving the public, and from the difficulties which are experienced in proving *mala praxis* when it occurs. Surgery, however, has lately been invaded by quacks, or, rather, their doings in this department have been brought to light.

An inquest was lately held at the Sheffield Infirmary, touching the death of a young man named George Taylor, who was alleged to have been improperly treated by an unlicensed practitioner. About six months ago the deceased began to be afflicted with a severe pain on the back part of his left arm above the elbow, and, under the impression that it was rheumatism, his mother rubbed in turpentine. This treatment was continued for three weeks without success, and the swelling of the arm extended down to the hand. He then got some medicine from the infirmary, but, his sufferings continuing to increase, he obtained an order for the dispensary, as he could not be admitted into the hospital for two or three days. The deceased attended at the dispensary about three weeks, and continued during this time to suffer great agony. He then placed himself under the care of one Thomas Whitehead, an unlicensed medical practitioner, who adopted the most extraordinary means to effect a cure, but in a short time killed the unfortunate patient. We will give a short account of the treatment, as detailed by a non-medical witness. Whitehead took the binder off the young man's arm, and then pulled hards (or tow) out of the hole with a pair of scissors having rounded points. The doctor then began to dress the wound with caustic, or keenin. He also put light-coloured salve upon the hards, and he bathed the parts with something out of a small bottle. The hards were put into the hole *with a skewer*. The arm, all round the edges of the wound, was much puffed up, in the form of a rim, of a dirty-red colour. On the following Sunday he extracted the hards with the scissors, which occasioned great pain. He then got another pair of scissors, and began cutting the flesh round the outside of the rim of the wound. The deceased cried out very much. When Whitehead had cut round the edges, a piece of the fleshy rim, as *large as a fist, fell upon the floor*. With the point of his scissors, put into the wound down to the bone, he prized bits off. This operation lasted about ten minutes, and at its termination the doctor told his patient that he must go into the infirmary directly, and have his arm taken off, or he would be dead in a very short time! The wound was then filled with tow, and bound up. Subsequently he was admitted into the infirmary, where he died.

This is a quack mode of treating inflammation of the periosteum covering the humerus; and who can wonder at the results? When the poor fellow was admitted into the infirmary, Mr. Law, the house-surgeon, found the arm presenting a very unusual appearance. Its whole length was much swollen and discoloured; and between the shoulder and elbow was a large elevation, which was found to be tow, forcibly rammed into the arm! When this mass was removed, the humerus was seen deprived of its vitality. The patient was then rapidly sinking under the fearful constitutional irritation which had been set up by the quack's remedies. Whitehead charged *threepence* for each dressing. The jury returned a verdict of "Manslaughter" against him.

This case is another melancholy exemplification of the evils of quackery. Whitehead appears to have had a large share of ignorance and impudence, and his patient much confidence in his skill, or he would not have endured for three weeks the tortures which were inflicted on him. Ought not the law to protect such credulous individuals? Where was the "*pleasure* of being cheated" in Taylor's case, whose life was taken away by the intensity of his sufferings?

The punishment of the quack will effect no good whatever, as it will merely prevent *one* from again imposing on the public, while there are hundreds of his fraternity ready to run the same risk for reward. It is time something was done, and we hope the profession will not rest till it has roused the Government to a sense of its duty and the public to a knowledge of its danger.

CHLOROFORM IN CHOLERA.

[To the Editor of the Medical Times.]

SIR,—I perceive, by the *Times* of this morning, that there is now no longer any doubt as to the presence of Asiatic cholera amongst us, and, therefore, lose no time in presenting my professional brethren with the formulæ of treatment by chloroform, which, from my increased experience of its physiological action, I believe, will be found most judicious.

I am confident that, in the hands of every intelligent practitioner, chloroform will rapidly supersede most of the anomalous and useless, if not worse than useless, remedies that have been hitherto trusted to. I am induced to hope that the mode of treatment I respectfully recommend will be copied by other medical journals, and published in the daily press, which I presume will be fully warranted by the remarkable success of the cases recorded in this journal by Mr. Stedman, Mr. Plimmer, and by myself. Theory is almost exhausted in treatises on the origin, mode of propagation, and pathology of Asiatic cholera; but, however interesting the subject may be considered in a scientific point of view, we are forced to acknowledge, that from such disquisitions we have never yet derived any indication pointing to an effective mode of treating the disease. To enter upon such topics now would be to discuss the character of an enemy who has already taken the citadel.

In pressing the subject of the treatment of cholera by chloroform on the attention of the profession, I am far from being actuated by a silly desire to extol a remedy merely because I have been the first to introduce it: my object is a higher and holier one—that of being useful to the cause of humanity by contributing, as far as it is in my power, to control the progress of a malady perhaps the most fatal with which the human race has ever yet been afflicted.

TREATMENT.

In the earlier period of the disease, when characterized by premonitory symptoms, such as diarrhœa, oppression at the præcordia, giddiness, &c., or, indeed, in every case of diarrhœa apparently occasioned by irritation of the primæ viæ, let the following draught be given:—

℞. Olei ricini, ʒiij.; chloroformi, m. vj.; tinct. opii, m. xx.; aq. menth. pip., ℥jss. M. fiat haust.

Should a sense of prostration ensue, with the supervention of pallor, coldness of surface, and nausea or vomiting, let the patient be immediately rolled up in hot blankets, apply a mustard sinapism to the stomach and epigastric region, and give the following draught and pill, which may be repeated according to circumstances:—

℞. Chloroform, m. viij.; sp. vin. gall. (brandy), ʒiij.; aquæ puræ, ℥ij. M. fiat haust.

℞. Fellis. bov. inspis., gr. iv.; hyd. chlorid., gr. iij. Fiat pilula.

Should collapse have supervened, with extreme prostration, with or without local or general spasm, with feeble pulse, imperfect respiration, and peculiar whispering voice, the period will have arrived which will demand the most energetic treatment, combined with great judgment. It is here that the employment of large and repeated doses of opium has so frequently led to the most unhappy results. Here we must endeavour to keep the temperature of the surface as high as possible, by means of artificial heat and stimulating frictions to the abdominal and gastric surface. Mustard frictions or cataplasms to the calves of the legs and soles of the feet, and other accessories which may be left to the judgment of the medical attendant.

The liniment I should be strongly inclined to use in such a case would be the following:—

℞. Chloroform, ℥ss.; olei terebinth., ℥ij.; lin. saponis, ℥j. M. fiat linimentum.

I would strongly advise that the whole length of the spine should be well rubbed with this embrocation, as well as the abdominal surface and cardiac region. At the same time I should increase the dose of chloroform to twenty minims, and give it every twenty or thirty minutes, and one of the before-mentioned pills every half hour.

In addition, should the case prove extremely obstinate, I would be inclined to administer an enema composed of chloroform, twenty minims; ox-gall, twenty grains; and thin starch, four ounces: and repeat it should circumstances indicate. Neither frictions nor enemata were used in any of the cases treated by me,—the internal use of the remedy, together with the calomel and ox-gall, so rapidly subduing the symptoms as to have rendered any accessory treatment—with the exception of sinapisms and artificial heat, a very short time applied—quite unnecessary.

The doses of chloroform and calomel above prescribed are for an adult, and may be increased or diminished according to the age of the patient, or the severity of the symptoms.

I am, Sir, your obedient servant,

P. BRADY, M.R.C.S.L., &c.

Harrow, Oct. 9.

P.S. The cases of cholera reported by me in this journal were treated in conjunction with Mr. Hewlett, surgeon to Harrow School, who will be happy to authenticate them, and to confirm the extraordinary therapeutical action of chloroform in the disease.

THE APOTHECARIES' PHYSIC GARDEN AT CHELSEA.

[To the Editor of the Medical Times.]

SIR,—A vague idea exists in the minds of members of the profession that there is somewhere in the neighbourhood of Chelsea a plot of ground called the Apothecaries' Botanical Garden. Having had occasion to visit town during the last summer, I was desirous of looking over this once celebrated place, and, through the kindness of a friend who had a ticket of admission, I was enabled to do so. Before I visited the spot I had pictured to myself a little Eden abounding with choice exotics calculated to excite the admiration of the casual visitor and to interest the man of science. Alas! I was doomed to a sad disappointment. The external aspect of the place at once checked the exuberance of my imagination—a high dead wall surrounding the garden. My friend and I arrived opposite the gate; we pulled the bell, and forthwith there issued from some hiding-place a man, who, having examined our passport, speedily vanished. When fairly entered I thought myself rather in some neglected field than a botanical garden. True, there were greenhouses, some in an unfinished state, others closely fastened, and we could only see through the glass that these were occupied by plants. Walking round the garden, I could discover scarcely a plant to which was attached a name, and in some places they appeared jumbled together without any system.

The house at one end presented a melancholy spectacle. On the basement there appeared to be railed off a place where the botanical lectures are delivered. The students, however, must, under ordinary circumstances, have no small work to keep themselves warm, even in a summer's day, for the breeze can find admission into the place on all sides. The walks in the garden appeared to have been constructed in the most economical manner, a quantity of coarse gravel being thrown carelessly down and just levelled with a rake. The stone statue of Sir Hans Sloane, which stood in the centre of the ground, seemed to look with an air of sadness upon it. Having satisfied my curiosity, I returned to the gate by which I entered. Not a soul could I see, and I began to think that I was prisoner for the day. My friend, however, knew where to find the bell which we rang when admitted; this, being pulled, brought forth the porter from his hiding-place. Without a word he turned the rusty lock, and when I got into the street I congratulated myself on my escape.

Really, Mr. Editor, the Apothecaries' Society must be very poor or very stingy to bestow upon this large garden such little attention. No doubt it yields but small profit, and I respectfully suggest, for all the good it is at present to science, that the company immediately let it out upon building leases. I should think, from the income thus derived, the society would be able to institute prosecutions against all the quacks in the kingdom, and found one or two valuable prizes for the most deserving students in botany.

Trusting you will give this letter a place in your widely-circulated journal,

I am, Sir, yours obediently,

A PROVINCIAL SURGEON.

CHOLERA.

PRECAUTIONS AND INSTRUCTIONS FROM COMMISSIONERS OF HEALTH.

Shun damp and low situations, and, if possible, quit dwellings in such places, during the prevalence of cholera; keep your houses and rooms dry, and the windows and doors open as much and as long as the weather will permit; there can scarcely be too much ventilation. An abundant supply of fresh air is as necessary during the night as in the day, and pure air is as requisite for the support of life and health as good food.

Remove all stagnant water and dunghcaps from around your dwellings, and clean out all sewers without delay. Do these things at once, without waiting for the outbreak of the disease. It will be unsafe, and it will be too late to undertake them, when cholera shall have broken out.

Avoid chills; do not wear wet clothes a moment longer than can be avoided. Wear a flannel belt round the stomach and loins—make use of plain wholesome food, in the solid rather than in the liquid form—abstain from fruit, raw and ill-cooked vegetables, pastry, smoked and hard salted meats, and salted fish, pork, cider, stale or sour malt drinks, pickles, and all articles of diet that from experience are known to have a purgative effect.

Avoid purgative medicines, particularly castor oil, seidlitz powders, and salts.

Be very careful that the water used as drink is of good quality.

Abstain from stimulants unless prescribed as remedies under medical advice. In former visitations of cholera many persons, both rich and poor, resorted to the use of stimulants—wine, whisky, brandy, &c.—under the false impression that what was sometimes useful as a cure was also good as a preventive. This is a great error; stimulants, frequently taken, or taken in excess, are followed by collapse, which predisposes to the disease, and the general health, moreover, is seriously and permanently injured by the practice. In fine, shun damp places, particularly for sleeping; breathe pure air; observe cleanliness; keep the surface of the body warm; avoid fatigues and excesses of all kinds; use wholesome plain food; live temperately; preserve, as much as possible, a state of general good health, and you will have adopted the best safeguards against cholera.

GOSSIP OF THE WEEK.

ROYAL COLLEGE OF SURGEONS.—Gentlemen admitted members on October 6:—Messrs. J. A. Tapson, J. Laity, J. G. Symes, J. O. Fletcher, C. E. B. Danson, T. Whitehead, W. Carr, W. Patteson, and R. Barnwell. Messrs. T. Hunter and T. E. Mouldsworth passed their examinations for naval surgeons.

APOTHECARIES' HALL.—Gentlemen admitted members on Thursday, October 5:—William Tindall Robertson, Green-hill, Lincolnshire; Matthew Lynch, Liverpool; William Strong Browne, St. George's-place, Camberwell.

THE CHOLERA AT WOOLWICH, Oct. 8.—The cholera has made its appearance here, and three fatal cases have occurred on board the convict ship moored opposite the Royal Arsenal, the whole of the sufferers being convicts. The first case took place on Friday, and the convict died after about seven hours' illness. Of the cases on Saturday two died, one after about seven hours' illness, and the other in about two hours after he had gone to the ship, having been taken ill when at work in the Royal Arsenal. Two cases were reported as having occurred to-day; but up to the afternoon they had, fortunately, not proved fatal. A medical officer arrived and inspected the convict hospital ship to-day, and afterwards had a meeting and consultation with the medical practitioners in Woolwich. The whole of the cases that have as yet occurred have taken place amongst the convicts at the Royal Arsenal, and none have been reported ill from that cause on board the Warrior convict

ship, opposite the dockyard. The convicts on board the Justitia, at the Royal Arsenal, have been permitted to have tobacco and pipes to smoke, and tea or cocoa is to be substituted for their usual allowance of gruel; tea and cocoa have also been allowed to the convicts on board the Warrior, opposite the Royal Dockyard.

Oct. 10.—There have been no new cases amongst the convicts to-day, and it is the general opinion that the prompt measures which were adopted on its first appearance will have the most beneficial results. At all events those measures have had a great influence on the minds of the inhabitants, and numerous faces, that on the first assurance that cases of cholera had ceased bore a most serious aspect, now appear quite cheerful, all apprehension of the disease increasing having ceased to exist. The convicts on board the Justitia are still under quarantine, and none of them are permitted on shore to work in the Royal Arsenal. The indulgence of being allowed to smoke has had a wonderful effect, and the men seem to enjoy themselves very much. Mr. Levy, inspector of police for the town, received instructions yesterday evening to make daily returns, the result of which will be made public.

Scarlet Fever at Woolwich.—Scarlet fever has broken out in the Royal Military Academy at Woolwich; and, one victim having fallen, the cadets have been dismissed for six weeks, until all danger is removed.

The Cholera at Hull.—No other cases of cholera have occurred in Hull since our last; and we believe that the apprehensions which existed last week have almost entirely subsided. This fearful disease appears on the point of leaving Europe, and we hope no more will be heard of it. Mr. Grainger, Dr. Sutherland's colleague, accompanied by Dr. Ayre, proceeded to Hamburg, in the Helen Macgregor steamer, Captain Frost, on Saturday evening. Dr. Sutherland remained in Hull throughout Sunday and Monday. On the latter day he expressed his entire conviction that there was not any cholera in the town. On Tuesday morning he proceeded to Sunderland, but is expected very shortly to return here, and to follow his colleague, Mr. Grainger, to Hamburg. Two vessels are lying in Whitebeath-roads, in the Humber, with the quarantine flag hoisted.

Reported Cholera in Edinburgh.—It will be seen from the report of the proceedings at the city parochial board yesterday that it was stated that seven or eight cases of Asiatic cholera had occurred in Edinburgh and Newhaven since Sunday last. In order to prevent unnecessary alarm, we deem it right to state that we have been informed that several of the cases included in those referred to by Dr. Taylor are considered by the medical gentlemen who treated them, and who, therefore, had the best opportunity of judging of their character, to be merely severe cases of the ordinary form of British cholera, so prevalent at this season of the year. The same parties also state that, if these cases were real cases of Asiatic cholera, they have met, in the course of their practice, with many cases of the same kind during the last nine months. At the same time that we would thus warn the public against unnecessary alarm, we would equally deprecate inattention to the means prescribed for warding off this frightful scourge, which, there is reason to fear, may yet ere long visit our land. —*Edinburgh Witness* of Saturday.

By information received in town on Sunday we learn that other cases considered to be of decided Asiatic cholera had appeared at Edinburgh. Other cases have been reported, with two in the metropolis several weeks ago; and in the extraordinary state of the weather during the last week, which would favour the propagation of the ordinary English cholera, the reported cases must be received with caution.

We learn from Edinburgh that twenty-three cases of cholera had occurred up to Tuesday, and seven at Newhaven. At Hull another fatal case had occurred on board a vessel from Hamburg. In the metropolis four fresh cases were reported on Tuesday. An official notification published on Tuesday by the General Board of Health contained an extract from a report by Mr. Grainger, the surgeon sent by them to Hamburg, in which he states that the notion of contagion had been universally abandoned in that city.

Deaths from Cholera.—On Saturday the brig Orb, Rackley, of Sunderland, arrived from Hamburg, with the mate, William Rackley (the master's brother), dead on board. The authorities took immediate steps, and prevented any of the crew from coming on shore. W. Mordey, Esq., surgeon, visited the vessel on Sunday, and found that the deceased had died from cholera. He ordered his clothes and the bed to be immediately destroyed, which order was promptly obeyed; and at ten o'clock the body of the deceased was taken out of the ship, and buried in Sunderland churchyard. The vessel was ordered to lie in quarantine near Pallion, up the river Wear. All the rest of the crew are well.—On Tuesday the Volante, Smith, of Sunderland, arrived from Hamburg. One of the crew had died at sea on Sunday, and was buried in the great deep the same evening. This vessel, also, was ordered into quarantine at Pallion. The mate died on board on Wednesday evening last. Both cases are supposed to have been cholera.—The guardians of the Sunderland union have been constituted a local board of health. Dr. Brown and Mr. Mordey have been appointed to be medical officers of health, and have drawn up instructions for the treatment of cholera, with the assistance of Dr. Sutherland, and these instructions have been laid before the guardians for publication; with, also, a report recommending that district dispensaries be established, and medical officers appointed to visit the poor, and see to the removal of nuisances. Dr. Sutherland, who had been sent down to Hull by the Government, came to Sunderland on the receipt of a telegraphic communication apprising him of the cholera cases on the Wear.

Cholera.—On the 27th of September, 47 fresh cases were reported of this disease at Berlin. Up to this time 1601 persons had been seized; of which 944 died, 260 were cured, and 397 remained under treatment. Persons of the middle class of society have been the principal victims, whilst in Russia and other countries the inferior orders appear to have suffered most. At Berlin few of the military have been seized, whilst in the prisons a large number of persons have been carried off.

The *Genoa Gazette* of the 30th ultimo states that the cholera had not manifested itself at Leghorn, as announced in some of the Tuscan journals. One suspicious case only had occurred on board a vessel coming from Alexandria, which had obliged the municipality to adopt precautionary measures.

Cholera is on the decline at Smyrna, Salonica, and Athens.

Enforcement of the Quarantine.—On Friday week notice was posted at Lloyd's intimating that, in consequence of several deaths from Asiatic cholera, on board vessels trading from Hamburg and other northern ports, orders had been issued by the Privy Council to the heads of the customs at the various ports, to place all description of craft coming from the places described under quarantine laws.

The cholera had entirely disappeared at Constantinople. The recent great fires in that city, it was supposed, had done much towards causing its decline.

The Cholera.—Enforcement of the Contagious Disease and Nuisances Act.—Friday's *Gazette* contains an order of the Privy Council, which states that, in consequence of the progressive advance of the cholera to the western portion of the continent of Europe, a case has arisen for putting in force the provisions of the act. And that in pursuance of the powers vested in the Lords of the Privy Council by the above act, that the provisions contained in it for the prevention of epidemic, endemic, and contagious diseases, be put in force throughout the whole of the United Kingdom.

Appointment of a Medical Officer of Health for London.—It is appointed that the Court of Sewers should meet specially on Monday, the 16th of October, for the purpose of receiving the various gentlemen who were candidates for the office, and of examining their testimonials, and to select two gentlemen to be returned to the Court of Common Council, as provided by the resolution of that court. It is further recommended that the court would cause advertisements to be put to the above effect in the usual daily newspapers, and that all testimonials should be delivered into the office of the Commissioners of Sewers before four o'clock on Saturday next.

Medical Officer of Health for the City.—A Court of Common Council was held on Thursday week, at which the report of the commissioners of sewers, recommending the appointment of a medical officer of health, was discussed. Mr. Wire pronounced such a proposition as extravagant humbug, and Sir Peter Laurie thought no serious danger was to be apprehended from the cholera. The following resolution was eventually agreed to:—"That this court do agree with the commissioners of sewers that it is highly necessary that a medical officer of health be forthwith appointed, and that a sum for that purpose, not exceeding £150, be paid out of the City's cash: and that the Court of Sewers be requested to nominate two fit and proper persons, of whom the court will appoint one to be the medical officer of health for this city and liberties."

The Health Committee, Liverpool.—At the usual weekly meeting, on Thursday, Mr. Lace presiding, the inspector of nuisances reported that during the week 842 middens had been removed; 43 alleged nuisances inspected and measures taken for their suppression; 12 cellar informations laid and convictions obtained; 13 streets, containing 202 cellars, previously cleared, examined, and 169 found empty; that 30 had been claimed which could now be legally occupied; and that 13 were found reoccupied, with beds in them, and would be cleared forthwith. The lodging-house registry was progressing, and informations would be laid against parties who neglected to register. Out of 788 orders to empty middens last week, only one complaint of neglect had been substantiated; and it was stated that, if cholera visits Liverpool, we are in a highly advantageous condition for its reception, as the middens and cesspools, as well as the courts and back passages, were now effectually cleansed, and the refuse from the most unhealthy streets is removed by the scavengers daily.

Cholera at Paris Once.—Douglas Jerrold remarks:—"The cholera—though threatening London—cannot shake that invincible spirit of economy that (save in the vital cases of eating and drinking) possesses a civic body. The City Sewers Commission have debated upon the appointment of an officer of health. It is, however, indispensable that he should protect the lives of the citizens at the cheapest cost. The scientific man who—at all hours and at all places—is to fight cholera, is offered £500 a year as full pay to engage the enemy."

Glasgow Medical Society.—At the thirty-fourth annual meeting, held in the Faculty Hall, St. Enoch-square, the following gentlemen were elected office-bearers:—George Watson, Esq., president; Dr. J. A. Easton and Dr. James Wilson, vice-presidents; Dr. A. Adams, treasurer; James M. Adams, Esq., secretary.

Govan Parochial Board.—On Thursday, at a special general meeting of the parochial board of Govan, held in the parish church there, it was unanimously agreed by the meeting to receive the Government grant for medical relief.

The Minister of the Interior (France) has distributed gold medals to the superintendents of the different hospitals of Paris, as an acknowledgment of their zeal and attention to the wounded under their care after the sanguinary conflict in June. Three medals were voted to the superintendents of the Hospital of St. Louis, which were refused by those to whom

they were awarded on the score that they did not merit them more than their comrades, and that they had only discharged an imperative duty.

REWARDS TO FRENCH MEDICAL MEN.—MM. Velpeau and Charruan have recently had conferred upon them the distinction of officers of the Legion of Honour. Many other physicians and surgeons have been made chevaliers of this order.

LIBRARY OF THE LOUVRE.—The library of the Louvre has been opened to the public, which will now be the great general gallery of the nation. The library consists of thirteen rooms; three of which are filled with works published by subscription, and which are unbound.

A writer in "The Anglo-Jewish Magazine" contends that Sir Charles Bell's theory of the function of the spinal nerves was somewhat anticipated by Maimonides.

CHEAP REMEDIES FOR GOUT AND RHEUMATISM.—In a French medical journal, written by M. Recamier, ex-physician of the Hôtel Dieu, the remedies proposed, and to which almost infallible powers are assigned, are cabbage poultices for gout and rheumatism, and cobweb pills as a substitute for quinine in intermittent fever. The rare sagacity and close observing powers of the author are eminently displayed in the discovery, that the cobwebs found in the houses of the poor are less efficacious than those which festoon the dwellings of the rich!

DUTY OFF MAGNESIA.—By an order of the Lords of the Treasury, magnesia, which has been charged 10 per cent. *ad valorem*, at some of the principal outports, as a manufactured article, is henceforth to be admitted as a drug, duty free.

HONORARY DEGREES IN MEDICINE.—It has been reported that for some time, at Brussels, the Faculty of Medicine of the University has been distributing its honorary diplomas with a liberality much to be deplored. It is desirable, both for the interests of the university and the profession, that an explanation should be given, to put an end to these reports so derogatory to both.

CAMBRIDGE.—The degree of Licentiate in Medicine has been conferred on Henry Goode, Pembroke College.

MUNIFICENCE.—The Rev. Dr. Warneford has presented to Queen's College, Birmingham, the munificent donation of £1000.

ROYAL INFIRMARY, MANCHESTER.—Mlle. Jenny Lind has promised to sing gratuitously in Manchester, in December, in aid of the Royal Infirmary.

PROFESSIONAL WISDOM.—The physicians of Smyrna having declared the cholera infectious, Franks, Greeks, Jews, Turks, and Armenians have fled in thousands to the neighbouring villages and Greek islands, and complete silence reigns in the streets of Smyrna.

CHLOROFORM.—NEW APPLICATION.—We observe the London robbers apply a handkerchief to the noses of their victims on the street, and set them to sleep before they relieve their pockets.

A YOUNG MOTHER.—On Saturday last Julia Amelia Sprayson, of this city (aged twelve years, seven months, and three days), was delivered of a son. Mr. Smith, surgeon, was in attendance. Mother and child are both going on well. The father of the child, who was convicted at our last assizes of a criminal assault upon the girl, is now undergoing his sentence of two years' imprisonment.—*Coventry Standard.*

TRICKERY IN LEECHES.—The tribunal of Correctional Police of Paris condemned, at one of their late sittings, two persons, named Barthe and Gent, dealers in leeches, to four months' imprisonment, and a fine of a 1000 francs, for having knowingly sold leeches gorged with blood. MM. Vitcoq and Vinot said that the leeches furnished by the defendants were relatively good, and such as were usually sold in commerce.

PRECIPITATE BURIALS.—In one of the sittings of the Medico-Chirurgical Academy of Milan, the question of precipitate inhumations was brought forward by Dr. Amato; and the academy pronounced in favour of depôts or dead-houses, so that persons should not be buried till distinct signs of decomposition were apparent. Three physicians or surgeons to be appointed to watch these indications, and to maintain sanitary regulations.

BURIAL CLUBS.—Mr. Tidd Pratt, in a letter to the *Times* says:—"That, by the late Friendly Society Act, 9 and 10 Victoria, chap. 27, sec. 1, it is expressly provided, 'That no person under the age of six shall be allowed to become a member of a Friendly Society for money payable on death, and that no insurance shall be effected on the life of any child under six years of age.' Any society, therefore, which effects such an insurance after the 3rd of July, 1846, is acting illegally, and the officers are liable to be indicted; in addition to which the money payable on the death of such child is not recoverable."

MORTALITY TABLE.

For the Week ending Saturday, Oct. 7, 1848.

Causes of Death.	Total.	Average of 5 Autumns.
ALL CAUSES.....	1006	1152
SPECIFIED CAUSES...	995	1149
Zymotic (or Epidemic, Endemic, and Contagious) Diseases.....	430	270
SPORADIC DISEASES.		
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	48	52
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.....	82	127
Diseases of the Lungs, and of the other Organs of Respiration	107	222
Diseases of the Heart and Blood-vessels.....	43	28
Diseases of the Stomach, Liver, and other organs of Digestion	45	67
Diseases of the Kidneys, &c.	9	12
Childbirth, Diseases of the Uterus, &c.	6	14
Rheumatism, Diseases of the Bones, Joints, &c. ...	6	8
Diseases of the Skin, Cellular Tissue, &c.	..	2
Old Age	42	64
Violence, Privation, Cold, and Intemperance.....	16	32

NOTICE.

☞ The subscription for the stamped edition of the *Medical Times* is 15*s.* for the half-year, and £1. 5*s.* for the year, paid in advance. Post-office orders, or orders on parties in town, should be made out in the name of ROBERT PALMER.

SUBSCRIBERS IN ARREAR are respectfully requested, in conformity with the terms of their subscriptions, at once to forward their remittances to the OFFICE.

TO CORRESPONDENTS.

The remainder of the Index will be published in the next number.

"One Interested."—Yes; a life-governor of the hospital.

"Expulsus."—At present the matter must rest; the documents, however, should be carefully preserved.

"Pignus."—It is doubtful whether the disease is caused by contagion, as it has appeared in persons who have been careful not to touch the organ with anything which has come in contact with the matter.

"Apothecary."—It is not liable to any duty.

"An Irish Student."—We cannot recommend such a proceeding.

"A Medical Practitioner."—We cannot foretel the results.

"Opifex."—Many chemists have supposed that the acid may prove to be tribasic. It will then have the formula $C_{12} H_3 O_9 + 3HO$.

"Mr. Leader."—We must decline the offer.

"Inquirer."—The diploma referred to by our correspondent would not render the possessor eligible for a hospital appointment.

"Academicus."—It is oviparous.

"Mentor."—The subject is not sufficiently professional for our columns.

"Tyro."—Either milk or alcohol will remove the stains.

"Medico-Chirurgus" recommends hydrated magnesia in poisoning by arsenic, and sends us a case in proof of its virtues. This we cannot publish unless authenticated.

"A Member of the College."—No prospect whatever.

"A Student of University College" laments the fallen condition of the medical school, and wishes us to suggest means to be adopted to promote a revival.

"Ominator."—Our correspondent's fears are groundless. The high contracting parties are proceeding amicably.

"Lucius."—Six months must elapse.

"Mr. Alfred Farrent."—A salt may have an acid reaction without an excess of acid.

"Cyrus."—In the seventeenth century, by Galileo, but afterwards demonstrated by Torricelli.

"M. D."—In the "Gazette Médicale," of Paris, about three weeks ago.

"B. M., Lond."—We cannot promise.

"Dr. Mead."—The numbers shall be sent.

"Omega."—Communication received.

"Accoucheur."—A difference of opinion exists as to the best form of exhibiting the medicine, whether in infusion, decoction, powder, or tincture. The powder, when fresh, may be relied on.

"N. B."—Mason Good's generic term for disorders of the sense of vision.

"A Bartholomew's Student."—We cannot account for the phenomena.

"A Subscriber in the Country."—Apply to the secretary of the College of Surgeons.

"Sigma."—The work is out of print.

"An Old Contributor."—We should feel obliged for the communication.

"Botanicus."—It is thought to be the concrete gummy resinous juice of an umbelliferous plant. What that plant is remains unknown.

"Ignoramus."—Tisane is a form of medicine much used in France, consisting generally of an aqueous infusion of substances of no great activity.

"Chirurgus."—An ordinary silver catheter will do.

"Hibernicus."—It will be productive of no good.

"M. D."—We should feel obliged by the particulars being transmitted to us.

"Creditor."—The fees can be recovered.

"Agricola."—The letter is under consideration.

"E. J. C."—The cases of cholera will be acceptable.

"Medicus, Lond."—"The Psychological Journal."

"Galen."—We do not know.

"Socius."—Not within the prescribed limits.

"A Medical Supporter."—The test cannot be relied on.

"Spectator, Gower-street," will see that his remarks have been anticipated.

"T. J. G."—The first Tuesday in May and August.

"A Young Surgeon."—No.

"Provincial."—The double qualification is not necessary.

"Matter of Fact" has been misinformed; the university never adopted such a practice.

"Mr. Robt. Brandon, Upper Seymour-street West."—Letter on the Cholera received.

"A Subscriber" says:—"I really think, after all the talk there has been upon the subject, that a College of Physicians and a College of Surgeons are amply sufficient for England and Wales. Let there be a fellow and membership belonging to each college—individuals intending to practise as general practitioners to pass as members of each, giving them power to recover debts, and the option of practising pharmacy. After ten years' general practice, if the parties choose to go up for the fellowship of either body, to practise as pures or consulting practitioners, their protection to cease, and an honorarium instead. As for the Apothecaries, the very name is a disgrace to the profession. Let its charter be given up, and the above substituted."

"Mr. Ancell Ball, Spalding," shall receive a private communication in a few days.

"Dr. Butler Lane, Ewell."—We are not aware of the work having been received.

"Dr. Walter Johnson, Guy's Hospital."—A private letter has been sent.

"Dr. W. Reid, Clanny, Sunderland."—A private communication has been forwarded.

"W. R. W."—The subject is yet under discussion; but it is probable that, under the circumstances, an examination would be insisted on.

"Dr. Thomas Ledurch, Dublin."—Communication received.

A. B."—Five shillings.

"Mr. Fred. Beverly Dixon, Norwich."—Communication shall receive insertion at an early opportunity.

"Dr. Kidd, on the Paris Hospitals," received.

Letters and communications have also been received from One Interested; Expulsus; Pignus; Apothecary; An Irish Student; A Medical Practitioner; Opifex; Mr. Leader; Inquirer; Academicus; Mentor; Tyro; Medico-Chirurgus; A Member of the College; A Student of University College; Ominator; Lucius; Mr. Alfred Farrent; Cyrus; M. D.; B. M., Lond.; Dr. Mead; Omega; Accoucheur; N. B.; A Bartholomew's Student; A Subscriber in the Country; Sigma; An Old Contributor; Botanicus; Ignoramus; Chirurgus; Hibernicus; M. D.; Creditor; Agricola; E. J. C.; Dr. Kidd; Galen; Socius; A Medical Supporter; Spectator, Gower-street; T. J. G.; A Young Surgeon; Provincial; Matter of Fact; Mr. Robt. Brandon, Upper Seymour-street West; A Subscriber; Mr. Ancell Ball, Spalding; Dr. Butler Lane, Ewell; Dr. Walter Johnson, Guy's Hospital; Dr. W. Reid, Clanny, Sunderland; W. R. W.; Dr. Thomas Ledurch, Dublin; A. B.; Mr. Fred. Beverly Dixon, Norwich; Medicus, Lond., &c, &c.

ORIGINAL LECTURES.

LECTURES ON THE RACES OF MEN.

By ROBERT KNOX, M.D., F.R.S.E.,
Lecturer on Anatomy, and Corresponding Member of the French Academy of Medicine.

(Continued from p. 3.)

HISTORY OF THE WELSHMAN, OR CELT OF ENGLAND.—THE KYMRI, THE CIMBRI OF ANTIQUITY.

Were a traveller blindfolded to be suddenly transported from the south and west of Ireland, or from the wilds of Ross-shire, in Caledonia, to that part of the principality of Wales extending from Bala and its pretty lake southwards to Duney, Mouthy, Ryadir, Builth, and Monmouth, and were he then, the blindfolding ceasing, to make his way to the nearest house, called a Welsh farmer's house; look steadily and with an unprejudiced eye at this cottier tenant and his wife and children; cast an observant glance at the domestic and agricultural misarrangements around him: his first remark, if pedantry and prejudice allowed him to speak his mind, would simply be this: "Either I have not left Scotland and Ireland, or these persons whom I see here, and whom you call Welshmen, and sometimes, which is diverting enough, Englishmen (as if an act of Parliament could change a man's nature!), are identical with the Celtic population of Caledonia and Erin, whom I saw but yesterday." It is impossible to arrive at any other conclusion. For seven hundred years this portion of Britain, namely, Wales, has been held to be a part of England; a *nationality* (the pet watchword at present of those who see in the element of race a lever for the upsetting of all rotten dynasties now lording it over antagonistic races) has been offered, nay, pressed, on the Cymri; this nationality they have steadily rejected; they decline being called by a name which they know is not and cannot be theirs; they despise the trick of England's nationality, with her brave old oak and her flag that stood the battle and the breeze. They know it to be a mere watchword for the trading, commercial Sassenach; a copy, and not a good one, of old Holland, with its Van Tromps and De Ruyters. I have heard of men fond of standing by "their order;" even gentlemen-pensioner flunkies will fight for pence and platter; why, then, should the Cymric inhabitant of Wales be blamed for "standing by his race"?

The pity is that, such is his profound ignorance, he does not know who are of his race. Could he but understand this leading and eternal fact, that his brethren, unaltered, unchanged, abound in Caledonia and in Ireland; that France, *la belle* France, is purely and entirely Celtic, he might dictate terms to the lumbering, plodding Sassenach.

Travelling through Wales a few years ago, I read a placard in the streets of Ruthin calling on the people to resist the appointment of English bishops to their churches; it pointed out to the Kymri of Wales the scandal of appointing persons to the holy office *for whom the Welsh language* had *no other name* but that of *barbarians!* I had been told before I went into Wales that the character of the natives was entirely altered; that, in fact, by living under the mild Government of the three estates, and enjoying under Divine Providence the inestimable benefits of our glorious constitution in church and state, all silly distinctions about races and such conceits of the scientific had ceased and determined; that the spread of education was great; new lights had burst upon the Ancient Britons; their moral and intellectual and social character fast approached the *model* of the English! Now, all these statements, on personal inquiry, I found, as I expected, to be totally untrue. Need I say more? The dark and gloomy hovel; the dreamy peasantry; the believers in second sight; the villages overrun with filth and pigs: there they are Celtic to the core. Here sits the Celtic woman croning over the antique songs of her race, or watching the husband as he fights his way through the drunken brawls of fairs and markets; her home in darkness; her children in rags; her domestic economy indescribable. Feudality and primogeniture complete the picture.

The Cymri of Wales are a noble, high-minded race, with all the good and all the bad qualities of the Celtic race, of which they form, perhaps, the purest specimen. Enthusiastic, religious, rigid Calvinists, haters and despisers of England's favourite semi-Lutheran episcopacy; poetical, fond of mystery, musical, warlike. Politically degraded, they have lost their *status* amongst nations. To allow even a shadow of independence to them would be madness on the part of England, whose position amongst nations, from the heterogeneous, ill-assorted character of her mixed population, her indefinable constitution, her Court in direct antagonism with her Saxon population, is already sufficiently perilous. Were I of the race of the ap Jones, ap Rices, ap Shenkins, ap David, ap Meredith, I would rejoin the men of my race, and take my chance of sharing in the glories of another Austerlitz—another Marengo.

A meeting is held annually, I think at Aberystwith, to commemorate something. The speaking is in the Welsh or Cymraig; some doggerel verses are recited; the old recollections are dragged out from their niches like mummies into the bright sunshine of the present active, coarse-handed, money-making, mechanical age: the whole is a farce and a mockery—a dream of the past. Meetings of this kind are occasionally held amongst the same race in Caledonia: mere delusions and humbug. Everybody knows this, excepting always the tourist and the Cockney. It was said of the Ministers of Catherine of Russia that, when on a visit to the vasty plains of Muscovy, they amused and *tried to deceive* their Empress by driving the population like cattle to the sides of the roads along which she passed; by building temporary villages, and even wooden towns, in hopes of persuading their mistress that her empire was thriving, populous, and happy. I recommend the trick to the courtiers on the occasion of the next royal visit to Ireland. The circumstances are not wholly dissimilar. A savage, despotic, military Government; millions of famishing serfs; suspension of all the rights of civil and religious liberty; the entire land in the hands of a few courtiers and their families; all wealth, patronage, land, centred in the Court. The cases are fairly parallel—Muscovy and Ireland. And thus I am led to consider the peculiarities and position of that portion of the Celtic race still encumbering the land of Ireland with its presence.

THE CELT IN IRELAND.

To suppose that this great portion of one of the most energetic of races is unequal to the carrying out its own elevation in social life—its own civilization—is to advance in the same breath two untenable hypotheses. Held in the most abject political slavery by a more powerful race, the natives of Ireland have been taunted with their imbecility, their indolence, their savage brutality. Whilst the Saxon race of England have proceeded slowly, but steadily, in the work of partial reform, the Celt of Ireland has not done so. It were, perhaps, no answer to this to say, that it has not been permitted him to do so; but this answer does not embrace the whole question: to reform, is Saxon; to revolutionize, Celtic. This is the difference. The Saxon endeavours first to amend the evil deeds of his government by attempting an innovation on "the law;" he generally has, in one shape or another, a sham which he calls "a constitution." It serves his purpose well enough, and he calls it "glorious." He would change it annually, if he could, to suit existing circumstances, until the patchings overlay the material fabric. The fiery Celt, on the other hand, despises this slow process of reform; he knows well, as all men do, that all power really rests on the bayonet; that in England itself the law, after all, reposes directly on the bayonets of the army, and on our cut-and-thrust and bludgeon police; that all the rest, including the specials and coal-whippers, is, in fact, humbug. The Celt flies, therefore, at once to the sword, cutting through all difficulties with it. The Saxon would, probably, do the same; but he loves not profitless fighting; and, besides, he is a collector of property,—a spatular-fingered man, as the philosphic Arpentigny would say; this, also, keeps his warlike propensities, if he has any, in check. With the Celt it is different, and, therefore, he revolutionizes. Leave Ireland to itself, and be sure that she will set herself right in a short time: with fire and sword, her natural weapons, would she purge the land of traitors and feudal lords—of the monstrous evils of primogeniture and entail — of squireens and priests—absentees and Sassenachs.

But this purgation of the land by fire and sword, the usual means which the Celtic race employs in its reforms, will now never happen; the nationality of Ireland, based on the unity of its race, has ceased. Ireland has not been for centuries of *one* race; all Eastern Ireland is occupied by the Saxon, who has carried into that portion of the isle his industry, his love of labour and accumulation; his steadiness, his Protestantism, and his love of rational liberty. Central and Western and Southern Ireland seems to me chiefly Celtic; the land of rodomontade, of dreams, of delusion, of indolence, of ignorance most profound, of Catholicism, and of matchless folly. The strong admixture of the ancient Phœnician blood with the Celtic race of South Ireland, whilst it has improved greatly the physical appearance of the inhabitants, has but little affected their moral character.

In a future lecture I shall speak of the Saxon portion of Ireland; my business at present is with the Celtic. A few years ago his character was greatly misunderstood, and is yet so in England. He is supposed in that country to be a person *sui generis*—brother to nobody; but this mistake will also in time be corrected. The Irish Celt is simply a section of that great race whose fortunes I have been tracing in Caledonia and in Wales; which I now examine in Ireland; and which I shall, in my next lecture, follow to his original country, France, the centre and the origin of his race.

M'Cullogh described the Caledonian Celt in three rambling volumes filled with science and sarcasm. Swift drew the character of the Irish Celt in a short doggerel poem beginning thus—

> "The feast of O'Rourke
> Will never be forgot
> By those who were there,
> And those who were not."

To comprehend clearly the character of the Celt in Ireland, we must take into consideration the influence of surrounding circumstances upon his physical and moral character. Sinking rapidly in the scale of civilization, despised by the world, debased by ignorance and superstition, he is still "the Celtic man." Civilization alters nothing essentially of nature; it merely touches the surface. This is what the historian either will not or cannot comprehend. He talks of the present age and the present era as if it were something quite peculiar, forgetting that it is but one of the revolving circles in which man moves—towards perfection, as some will have not; I think not myself, but mean not here to discuss the point. From a passage or two in Possidonius, I apprehend the modern Irish Celt to be much in the position of the French Celt in his time—that is, before, I think, the age of Cæsar. The modern one, it is true, we call a Christian; the ancient was a Pagan. But this is a mere formula; the faith, the religious faith, in the Unknown is, after all, the same. To give the name of Christian community to the inhabitants of some villages I have read of in the south and west of Ireland would surely be using the term in a very wide and liberal sense. But, be this as it may, the Irish Celt has all the good and bad qualities of his race: a wit and courtesy not to be surpassed;

deep and great feelings; a love of beauty, of form, of colour, of dress, of parade, of show. His taste is generally fine; his love and taste for the pathetic and the comical in music unquestioned and unquestionable; he is a true soldier—warlike, brave, with a quick sense of honour, fond of war. Trade, and traffic, and industry, and scraping and collecting together of wealth and other worldly matters, he despises; his indolence in such points is notorious. Of comfort and domestic happiness he takes no heed; in his house reigns disorder, be it the mansion or the hovel; rank alters not race; the Irish gentleman is a *Celtic man*.

An esteemed friend, himself of the Celtic race, informed me that, about fifty or sixty miles to the west of Dublin, you might almost count the straws in a field of grain; weeds overran everything; the family—father, mother, and ten children—were listlessly lying by the roadside herding a single cow. On speaking to one of them, they came all from their hiding-places. He pointed to the weeds in the field and the state of the crops. "Sure your honor is a stranger," replied the man, "or you would never speak in that way. We see you do not understand the country at all, at all." But my friend understood them well; too well, alas! He pitied and wept for those to whom nature had denied the power of self-regeneration. He well knew the character of their squireens, their middlemen, their landlords. It is a painful subject, which we in England, I have been assured, can scarcely comprehend. In this country we get into the fashion of talking about supporting the laws and the cause of order and property; but it appears that in Ireland disorder and violation of the law commences generally with those who are bound by rank and fortune to be their safeguard. A hundred families of starving women and children are driven out on the roads in the depth of winter, there to perish! This is said to be quite common. To what a state must those men be reduced who stand this! suffering oppressors to walk about with impunity!

It is stated that Lord R. once gave to an Irish billsticker a parcel of bills to be posted up in the streets of Dublin; his lordship promised the billsticker a reward of five shillings for his trouble. The ingenious Celt saw the whole affair in the twinkling of an eye; he says to another billsticker, "I will give you two shillings to stick these bills up in the streets;" this leaves three shillings to himself for doing nothing—sweet idea!—with entire liberty to dream away the day on the sunny side of the wall, talk big at a tavern, or swagger it about like a real-born Irish gentleman, with nothing at all to do in this world, and without having occasion, sure, to do any dirty work whatever. Sweet ideas to the Celt! How painful is constant, regular labour to him! How hateful the idea of an obligation in time or place. Order, and economy, and temperance—Faugh! these are for brutes and cattle, and for the Sassenach, mere machines, composed of limbs and stomach,—a stomach served by limbs. Look at an Irish boy! an out-and-outer. Then look at the Celt of the Rhone, with his capering, and dancing, and mountebankery; his trinkets and ribbons, watches and showy sashes; his fanfaronade and big talk; and tell me if you can discover any difference whatever between them?

But Ireland contains in her Celtic population the elements of a great race, were she not politically enslaved. Manufactures of the highest order would spring up under a healthy Government; in the taste of her Celtic population the fine arts would meet a response and a people fitted for their cultivation. Her literature and science would keep pace with that of France, of which her population forms but a part; and in Dublin we should have a miniature Paris.

A *small job* displays, I think, the character of a statesman and of his Government better, I have always thought, than a large one; and I shall, therefore, state what the English Government has done for the fine arts in Ireland, that is, for a nation composed of men whose taste for fine arts stands as high as that of the Saxon is low and boorish,—a population carrying out their destiny as a race, but now sunk below all hopes of regeneration.

Some years ago the condition of the national taste or, rather, want of taste, became the subject of public discussion. It was then suggested that boards sitting in London, offsets of one or other of the "two Houses," the joint-stock companies managing the affairs of the nation for a share of the good things with the Court, might do much to improve the public taste; it was one of the most disgusting of these boards, the Commissioners of Fine Arts, connected with the wretched things called schools of design, which it pleased the Government to attempt the formation of, as usual, a hundred years after their universal establishment in civilized Europe. Is it not shameful, said some one, that in England and Scotland, the first of all manufacturing countries in the world, there should not be a single artist equal to the invention of a pattern for silks and cottons, shawls and kercheifs, vests and ribbons? A cunning jobber asserted in the House, "that the reason of all this deplorable want of inventive genius and absence of the arts of design in the nation originated in our having no schools of design." Now this person, whoever he was, knew much better than this; he knew it lay in the character of the race; but it suited his views to say so. It flattered national vanity, the besetting evil of all nations; but, above all, it enabled him to get up a snug little board of commissioners, on the plan and principles of the "Board of Trade"—(trade in the fine arts!). It might even be associated with the Board of Health! Why not? We need not mind what Napoleon said; he is gone, and we are still here. Let us, therefore, get up a board or commission, with the usual staff, perquisites, and patronage; take care that the real artists of Britain have nothing to do with it; exclude also the public, among whom troublesome persons occasionally appear; make it as snug as possible—it cannot be too close. A member or two of the Commons; two or three of the Lords; one or two of the Ministry for the time being; do not forget Sir Robert Peel, and a high and illustrious person whose taste for fat pigs and oxen, model houses and washhouses, proves him at once, independent of his exalted station, attained solely by his extraordinary merit and ability, to be the fittest person in the kingdom to be president and chairman of all such boards and associations. Accordingly, and with these views, and based on these principles, the grasping spatular-fingered men in both Houses arrange the matter of schools of design. To any one not a statesman it would have occurred, that as we borrowed everything of this kind from France—all patterns in silks, shawls, &c., from the Celtic population of France—why not encourage and employ their Celtic brethren in Ireland, the men unhappily called Irishmen? There is the race; encourage and employ them, and you will find their taste and inventive genius at least equal to their continental brethren. Look even at the little they have been permitted to do; their poplin manufactures you cannot equal—cannot even approach; not even France, with all her high art, can manufacture a stuff equal to Irish poplin. Why not, then, commence with your schools of design in Ireland? Begin with the race where the national taste exists? Try them first? But the logic of common sense is one thing, and the views of English statesmen quite another. Accordingly the *scheme* was, of course, commenced in England; naturally in London. Where could a job begun in St. Stephen's end so well as in Somerset-house? But the brief history of the English schools of design; of the petition from Cork, about a year ago, to the commissioners, that they would be graciously pleased to establish a school of design in Cork; and the delightful, statesmanlike answer of the English officials at Somerset-house, "that so soon as the board had information of the working of the school of design which the honourable board of commissioners had about a year and a half ago first established in *Dublin*, the board would give to the petition from Cork all due consideration:"—the brief history, I repeat, of these English schools of design I must leave to my lecture on the Saxon race. In the meantime I beseech my audience to ponder over a few facts, drawing from them unprejudiced conclusions. For seven hundred years Ireland has been more or less completely in the hands of England; her population is chiefly *Celtic*, possessing indisputably all the good and bad qualities of the race. Amongst the good are a high taste for art; the Englishman despises this, I know; he is like a Dutchman, a utilitarian, and, therefore, I do not expect that mere English statesmen, Saxon men, would care one farthing for any high taste in Ireland, so long as she furnished her quota of men and money, rents and taxes, blood and treasure. But Irish and, I presume, Celtic men have figured as English Ministers, who ought to have known their race—heartless scoundrels, no doubt, ready at any time to sell the liberties of their country. They, of course, could not suggest anything for Ireland. And thus it happens that, after 700 years' possession, and in the year 1846 or 1847, a Government ruling six or seven millions of *Celtic people* actually does at last establish a school of design as an experiment (!) in Dublin, and promises another by-and-by to Cork, thus forming two for all Ireland—but not two yet! and this amongst millions of a race of the highest taste in the world! Ponder over these facts. They seem unimportant; you will be told they are so. A venal press will direct your attention to the six millions of money sent them lately. Ireland wants no money; she asks a firm government and justice. But the *land* (that is the question of all questions), the land of Ireland is in the hands of the Court; it belongs chiefly to a few courtiers. In this respect she resembles France in 1792. To the journalist and statesman I leave the questions of *large holdings* and *small holdings*, annually discussed by the collective wisdom of England—endless discussions, got up to amuse the people and to secure the possession of Ireland to the Anglo-Irish courtier. There is a much higher question to be discussed than large holdings and small holdings; it is this:—To whom belongs naturally the soil from which a nation is to draw its food? In what relation stands the Celtic mind to "the tenure of land as private property?"

INTRODUCTORY ADDRESS DELIVERED AT THE HUNTERIAN SCHOOL OF MEDICINE, OCT. 2, 1848.

By C. J. B. ALDIS, M.D., Fellow of the Royal College of Physicians, and Physician to the Surrey Dispensary.

GENTLEMEN,—It is with much pleasure that I commence this, the seventh, session of my lectures on the nature and treatment of diseases, at the Hunterian School of Medicine. During the period I have had the honour of addressing the pupils in this establishment, numerous young men, who entered it quite unacquainted with the rudiments of their profession, have been trained up by my colleagues and myself in the knowledge of such sciences as were suitable to them, have studied such subjects as were calculated to contribute to the welfare of mankind, and have become qualified, safe, and successful practitioners, distributing the blessings of health in different parts of the world. It is, therefore, with much pleasure that I reflect upon the many hours which we have passed together in this school, in pursuing the important truths of our profession, and that I have been an instrument in assisting my colleagues in so careful an undertaking. There never was a period in which a greater effort has been made for promoting education than at the present time: popular instruction seems to be the grand object of the day. The clergy and laity are most actively engaged in extending knowledge among the poor, associations are being formed for young men desirous of improving their leisure hours in the evening at the lowest possible expense, and

the working man enjoys his institute. The first experiment of the evening classes will be made this evening at the schoolroom of St. James's, Curtain-road, at eight o'clock. The range of subjects will be nearly the same as that adopted at King's College. These facts should stimulate you to increased exertion in your studies, otherwise you may hereafter find that many in a lower station of life have greatly outstripped you in general information. The practice of medicine has been ordered by our Saviour, who commanded his disciples to heal the sick; and we find a request in the same book that His command is given to honour a physician with the honour that is due to him. I will, therefore, take it for granted that those gentlemen present who are about to commence their studies, and to whom I more particularly address myself, have felt convinced that the art of curing or relieving disease is one of the most important sciences to which the mind can be applied. (Allusion was then made to the advantage of a good preliminary education.) The mathematics would be useful in preparing the mind for the investigation of truth, which must improve it. Truth is preferable to imagination and speculation, and is the genial climate for the mind of an intelligent youth to flourish in. Although a distinction in practice existed between the physician and surgeon, nevertheless the principles were the same. Medicine and surgery were branches of the same tree planted by philanthropy to relieve the ailments of mankind. (The lecturer then commented at length upon the different medical sciences which must be acquired by students in order to obtain a knowledge of their profession, and in which they would be compelled to undergo a strict examination before commencing practice on their own account.) I ventured to presume, in my opening address last year, that Government would do something at the ensuing session of Parliament for the sanitary condition of the people. A bill has since passed through both Houses of Parliament; but at present London, Scotland, and Ireland are excluded from its operation, while there is ample evidence to prove the necessity of including all these places. If we consider a portion of one locality in this metropolis, viz., the lower parts of Westminster, we shall be disgusted not only with the low physical condition of the people, but also with their depraved state of morals. Fever broke out not long ago at Westminster School, when the place was proved to be actually riddled with sources of disease. And the state of the sewers was considered to be a "mystery;" the neighbourhood is also very badly drained, creating disease and death among the inhabitants. The registrar informed me, a short time back, that more deaths had occurred from smallpox and scarlet fever during two months than he had ever known during the same period since he had held his appointment. Now, there is connected with this low physical state of the inhabitants a corresponding moral degradation; and I will, with your permission, read one or two extracts from a pamphlet entitled, "Westminster, Past and Present":—

"We now take a family of another character, where the parents themselves have grown up in crime; the most painful of all with which we have to do. The parents look upon their children in no other view than they have been brought into life to follow their footsteps. T. W. had three sons; the youngest was ten when we first became acquainted with the family. The whole of their sons have been transported; the youngest of the three we made every effort to save from ruin; but, alas! we had a mother to contend against whom nothing would satisfy but to send her boy out to steal. Her violence to that poor boy, when unsuccessful, was more like the fiend than the parent. He once told the writer that he was doomed to be nothing but a thief, and he cared not what would become of him. It is impossible to conceive a more fearful state of depravity than that of parents living on the wages of their own children's sin and shame; yet cases of this kind are so numerous that we cannot pass them by without mention of the fact. We only give one case of this kind, it is that of J. H. He and his wife kept two houses of infamy, with upwards of thirty young women as inmates, and among that number there were two of the daughters of the keepers of these very houses pursuing this awful life, who contributed their share for the good of the house. Another case is related of a child who was ordered by his mother 'to go and steal.' He was caught and imprisoned. He has spent fifteen months in prison, during the space of two years, and would in all probability have been sent to a distant land as a felon, but a friend was found just in time to save him, and attended to his moral and spiritual interests as well as to his temporal comforts. The boy attending the house of God, the Gospel was blessed to his soul. But his sister, who was sent the same way by the mother, became an abandoned outcast; disease laid hold upon her, which soon wasted her health, and hastened her to a premature grave. The sanitary and moral condition of the people will be of much importance to millions, and creates so much interest at the present time that I hope you will excuse my dwelling upon the subject. In Westminster youths were taught the science of "phobology," or pocket-picking. A mock trial followed, in imitation of the Old Bailey. Now, it costs to educate these children at the "Refuge" £5 each boy; but what was the expense of imprisoning, boarding, and transporting one of these pests of society? Not less than £150.

The reaction of children upon parents is also considered in the same pamphlet. One dying child, educated at the Refuge, said, "Oh! mother, will you give up drinking, and go to church, and pray for a new heart? I want to meet you in heaven!" The mother's heart was full; tears ran down her squalid cheeks. The writer had often made the same request, but his words fell upon her ears like the raindrops upon the adamantine rock. The expense arising from disease is also very great. I was requested to visit a patient of the Western Dispensary in March last. When I entered the house I found two cases of typhus fever: a boy, eleven years of age, who lay at the foot of the same bed that his mother occupied. The mother had four children to maintain, her husband being blind and paralytic; and the patients were nursed by a female, six months advanced in pregnancy, who had other engagements. The fever attacked some of the other children, when it became necessary to remove the whole family into the workhouse. (The importance of clinical study was then dwelt upon, and various complicated diseases, illustrated by diagrams and plates.) I wish to make a few remarks on private schools of medicine. It has been stated that neither medicine nor surgery should be taught in these, because they do not possess opportunities for clinical instruction. Now, this is an error; for in every private school that I am acquainted with some of the teachers are medical officers to dispensaries and other institutions, and, consequently, can give and do afford their pupils opportunities of acquiring clinical instruction. Again, every pupil who attends a private school must enter some hospital for learning practice; so the difference consists in this,—that the pupil, instead of walking from the lecture-room of the hospital at once into the wards, walks from the lecture-room of his private school (which, by-the-by, is so far public that during its existence we have received pupils from every hospital in London, besides some from Oxford, Cambridge, Dublin, and Edinburgh) to the hospital, with the advantage of a little fresh air in the latter case. The same plausible objection might be made to teaching midwifery in most of the hospitals, because they do not admit midwifery cases. Can a pupil learn the nature and treatment of smallpox, insanity, puerperal fever, or infantile diseases, in the general hospitals? The majority, as far as they are able, exclude them; others object to the reasonable terms demanded in private schools, which allow individuals with very small means to enter the profession. If poverty had kept men out of the medical profession, how many excellent and talented persons must have been excluded from its pale! John Hunter, the greatest surgeon that ever existed, must have been rejected. Now, look at our public schools—Eton, Winchester, Harrow, St. Paul's, &c., or the two universities of Oxford and Cambridge. No man is too mean or too poor for them to encourage and assist in being elevated to some of the hightest posts in the land; and I conceive it to be the glory of this country that education, industry, and good conduct will carry a man beyond the crushing system of any narrow-minded and unjust policy. Again, a medical man, with a numerous family and small means, may be anxious to educate one son, at least, in his own profession, probably to assist him when age creeps on, or to reap the produce of some of the seed which his father has sown. He cannot enter his son to the hospital schools because the fees are too heavy. There are several persons maintaining a high position in the profession who are anxious to suppress private schools, and to stop up some of the legitimate channels for exertion; but they seem to forget that there must be feebler members in every profession, who, individually and aggregately, are of immense benefit to society. Let me urge you to diligent application in following your studies; do not say that your circumstances are easy now, and that there is no such need of careful study, for these may alter; your homes may be disturbed as the nest by the shot of the fowler; affection which now exists may be dissipated by anger, or jealousy, or something worse; and friends that are closer than brothers may be divided, as the poles, asunder. Under such circumstances, how valuable your profession will become! Look at many of the railway adventurers, the West India merchants and proprietors, whose homes, once gay and verdant with prosperity, are now sorrowful and chilled by the winter of adversity; many of them would be glad now to have been brought up to some profession.

I have hitherto, my friends, been speaking to you merely of things temporal and your secular education. But it would ill become me, as superintendent of this school, if I were to omit urging you to a strict attention to religious duties. We have no means of religious instruction here, but you may do much for yourselves; and I make no doubt that many clergymen would be happy to advise you as to the religious books you might add with advantage to your medical collection. I would quote from the life of the late celebrated Dr. Arnold, master of the Rugby School, "What we must look for here is, 1st, religious and moral principles; 2ndly, gentlemanly conduct; 3rdly, intellectual ability." Again, in page 132 of his life it is stated, "We are not a gaol to keep it (vice) in, but a place of education, where we must cast it out to prevent its taint from spreading." What an element for good or for evil a young man is, especially a medical student, who is generally separated from his family and friends, and thrown suddenly into the vortex of London temptation, or afterwards of Paris, through which few pas unscathed! It may be that some of you have not thought of religion at all in connection with your medical studies; then begin at once to do so: begin this very night and pray for Divine assistance in your honest endeavours after knowledge. Some of your parents will do so for you. One of your fathers, a medical friend of mine, wrote to me about his son, who has entered to the lectures of this school, "That he has hitherto sustained an untarnished character from all his employers. God grant that he may pass through the London ordeal as satisfactorily," is the prayer of an anxious parent for the welfare of his son. That there is no natural tendency in medical science to infidelity in religion, we can prove from several medical writers; the example of St. Luke will also show that there is nothing in its principles contrary to the doctrines of Christianity. Linacre, the founder and first president of the College of Physicians; Cham-

bers, a joint founder of the same college, Dean of Westminster; Marbeck, physician to Queen Elizabeth, and Canon of Christ Church; Sir Thomas Browne, Haller, and Heberden, were eminent for piety and religious works.

My young friends, be careful, be not thoughtless, have great regard to character, especially in this school. Your teachers here may be of great service to you hereafter in bearing testimony to your character, provided it has been good. When you have received your diplomas, you may seek some public or private appointment, and will require testimonials from your former teachers, or the malevolent and perjured may attack you. How you will then feel supported and strengthened against a host of such persons by the testimony of those who have watched your upright conduct for several years! "Remember *now* thy Creator in the days of thy youth, while the evil days come not, nor the years draw nigh, when thou shalt say I have no pleasure in them." Mark the word *now*: remember *now* thy Creator; and why lay such a stress upon *now*? Because youth is passing quickly *now*, *now* when you are pliant, like young plants; wait not, then, for another season that we may send you forth into the world thoughtful and careful men, anxious not only to obtain your qualifications here, but to pass with credit your final examination, which all must undergo in another world.

ORIGINAL CONTRIBUTIONS.

ROYAL BERKSHIRE HOSPITAL.

SURGICAL REPORTS AND OBSERVATIONS.

By F. A. BULLEY, Esq., F.R.C.S., Surgeon to the Royal Berkshire Hospital, Reading.

GANGRENE OF THE TWO PROXIMAL PHALANGES OF THE FORE AND MIDDLE FINGERS, FROM AN INJURY BY A THRASHING MACHINE; TETANUS; DEATH.

Thomas M., an agricultural labourer, of robust and healthy appearance and temperate habits, was admitted Aug. 31, 1848, on account of a dry gangrene of the two first phalanges of the fore and middle fingers, which had followed a comparatively slight contusion of the hand, from its having been drawn into one of the small wheels of a thrashing-machine, which he was employed in feeding. The accident had happened just a week before he applied for admission. It appeared that no particular surgical applications had been made to the injured parts, beyond their being covered with lint and warm water, and afterwards dressed with a simple ointment, which was all that seemed to be required. Two or three days after the receipt of the injury he quitted Uxbridge, where the accident had happened, and returned to his home at Compton, in Berkshire, where it appears he neglected to apply for any further medical advice, until, after a violent attack of pain and inflammation in the injured fingers, he found that they were beginning to lose their natural colour, turning at first of a bluish tint, and ultimately becoming quite black from gangrene, which extended as far as the second joint in each of the affected fingers, where it somewhat abruptly ended. The weather was cold and damp at the time he took his journey, which might have favoured the occurrence of the inflammation which preceded the mortification, as well as the tetanus which followed it.

In this state he was admitted into the hospital; and as the mortified ends of the fingers appeared to be nearly separated, and as the surrounding parts looked healthy and sufficiently vigorous to ensure a separation by the natural processes, and, moreover, being solicitous to spare him the pain of amputation in sound parts, I allowed them to remain undisturbed, trusting to their coming off in the dressings, as I thought that by thus leaving them, as I considered I might safely do, there would be less loss of substance, and he would have longer and more useful stumps than could be procured by interference with the knife; stimulating dressings being used, as in ordinary cases of dry gangrene, to favour the natural separation.

Sept. 3. The gangrened ends of the fingers have almost separated at the joints, but there is a change in the appearance of the adjoining raw edges of the sound parts: the granulations are more flabby and less vascular, and the natural efforts appear to be insufficient to complete the separation. This morning, between six and seven o'clock, he complained to the nurse of a pain in both sides of his neck, and a stiffness of the jaw, so much so that he was only able to open his mouth about a quarter of an inch, with great difficulty in swallowing. On examination, his back, of which he had also complained, was found to be in a state of rigid spasm, and the vertebral column had assumed a deep, hollow, permanently incurvated appearance. He has an agonized and anxious look, and his face and body are bathed with a profuse briny perspiration. The abdominal muscles are hard and contracted. Pulse at the wrist quick, full, and throbbing; quick labouring action of the heart on auscultation, with tightness in his breathing. He had complained of excessive coldness in his feet and legs just prior to the attack.

Finding that the mortified parts had made no further progress towards a natural separation, and that the adjoining ulcerative surfaces had since last evening assumed a still more sodden and inactive appearance, I removed the gangrenous fingers just beyond the apparent lines of separation, the general spasms appearing, for the time at least, to be suspended by the operation.

Electro-galvanism of moderate intensity was applied as early as possible, one of the sponge-conductors being placed upon the upper part of the spine, while the other was drawn downwards along the contracted dorsal muscles and over the surface of the abdomen, as well as on each side of the neck; the muscular spasm of which latter part became almost immediately relaxed, and he was able to swallow better after its employment. Thirty grains of Dr. Stevens's saline powder dissolved in hot water to be taken every three hours. To have small quantities of port wine during the day.

Four o'clock P.M. My assistant repeated the application of the electro-galvanism principally over the contracted muscles of the neck and jaw, after which he was able to pass two fingers into the patient's mouth without difficulty; it also somewhat relieved the general spasm.

Ten o'clock P.M. The spasm and pain in the back have become increased; he is in a constant bath of perspiration; pulse 120, full, and throbbing. The slightest attempt to separate the jaws induces violent tetanic contraction; there is a greater hardness of the abdominal muscles, and an increasing difficulty in breathing. A sinapism composed of one part of powdered mustard and two of linseed-meal, and smeared with a stimulating liniment, to be applied along the whole course of the spine.

Monday morning, ten o'clock. The poultice has occasioned a good deal of redness and soreness on the surface, but it appeared to relieve the pain and spasm, and he continued better until one o'clock in the morning, when he felt a great difficulty in swallowing some wine which was given him. The electro-galvanism being re-applied, the spasms of the neck became diminished, and he was shortly afterwards able to swallow it with tolerable ease. At half-past two, he for the first time complained of a violent *tucking* pain in his back, with more rigid opisthotonos; after which he became easier and had an hour or two of sleep and comparative freedom from spasm, when he was awakened by the same tucking sensations, which now accompanied the spasms whenever they recurred, and continued till he died. Pulse still full and throbbing, 105.

Monday, eight o'clock P.M. Has been in a state of constant profuse perspiration, with spasms rapidly recurring, since last report; the arms and legs are warm and scarcely affected by the spasms; jaw immovably closed; pulse still quick and full; he has passed a good deal of water, but no stool since yesterday morning. The hot-air or spirit-vapourbath to be applied for an hour.

Twelve o'clock, noon. The spasms of the back have been rather more frequent and severe pulse continues quick and full, with the same throbbing beating of the heart. It was now suggested that chloroform should be administered, but, the vapour not being of sufficient strength, it produced only a kind of intoxication, short of anæsthesia, but which he said mitigated the violence of the spasms and relieved the pain. The cataplasm to the spine to be repeated.

Half-past three P.M. Mind wandering, and incoherent in his talk; his countenance has a more pinched and anxious appearance; his pulse, from having been all along quick, full, and throbbing, has become small and intermittent; and the action of the heart is evidently failing, the extremities beginning to get cold. The rigid spasm of the back continues.

On removing the mustard cataplasm, which, owing to the sinking of the vital powers, had not produced so much excitement of the skin as the former one, he was seized with a more violent and general convulsion than he had yet suffered, and almost immediately expired, thirty-two hours after the first accession of the symptoms. Much to my regret, his friends obstinately refused an examination of the body.

REMARKS.

The foregoing case will, doubtless, be thought to be incomplete, inasmuch as the impossibility of procuring a *post-mortem* examination has prevented any light being thrown upon it by the evidences of pathological anatomy; but I trust I may be excused if, under the want of such exact means of observation, I attempt by hypothetical reasoning to account for some of the most remarkable phenomena which attended it.

As regards the origin of the tetanic convulsions, it is evident from the history given that the patient had been subjected to the ordinary and most acknowledged causes of the disease—exposure to cold and moisture—which, acting upon the injured parts, had occasioned the inflammation which preceded their destruction, and had, probably at the same time, sown the seeds of the tetanic affection, which, incubating in the system, made its appearance about the usual period for its maturation, namely, about the second week after the occurrence of the accident; and it is not altogether unlikely that that peculiar state of the constitution, whatever it might be, which favoured the occurrence of the gangrene, influenced also, in some measure, the tetanic condition.

I have, within the last few years, had several opportunities of examining the bodies of persons who have died of tetanus in this hospital, but in none of these inspections have I been able to observe that the spinal marrow has been affected in such a way as to lead me to believe that the disease has had its principal origin in this structure, with the exception of one case, where it might possibly have been so, in which the cord appeared to be slightly softened; and it has been remarked by Dr. Hennen, who possessed very extended means of acquiring information on this subject, that, "of the cases communicated to him, many presented the cord and its membranes in a perfectly natural condition," as well as by Sir B. Brodie, who remarks that "he could never satisfy himself that these parts were diseased:" such also being the case according to other observers. It is not altogether extraordinary that the heart, and that portion of the vascular system more immediately in connection with it, should sometimes display unusual appearances of diseased action having been going on in their structures; (a) and in one or two of those instances

(a) Lecture on Tetanus, *Medical Gazette*, cit. in "Cyclopædia of Practical Medicine," vol. 4, p. 677.

It is related by Mr. Howship, that in a case of

which I have mentioned, I could have little doubt that such had been the case, as I found distinct indications of endocardial irritation, which irritation seemed to have extended into the aorta, and, probably, might have been visible in the bronchial and intercostal arteries and their dorsal branches, as well as in the lumbar and other arteries in proximity to the aorta; whither, however, I did not seek minutely to trace it, but I could clearly observe that the muscles supplied by these vessels, and which had been the most palpably affected by the spasm, as well as some of the organs, were of a bright red colour, and gorged with what seemed to be arterial blood, though darker than natural, while in some places there was evidence of the muscular fibres having given way from the violence of the muscular contractions.

The pathology of tetanus is so little understood, and its origin is involved in such obscurity, that it might seem presumptuous to hazard an opinion on the subject; but I would humbly suggest that, as in many instances of this disease the heart and other vital organs (which depend for the integrity of their functions upon the healthy influence of the sympathetic nervous system) appear from the first to be principally affected, this portion of the nervous system may sometimes present appearances of morbid change, either from irritation or congestion, inducing a partial paralysis of its ganglionic structure, and it might not be altogether useless to institute a more careful examination of this system after death, to ascertain its particular condition. The spasm of tetanus is, probably, nothing more than a violent effort of nature to restore the disturbed balance of the circulation, the heart's healthy action having been interrupted by disorder of that portion of the nervous system which regulates and controls its functions; and I cannot believe that irritation or congestion of the spine alone is sufficient for the production of tetanic spasm, inasmuch as patients will linger, bedridden for months and even years, with the most strongly marked symptoms of spinal irritation, and yet remain perfectly unaffected by spasm of any kind; and I have myself examined the bodies of persons who have died from spinal injuries and diseases, with irritation and congestion in different degrees, and even softening of the cord, in whom no sign of spasm was at any time apparent during life.

The most ordinary predisposing cause of this remarkable disease is, doubtless, the exposure to cold and moisture; and many cases are on record where, under the combined operation of these influences, it has occurred without the intervention of any particular surgical injury. An account is given by Bonetus of a young soldier who contracted the disease by sleeping in the open air a whole night while in a state of intoxication; and Fournier Pescay also relates the case of another soldier at Breda, who went into a cold bath when greatly heated, and on coming out was seized with fatal tetanus; and I have witnessed a case in this hospital, where a young man, who, having nearly recovered from the amputation of one of his fingers, imprudently exposed himself for a short time to the cold and damp night-air at an open window, while dressed only in his shirt, and was the next morning seized with tetanus, and died. It would seem that some special idiosyncrasy, which it is impossible to explain, rendered some persons more liable to the disease than others, and that, as in typhus fever and some other disorders which attack only certain portions of the community, while others escape—all being equally exposed to their influence—a particular state of the system previously existing was necessary to constitute a susceptibility to the attack; but what this particular state consists in may, probably, never be truly ascertained, or, at least, until pathology is more advanced upon the subject than it is at present.

But I can scarcely suppose that there are no cases of tetanus which depend for their origin on special irritation from a wounded nerve, because there are undoubtedly some which are so manifestly referable to nervous lesion, that it would be contrary to reason and common observation to doubt their relation as cause and effect; but as there are many other cases in which this relation is not so easily traced, and as out of the immense number of surgical injuries constantly occurring, in which it is impossible but that some portion of the nervous system should be lacerated or bruised, comparatively very few cases of tetanus occur, these observations will only have reference to those which seem to depend, with some probability, upon a morbid condition of the blood and circulating organs, as I believe was especially the case in the foregoing instance, where, if the nerve had been the sole or principal cause of the disease, the tetanic spasm would most likely in some way, or at some time, have affected the arm, through which the morbid influence must have been conveyed to the central nervous organ; whereas, on the contrary, the patient never suffered either pain or spasm in this extremity, and was able to move it with great freedom during the whole progress of the disease.

In reference to tetanic affections Dr. Wilson, an eminent physician, thus remarks:(a)—"No mere irritation of the nerve would suffice for the production of tetanus, and, in most cases of this disease, there is no evidence during life, or by dissection after death, of the existence of any local irritation in the nervous structures. They are irritated, no doubt, at the moment of the injury, but the spasm which follows, if any, is not then universal or tetanic." And again, "Spasm is much more readily produced by a prejudice of the blood than by an injury of the nerves; but to constitute a case of tetanus more than spasm is required. Spasm, frequent and protracted, of the voluntary muscles, is in itself a severe disease, implying disturbance or interruption of functions the most important in the body, yet such spasm alone would not be fatal. The spasms of tetanus are not more violent than those of epilepsy, which in their effect are salutary to the patient. It is scarcely possible to refuse the inference that in such cases the state of the muscular fibre is mainly determined by what influences the coagulable properties and local settling of the blood."

Pathologists have usually fixed upon the spinal cord as the seat of this mysterious affection, but have often failed to find in its structure those indications of disease which would account for its accompanying phenomena; yet, as from the freedom of the cerebral functions, which so frequently accompanies the tetanic convulsion, the brain has, in many cases, presented no particular appearances of lesion in its structure, it is curious that little or no attention has been paid to the sympathetic ganglionic nervous system, which, having under its control and regulation the organic and circulating functions, which are frequently the most disturbed in this disease, I am led to believe would not improbably, in some cases at least, present appearances of structural alteration.

I need scarcely mention that the blood, in these cases, has almost invariably been found to have become much altered from its natural healthy appearance and consistence, as, even when drawn during the various stages of the disease in life, it has appeared to be thinner than natural, darker coloured, and manifesting a great indisposition to coagulate, the same condition being apparent after death; and it was a consideration of this circumstance which induced me to prescribe the saline method of treatment, which, according to Dr. Stevens (who had paid great attention to the state of the blood in typhus fever and some analogous diseases), possess in some measure the power of restoring its natural saline condition, and thus rendering it a medium of more healthy stimulation to the heart; and I was the more inclined to this practice, because, from the immense quantity of briny sweat discharged from the skin during the attack, I felt satisfied that, as these saline ingredients, which are so indispensable to the proper vital condition of the blood, must in this way have been almost entirely drained from the circulation, no other or, at least, more speedy means could be made available for their restoration.

On the other parts of the treatment want of space prevents my making any particular observation. The electro-galvanism (which in some cases of atonic dyspepsia would seem to act by reversing the sympathetic nervous system), although it failed in removing or even materially relieving the general spasm, had the good effect of relaxing the muscles of the jaw, which enabled the patient to take his medicines, wine, and nourishment, which otherwise he might not have been able to do, and thus far it was benefical. In a less urgent and more chronic case I have found it relieve the general spasm; and I have no doubt that in some milder instances of the disease, especially of the idiopathic kind, it may be found to be of essential service.

Opium was not given in any form, because, reasoning on the foregoing hypothesis, I concluded that although it might possibly relieve the spasm, and thus mark the real state of the disease, it might oppress the brain, and thus indirectly increase the congestion of the sympathetic nervous system; probably, however, some patients have recovered apparently through its influence; but I would rather believe that, in these cases, there existed in the patients themselves sufficient inherent power of recovery to enable them to throw off both the disease and the effects of the remedy.

Probably the external use of chloroform—which, according to the observations of Mr. Brady, of Harrow, has the good effect of restoring the functions of the ganglionic system in the spasmodic cholera—may, in like manner, be found to be of service in this disease.

P.S. It has struck me, while reflecting upon this case, that the postponement of the amputation of the fingers might possibly, by allowing the contiguity of mortified parts, influence the production of the tetanus by the infection of the blood; but, on referring to a great number of recorded cases, I am unable to find that such a cause has ever been known to be productive of the disease; indeed, the circumstance that the spontaneous gangrene of the foot, which so often occurs in persons of all ages from frost-bite and other causes, and the extensive sloughing which sometimes follows debilitating fevers, is never followed by tetanus, is a sufficient argument against its having originated from this source.

ON SCARLATINA.

By J. W. TRIPE, M.D., M.R.C.S., and L.A.C., London

(Continued from p. 7.)

From the microscopic and chemical examinations of the urine previously described, we are induced to think that the kidney must be affected in a similar manner to the skin, in most, if not in all, cases of scarlatina. Thus the albumen and blood corpuscles, which are so frequently met with, are indicative of congestion of the vessels

tetanus, which he had an opportunity of examining after death, he found the heart so changed from its natural healthy state that it had become almost as hard as a board, I believe without reference to tetanic contraction; and in a case quoted from Bouillaud by Dr. Burrows (in illustration of certain nervous affections which are liable to originate during the progress of acute disease of the heart, and which are erroneously attributed to lesions of the nervous system), a boy, aged sixteen, having been affected with severe tetanus for four days, dissection showed a general increased vascularity of the pericardium, and about two ounces of pure creamy pus were found in the sac. In this case pericarditis was never suspected. The spasmodic movements of chorea are also often referable to heart affection.

(a) "Wilson on Languor, Spasm, and Palsy," page 79.

of the gland, in the same manner as of the vessels of the cutis; the increased quantity of epithelial scales shows that desquamation of the mucous membrane of the tubes occurs as well as of the cuticle. If, then, we can show by deduction that the kidney must suffer in a manner precisely similar to the skin, and that, therefore, the virus must attack both membranes, ought we not to consider that, if one is essential against a second attack, the other must also be?

But, in addition to the facts presented by the urine, the kidneys of those who die from scarlatina usually afford irrefragable proof of having suffered from the virus. They are usually enlarged, dark coloured, congested, and somewhat softened; if they do not die in the early stage, or from the invasion of dropsy, &c., they present further evidences of inflammatory action, which will be stated when treating of dropsy.

The following, which occurred in April, 1844, affords strong confirmation of the correctness of this view.

Master ——, aged seven, had scarlatina about two years ago (in 1842), at which time he had severe cynanche, as well as the rash, but no subsequent dropsy (whether the urine contained albumen and an increased quantity of epithelium, or not, I cannot state, as I did not attend him). About three weeks since he was exposed to the virus of scarlatina, without any apparent effect at the time. Some few days afterwards slight cynanche of the parotids supervened, which went away after a few days. On the nineteenth or twentieth day after the exposure the face began to swell, then his extremities, and lastly his abdomen and scrotum. This was attended with fever and paucity of urine, which was albuminous, high coloured, small in quantity, of high specific gravity, and contained some pus, or mucous and blood corpuscles, epithelial cells, and fibrinous cylinders. When I saw him he was of large size, the face, extremities, and peritoneal cavity containing fluid.

I did not at this time (1844) know the value of these fibrinous cylinders, as diagnostic marks of inflammation of the tubular portions of the kidney. They are merely mentioned in my notebook as long, cylindrical, granular bodies. The observations previously enumerated were not made until comparatively lately; my first investigations in albuminous urine were made in 1842, and were read at a meeting of the London Hospital Medical Society at the end of that year. I then stated that albumen frequently appeared in the urine from transitory causes, as dyspepsia; from the action of certain medicines, as cantharides, the terebinthinates, &c.; or from any other cause which produced great congestion or irritation of the gland. This paper is, I believe, in custody of the librarian.

Before passing to the true complications or secondary results of scarlatina, I may observe that I do not consider Liebig's theory of the mode in which the patient is protected from a subsequent attack is correct. He considers that this protection arises from some change which occurs in the blood; whilst I think that it is from some change effected in the tissues of the membranes which are susceptible of the virus. The virus, having been taken into the blood, is evidently thrown off by the skin and mucous membranes of the alimentary canal and of the kidneys —in the same way as that of typhus appears to be excreted by the glands of the intestines—and thus produces the symptoms which we class under the denomination of scarlatina. I believe that the infection, in passing out of the system, affects chiefly that membrane which is at the time most susceptible of its attack; and that, if the quantity of the virus be not sufficient to affect all the membranes, those which escape are, as before stated, liable to be attacked at a future period. This will be more fully considered hereafter.

Closely connected with, although not invariably dependent on, the renal disease is the dropsy which follows an attack of scarlatina. This is frequently but, improperly, termed inflammatory dropsy.

Of this disease, if it may be so called, there are three varieties:—1st. That in which the urine is non-albuminous; 2nd. In which the urine is albuminous, and the disease arises from a congested or subacute inflammatory state of the kidney; and, 3rd. In which the urine is albuminous, but the kidney is in a state of acute inflammation. They had better, therefore, be divided into *A*, dropsy from debility; and *B*, dropsy from renal derangement (*a*), or disorganization (*b*).

This division is of considerable practical importance, as the treatment required varies according to the cause of the dropsy.

The dropsy which follows scarlatina was considered by the older writers to be but of little import. Cullen says:—"The anasarcous swelling, which frequently follows the scarlatina anginosa, seldom requires any remedy; at least, the purgatives so much inculcated, and so commonly exhibited, soon take off the anasarca." (Gregory's edit., vol. i., p. 253.) Dr. Bateman says:—"But there is one affection peculiar to scarlatina, which occurs especially when the eruption has been extensive, viz., anasarca of the face and extremities. This dropsical effusion is commonly confined to these parts, and, therefore, unattended with danger; it usually appears in the second week after the declension of the rash, and continues for a fortnight or longer. But in a small number of cases, when the anasarca has become pretty general, a sudden effusion has taken place into the cavity of the chest, or into the ventricles of the brain, and occasioned the death of the patient in a few hours, of which I have witnessed two instances." (*Op. cit.*, p. 76.)

This paragraph of Bateman, as well as that of Cullen, is introduced to show that these writers described the dropsy as a result of scarlatina anginosa, in which the rash is usually well developed, and the desquamation of the epithelium correspondingly large. Both of these authors, and others who wrote previously to Bateman, were of opinion that the disease was rarely fatal, considering it to be almost innocuous. How, then, can we explain the severity of the symptoms and frequent death of the patient in the present day? I think than an analysis of the causes will readily explain this: they, as before stated, observed the affection to occur chiefly after scarlatina anginosa; on the contrary, we find that it more frequently results after an attack of S. simplex. In the one case the desquamation of the cuticle is usually abundant; in the other but trifling. Why we should now find it occur more frequently after S. simplex than after S. anginosa I cannot explain, unless it is that less care is now bestowed on all patients, and especially in these, during the period of convalescence, than formerly obtained. People now think it useless to take medicines or use any precautions as soon as they feel themselves convalescent; and this is more especially encouraged by the term scarlatina being used by practitioners, and understood by parents, to mean a less severe disease than scarlet fever; so that the same precautions are not used to protect the patients against atmospheric changes which are adopted in the other. We well know that the great exciting cause of this variety of dropsy consists in exposure to cold damp air, by which the functions of the skin are stayed, and more work is consequently thrown on organs—the kidneys—which are already impaired by the scarlatina.

As before stated, the urine in one variety of dropsy is non-albuminous, whilst in the others it is not only albuminous, but contains an increased quantity of epithelium, and in many cases blood, mucous, and pus corpscles, and a smaller or greater number of the cylinders previously described. In the former variety recovery will speedily happen, whilst in the latter death frequently results, either immediately, *i.e.*, from the present attack; or, subsequently, with symptoms of degeneration of the kidneys. The reason of this is obvious—in the one there exists severe and, most probably, disorganizing disease of the kidney, whilst in the other no such change has happened. I think we are warranted in supposing that the simple form of dropsy observed by our predecessors originated in extensive desquamation of the cuticle, and consequent suppression of the perspiration, together with debility of the vessels from the congestion and distention which they have suffered. Under these circumstances we can readily explain why the effusion of serum into the areolar tissue, which constitutes œdema, may arise from slight causes, and may happen without any serious results. We must not forget that when the functions of the skin are impeded the amount of watery particles and of the solid azotized matters which it ordinarily excretes, amounting daily to thirty ounces of the former and about one hundred grains of the latter, must be excreted by other organs. This duty devolves upon the kidneys, and thus causes an additional amount of labour, and corresponding increase in the rapidity of the excretory processes of the glands.

In this, the simple form of dropsy, the urine is occasionally albuminous; but usually it is not so, and contains an unusual quantity of lithates; in other respects it is ordinarily healthy. The presence of albumen, as before stated, is by no means indicative of disease of the kidney, but frequently of congestion or irritation only. The treatment of this form of dropsy is very simple, consisting chiefly in a free exhibition of purgatives; in the use of warm baths to restore the functions of the skin; and occasionally of diuretics, and the exhibition of the tincture of sesquichloride of iron.

The next variety depends on a far more serious cause, viz., derangement of the circulation, and irritation or subacute inflammation of the secretory tubules of the kidney. The first symptoms are very slight, consisting in a trifling accession of fever and thirst, loss of appetite, lassitude, and slight aching of the loins. After a few days the eyelids puff up, the face becomes œdematous, and next the extremities, occasionally also the penis, scrotum, or labia; and, lastly, effusion may occur into some of the serous cavities. The urine, if it was not previously albuminous, becomes so either a day or two previously, or a few days subsequently to the occurrence of the œdema; it becomes somewhat less in quantity, and of higher specific gravity and colour. A number of abnormal cells are also contained in it; mucous and, occasionally, blood corpuscles; an increased quantity of broken up epithelial cells; large globular nucleated cells, some of which much resemble in size and constitution the parent cells of cancer. Another kind of large cells, with indistinct nuclei and of a yellow colour, are always to be met with. They have a great tendency to aggregate, or I should rather say that they are bound together in clusters or rows; sometimes they form a single row of three, four, five, or six; sometimes two or three rows are joined together, and sometimes they occur in masses; more rarely single. When they form rows, they appear to be joined by agglutination, without any distinct membrane between them; they are rarely quite circular, being more or less hexagonal, and are not so thick as they are long. There are also a few of the cylinders described by Simon.(a) The salts of the urine are increased, especially the lithates and lithic acid, whilst the urea is diminished. I am accustomed to roughly estimate the quantity of urea present, by adding nitric or oxalic acid to a drop or two of the urine on a slip of glass, and placing it after a short time under the microscope, when the amount of nitrate or of oxalate of urea (according to the acid used) will afford a tolerably good estimate. Common salt, in combination with urea, is not unfrequently met with, in the form of

(a) The large cells described at p. 6, vol. xix., as forming an ordinary constituent of these cylinders, do not so frequently exist as I thought; for in many specimens, subsequently examined, the cells are small, and contain three or four rather large nuclei, like the pus corpuscles figured in plate 3, fig. 9, B, of Day's translation of Vogel's "Pathological Anatomy."

octohedral crystals, which very closely resemble oxalate of lime. These crystals may readily be distinguished by their size, which is usually larger, and their angles, which are less sharp, than those of the oxalate; they dissolve in distilled water, and often recrystallize in the form of cubes; on the addition of nitric acid they dissolve with a slight effervescence, and produce the crystals of nitrate of urea. Oxalate of lime dissolves in nitric acid without effervescence, and of course does not form nitrate of urea. The effervescence can be readily seen under the microscope.

The treatment consists in avoiding diuretics and acids, in the use of antimonials in small doses, in the exhibition of purgatives, and in restoring functions of the skin as speedily as possible. The tincture of the sesquichloride of iron is very useful, as soon as the febrile symptoms disappear. These patients generally recover.

The most important and, fortunately, the most rare form of acute albuminous dropsy (excluding nephritis, which does not always produce dropsy) is characterized by somewhat similar symptoms to those previously described; indeed, the one form of disease graduates so insensibly into the other that, in some cases, it is impossible to say to which form a case belongs. In well-marked cases the early symptoms consist in increased heat of skin, thirst, a furred tongue, and quick pulse; great diminution or almost total suppression of the urine, and a great diminution in the quantity of urea. After the febrile symptoms have existed a day or two the eyelids become swelled and œdematous; the face leucophlegmatic and swelled; next, the extremities are invaded by the dropsy, then the genital organs, and, if the disease progresses, the serous cavities are similarly affected. The cavity into which the fluid is deposited appears to vary somewhat in each epidemic. This year I have noticed it to occur most often in the abdominal cavity; in the year 1844, chiefly into the cavity of the ventricles of the brain; at other periods the thoracic cavities have seemed most obnoxious to it. Occasionally the membranes lining these cavities are attacked with inflammatory disease, which is very apt to creep on without being noticed, as the symptoms are not so acute as they ordinarily are.

If we examine the urine we shall invariably find it albuminous, usually very highly so, and presenting an unusual quantity of lithates, is of a high specific gravity, and a deep colour, with a large quantity of broken up and entire epithelial cells, and also of the other cells described in variety (*a*). There are also blood and mucous, or pus corpuscles; large, round, granular cells, much larger than pus corpuscles; and a number of the cylindrical moulds of the convoluted renal tubules. As the disease advances, the urine either becomes still more diminished in quantity, or perhaps totally suppressed, when death results from poisoning of the blood by the accumulation of urea in it. If the course of the disease is favourable, the quantity of the urine becomes increased, its colour becomes lighter, its specific gravity diminished, the number of cells, corpuscles, and fibrinous cylinders lessened, and the quantity of albumen reduced. With these the other symptoms improve; the fever, thirst, and dropsy diminish, the face becomes more roseate, the appetite returns, and the patient appears to become gradually but perfectly cured.

But, although the recovery seems to be perfect, yet we must not by any means be too sanguine that such a result has been obtained, as, in consequence of the severe irritation or inflammation of the secretory apparatus, more or less permanent injury invariably results.

A brief *résumé* of the pathological changes which occur in the kidneys during the progress of the scarlatina and of the dropsy will readily explain why a perfect cure rarely occurs. The early changes we can only deduce from the *post-mortem* appearances of more advanced cases; but they most probably consist in congestion of the plexus of vessels surrounding the convoluted tubules. These vessels which supply the blood (*vide* Bowman, "Philosophical Transactions," 1842) for the secretion of the solid parts of the urine are derived from the efferent vessels of the Malpighian tufts, which form a plexus around each convoluted tubule. Now, as all the solid parts of the urine are abstracted from the blood by the cells lining these tubules, it is very evident that, if the vessels from which their supply of nutrient fluid is derived become congested, some change must occur in the cells themselves. This change consists, first, in an increased activity in the nutritive process, and a consequent diminution in the duration of vitality in each cell; that is to say, the cells die sooner.

In normal secretions, as soon as the cells arrive at the full period of their growth, they are cast off from the surface of the tube which they line into its free cavity; if they are not thrown off quicker than ordinary, they are, in the case of the kidney, washed out by the fluid parts of the urine; but if quicker, and more especially if they become agglutinated by a fibrinous effusion, they block up the tube. This increased nutrition and desquamation of the epithelium is probably partly caused by the absorption of septic poison, which constitutes the virus of scarlatina, and by its excretion from the system partly through the agency of these cells. That the inflammation is chiefly confined to the vessels of the convoluted tubes is proved by the quantity of the watery parts of the urine being ordinarily but little altered; sometimes, however, the inflammation involves the whole gland, which is shown by the total suspension of all secretion. Dr. Johnson, in "The Medico-Chirurgical Transactions" for 1847, who has given the best account hitherto published of the microscopic pathology of the disease, states that, if the tubes once become completely blocked up, they never recover their proper function, and that after an attack of this kind, which he terms "acute desquamative nephritis," a larger or smaller number of these tubules are rendered useless. If the number be small, the patient's recovery may be considered so far perfect that no bad results are likely to happen; but, if the number be large, the patient will always be liable to an attack of albuminous dropsy, and will most probably eventually die with that peculiar form of granular degeneration in which the gland presents a mottled aspect, is of rather small size, firm, allows of the ready stripping off of its proper covering, and, when divided longitudinally, presents a much reduced size of the cortical portion. The first case in which I was enabled to trace this sequence occurred in a patient of Dr. Gordon's, who died in May, 1843. The patient was six years old, and had had scarlatina five months and a half prior to her admission into the hospital. Severe dropsy had followed the disease, from which she recovered; at a subsequent period dropsy again supervened, and she died comatose. Both of the kidneys presented this appearance, but not to the extent above described.

(To be continued.)

OBSERVATIONS IN THE HOSPITALS OF PARIS AFTER THE REVOLUTION OF JUNE.

By CHARLES KIDD, M.D., M.C.S., Limerick.

(Continued from vol. xviii., p. 370.)

We have arrived now nearly at the ultimate results of the late experiments in the Paris hospitals, only about 150 cases still remaining of the 1600 brought to the various institutions.

I cannot say, as far as figures go, that the event is much in favour of French surgery. As I took occasion to mention before, however, there have been too many novelties, too many disturbing elements in the affair, for it to wear that uniform appearance one would expect; too many little incongruities and differences of treatment, to render it all like one of our own battles or campaigns. It has been a thing, indeed, *sui generis* from beginning to end; but, then, our friends in France are ever fond of change and dramatic effect.

There are three or four varieties of the drama, I need scarcely say, in France. The old classical, long-winded one, in which half a dozen people talk very-measured Alexandrines, all very natural, of course; next the comedy of M. Scribe; then the drama, and others not to be described, productions of Victor Hugo and Dumas! The little one that ended last week with the toddling chariot of Louis Napoleon forms, perhaps, another; and, like a fly in amber, seems in every way worthy of preservation. What General Cavaignac, however, had left undone, the many-coloured theories of our friends in Paris have nearly finished—it is a sad admission, but not less a fact—the war of the barricades having died away in a war of words and a very battlesome cross-fire of conflicting opinions.

Even in the same hospital I have seen the men in attendance differ as widely as the poles asunder in their treatments: some being "conservatives" of the first water; others, destructives; others, as M. Velpeau, the great medium between both, — this distinguished physician thinking that figures exhibit one treatment as good as the other: though, by the way, what he means by saying 250 men, with all their limbs preserved by the temporizing method, are quite as good as 300 without them, I am not prepared to say.

From such a mass of incongruities it has not been easy to winnow out the few facts, the few stray seeds of truth; we have succeeded, however, to some extent.

Since last writing, my attention has been drawn to "The American Journal" of July, 1848, in which I find some very valuable statistics as to the rate of mortality after wounds in various hospitals at the other side of the Atlantic. As a pendant to a table in a former number (*Medical Times*, p. 319), and as extending the field of numerical inquiry, I have thought the main facts very worthy of remark. We have first, then, the results of 91 amputations in the New York Hospital, according to the laborious researches of Buel; a table, also, by Norris and Hayward, of no less interest, pointing out the rate of mortality in the several hospitals of Philadelphia and Boston; to which I have added some figures, collected by Mr. Potter and Mr. Phillips, the former at University College Hospital, London—the latter in various hospitals, both at home and on the Continent. The chief point of interest—and it is one which has struck me very forcibly—is, that the general mean of this multitude of cases gives a per-centage within one of the number I had already struck out myself, and may be considered as a fair exponent of the danger of general surgical accidents.

STATE OF MORTALITY AFTER VARIOUS SURGICAL OPERATIONS.

According to the experience of	Per-centage of deaths after amputation of upper extremity.	Per-centage after amputation of thigh.	Per-centage of deaths after general operations.
Buel (New York)	44	26	28·57
Norris and Hayward (Philadelphia) ..	15	34	27·84
Ditto (Boston)	10	24	22·38
The three American hospitals, collectively	..	..	26·58
Mr. Phillips (hospitals of France, collected by him, 203 cases)	..	..	23·10
Ditto (hospitals of Germany, 109 cases)	..	..	23·85
Ditto (Great Britain 233 cases)	..	..	22·66
University College Hospital (Mr. Potter. — *Medico-Chirurgical Transactions*, vol. xxiv.	..	..	15·15

The mean of all these cases is twenty-four per cent., a test of no little use, perhaps, wherewith to compare the results of different kinds of treatment in the different hospitals. Indeed, it is quite clear some such criterion is wanted to regulate the opposite, and not unfrequently contradictory, practice but too general at present in the surgical world on the Continent.

In Great Britain, thanks to Mr. Guthrie, Mr. Hennen, and the Coopers, our practice is well defined, and founded on general principles. On the Continent, on the other hand, as I have said before, there is too much theorizing and striving after novelties. I don't know but your theorists, too, very often prove things rather hard of digestion. Lucian, we are told, painted his one-eyed princes in profile. Our theoretic friends in Paris, in the same way, love to turn the "seamy side" of their opinions out. This is a great fault. We are not entirely free from it ourselves, perhaps, in other departments of science. Any one who has read a late able and elegant work, "Vestiges of Creation," will perceive what I mean. But to proceed. It is a curious thing, as very ably shown by M. Quetelet, of Brussels, that in all our social and moral arrangements there are laws as fixed and definite as those in any other domain of nature; in fact, that man, a mystery in himself—as pencilled for us, for instance, by our great bard—is subject in the mass to regulations and arrangements of almost unerring accuracy. If this twenty-four per cent., then, represent the average mortality after severe surgical operations (and I would court inquiry on the subject), it is a fact of the most intense interest, and one which I would bring under the notice of this great statistician.

M. Quetelet, I need scarcely say, has shown the regularity which exists in the relative number of births and deaths in large communities—the regularity in the stature, weight, strength of different nations; in the moral world, the regularity, even, in the tendency to crime; with many other things which we should, *à priori*, consider without law or order. If then, this law, too, prevail, we will find it, as we will a little farther on, a test of no inconsiderable value in the comparison of facts.

A word now on wounds of the abdomen, and hemorrhage. After wounds of the chest, in point of gravity, come, perhaps, wounds of the abdomen. In 708 injuries of various kinds in the chief hospitals which I classified, I find exactly fifty cases of wounds of abdomen, thirty-eight injuries of the chest. Of the former a very large number were severe penetrating wounds, mostly fatal, and presenting nothing very particular, or nothing in addition to the usual *ensemble* of symptoms in such cases. In the matter of treatment, I don't know that the French differ so much in cases of this kind as others. Of eleven cases under the care of M. Jobert at St. Louis, eight died almost before anything could be done for them. At Val de Grâce I counted eight cases which seemed, as a general rule, to be doing well; four, however, died. In one the internal organs seemed to suffer little; in a second, though the ball had gone right through the hypogastrium, coming out at the perineum, there seemed little disturbance of the system; in another the liver was very manifestly wounded, yet he seemed getting on well; in another there was evident perforation of the large intestine, yet he lived several days; in another very remarkable case the ball had entered right over the stomach, going out at the left hypochondrium, without bad symptoms. Of these eight cases four ultimately died. Of four under M. Larrey, in the same hospital, two died.

At the Hôtel Dieu, in nine very bad cases there were four deaths. A wretched insurgent, battling under the walls of Notre Dame, was shot through the abdomen—the ball entering through the left hypochondrium. Intense vomiting and jaundice set in, yet he lived for four days. In another, wounded in the right iliac fossa, the wretched creature died after much suffering. In two others death was almost instantaneous.

At one of the ambulances, under the care of some surgeon whose name has escaped me, were five cases—two badly penetrating, which died; three recovering. In the other ambulances, the notes of which I have lost, the proportion was something of the same kind.

At the Hôpital St. Antoine there was one desperate case—a man wounded in the left hypochondrium: he had been run through with a knife by one of his comrades. A surgeon stitched the wound in the intestine, and replaced it in the abdominal cavity. He was brought next day to this little hospital. Leeches were applied and opium exhibited, to lessen the peristaltic action of the bowels; a bandage, also, was put on. The contents of the viscus, however, came away, with purulent matter, which continued for several days. I lost sight of him, however, ultimately.

Wounds of the abdomen are thus about the most fatal that have resulted from the late events. Of thirty-seven cases, we find twenty sinking, at greater or lesser intervals. The gravity of the injury seemed in all the cases owing to one of two circumstances—First, direct mechanical injury from perforation of internal organs; secondly, inflammation of the peritoneal cavity from lodgment of foreign matters: the latter, as a general rule, was more manageable than the former.

The result, too, in some instances was not at all proportionate to the apparent danger. In more than one case a large suppurating gunshot wound existed at the pit of the stomach, with very little constitutional derangement to intimate such a thing, followed, too, by recovery; while in others the "shock to the system" seemed the only way of accounting for the almost instantaneous death. Every one remembers the curious case mentioned by Dupuytren. A French soldier was wounded outside the city; the ball struck him obliquely, producing no external wound of any kind. Taken to a little ambulance at Villette, he became an object of raillery to his companions, who, seeing no wound, were tempted to believe that he had only feigned sickness to escape from the field of battle. All, however, seemed not right, and Dupuytren had him removed to the Hôtel Dieu. On his arrival there he began to complain of vomiting, insensibility of the lower extremities, hæmaturia, and other dangerous symptoms. He died a few days after; and, on a *post-mortem* examination, the subcutaneous cellular tissue and muscles of the sacro-lumbar region, the left kidney, and all the parts about, were reduced to one indiscriminate mass of disorganization: the skin alone had resisted the action of the ball.

Some cases of hemorrhage occurred after the late events, of some little interest.

In tying arteries the practice of the best French surgeons is to put on the ligature as separate from the surrounding tissues (having a regard, of course, to the *vasa vasorum*)—as distinct from the accompanying vessels as possible. In this, I believe, they are followed by the generality of English surgeons. There are many little details in this operation, as well as the putting up of stumps, which one cannot fail to perceive on going round the hospitals; not, however, of any particular moment. In smaller arteries torsion is very much in use, as first, I believe, suggested by Velpeau and Amussat. Velpeau recommends two pair of forceps to be used: with one he catches hold of the artery and draws it out; with the other he fixes it—performing the process of twisting by the former: the chief points insisted on by this eminent surgeon being the division of the inner coats of the vessel, which, retracting themselves, form a kind of valve at the opening of the artery. It is not applicable, of course, to vessels above a certain size.

Owing to the confusion of the late events and the obstacles of the barricades, there were very few cases of primary hemorrhage to treat: the many unhappy individuals who sank under such accidents never recovering at all, in many instances, too, brought dead to the hospitals. It was quite amazing the number of instances also in which balls had run along the *trajet* of large vessels without injuring them. At La Charité a man was brought in; the ball had, apparently, gone right through the subclavian artery, yet there was no hemorrhage. In another, the ball went through the thigh, coming out at the site of the femoral artery; still no hemorrhage. At St. Louis, a ball went right through the knee, coming out with the popliteal vessels; no injury. At the Hôtel Dieu alone, however, twenty-five cases were brought in, in most of which frightful hemorrhage had occurred on the field of battle; they all died on being moved. M. Amussat has great faith in letting patients alone in extremities of this kind, believing that the clot (*caillot*) formed at the bleeding orifice is quite sufficient, together with rest, to put an end to the hemorrhage. He has brought before the academy the result of three cases of no little interest. In one, a poor fellow, a physician, running amongst the wounded, a desperate rush of blood took place from the femoral artery on his being shot. With wonderful presence of mind he begged to be left on the pavement, and, binding round the wound a strip of his coat, awaited the results; immense swelling of the limb followed, the battle raged about him; the hemorrhage, however, stopped, and he ultimately recovered! In a second case, the lower end of the same limb was shattered by a ball, the popliteal nerve and vessels were divided; still the hemorrhage stopped of its own accord, and after amputation the artery was found blocked up with a clot. In a third instance, not very dissimilar, in which the upper extremity was severely injured, the brachial artery was completely closed. In accidents of this kind, according to this indefatigable pathologist, the extremity of the artery is surrounded by sundry layers of coagulated lymph, with a distinct membranous layer which he dignifies with the title of the fourth coat of the artery. The effects of mineral astringents in arresting hemorrhage is traceable, he thinks, to the facility with which this coagulum is produced. And fainting, the mode and manner in which Nature sets about effecting the same purpose, owes its operation to the facility it affords to the same process.

Very manifold wonders are now beginning to be performed in the Paris hospitals by the new agent, collodium. Novelties are never-ending among our very versatile neighbours—"*les badauds sont eternelle*." I should not wonder if its use in arresting hemorrhage will soon be very general. M. Piorry, indeed, has already recommended something of the kind to keep air from wounds; and M. Nelaton, after tying the artery, cuts off the ligature close to the vessel, shutting up the entire wound with the new preparation.(a) This looks, indeed, like a very manifest improvement.

As to the position of the ligature in hemorrhage, the men in Paris differ, of course, not a little. At the Hôtel Dieu I was informed Roux places the ligature always as near the seat of hemorrhage as possible, so as to have room enough to operate again in case of secondary hemorrhage. Professor Blandin, on the other hand, prefers tying the main branch, and thus cutting off the supplies. He had one case after the late events in which he tied the posterior tibial; he was afterwards obliged, however, to have recourse to amputation.

Roux has made an ingenious remark, the result

(a) The chief point to be attended to in the preparation of a perfectly soluble "fulmi-cotton," according to the wise heads in the various hospitals, would seem to be a perfectly anhydrous sulphuric acid and nitrate of potash. I am not aware that the new agent has found its way to this side of the world; yet it seems, however, very worthy of a trial. Starch bandages and gutta percha solutions have effected a world of good in a large way. The chief advantage of the fulmi-cotton dissolved in ether appears to be that the smallest wounds may be pencilled with it. Would it be worth trying in that opprobrium of surgery, vesico-vaginal and analogous fistulæ?

of the late events: it is this—that hemorrhage from wounds of soft parts rarely or never occur after the eighth day, so that we are then all right; whereas wounds where the bones are implicated are never safe till after the twentieth. Roux has used chloroform in all his operations without any of the bad effects said to arise from its action on the heart and larger vessels.

Secondary hemorrhage, like secondary amputation, I need scarcely say, is much more dangerous than that of a primary character. The little ambulances spread about the city of Paris after the late occurrences were found of very eminent service in accommodating patients of this class, and here cases of hemorrhage were watched and guarded against with unusual care. There seemed two varieties of accidents: in one the entire calibre of the artery had been destroyed, judging from the hemorrhage; in others only a small part, or some very small vessel; in some, horrid injuries; in many stumps, for instance, all the symptoms of hospital gangrene, the peculiar "strawberries-and-cream" appearance, to borrow an expressive phrase, set in, followed (in but too many instances) by death; in others the stump had not at all the appearance I have seen it wear in the Dublin and London hospitals—indeed, in this simplest matter our iends in Paris seem much behind us.

(To be concluded in our next.)

ON THE APPLICATION OF WARMTH AND MOISTURE.

OBSERVATIONS SUGGESTED BY A CLINICAL LECTURE LATELY DELIVERED BY M. VELPEAU.

By ALFRED MARKWICK, Esq., Surgeon to the Western German Dispensary, and formerly Externeto the Venereal Hospital, Paris, &c.

A short time since the *Gazette Médicale* contained the report of a clinical lecture, by M. Velpeau, on topical applications, but more particularly on poultices; and, as that lecture has been made public in this country by having been translated and inserted in one of our weekly periodicals, I deem it incumbent on me, as the introducer of a material (spongio piline) which is now fast superseding all kinds of cataplasms and all former modes of applying warmth and moisture, the water-dressing even, in many cases, not excepted, to make a few remarks on its contents, through the medium of the *Medical Times*, with the kind permission of the editor of that journal.

I believe it to be the opinion among the majority of the profession, in this country at least, that poultices are merely certain modes of applying moist heat; that the effects they produce are due entirely to their warmth and moisture, and that the bread, linseed-meal, &c., are mere vehicles for the latter, adding nothing to their soothing and relaxing action. M. Velpeau, however, seems to differ from this, judging from the following observation. He says:—"It was believed at one time that poultices were useful merely in virtue of the water they contained, and that if water were kept on the affected part the same end would be gained as where using a poultice;" hence I infer that he considers the farinaceous matter of which the body, or corpus, of the poultice is formed to have a certain share in the effects produced. In order, therefore, to set this question at rest, I would recommend that the learned lecturer pursue here the same plan that he adopts in forming a diagnosis, viz., "*la voie d'exclusion.*" Let him take any farinaceous matter he pleases, even the linseed-meal, which he prefers "because it imbibes liquids thoroughly, and contains a certain proportion of very sweet oil, which is not to be found in any other meal," although it has the objection of becoming acid, rancid, &c., which he admits, but evidently considers of no consequence, since "it applies to all the sorts of meal," and apply it to an inflamed surface; he will then see whether it possesses the same soothing and relaxing action as when combined with hot water; if it does not, it is evident that it is to the latter we must ascribe these effects. I need not say that this will be the result of such a course of proceeding. In fact, the attention of surgeons (I speak now of those who follow in the march of improvement) is directed not to the poultice as a "body," but to the "liquor" contained in it, and hence we find them expressing themselves in very strong terms on the subject. M. Guersant, in the "Dictionnaire de Médecine," states that the "beneficial action of a poultice depends on the time it remains warm and moist." Bourgery, in his "Minor Surgery," remarks that "poultices act by their temperature, by the moisture which they communicate to the skin, keeping it, as it were, in a perpetual bath." "Employed in various ways, but especially in the form of steam, simple or medicated, and of fomentations, poultices, and warm baths also, either simple or medicated, moist heat," says Dr. Copland, "is the principal agent by which the physician or surgeon is able to diminish the tension of rigid and unyielding tissues, lessen pressure on sensitive parts, and produce an emollient and soothing effect." Dr. Williams observes, in his "Principles of Medicine":—"In slight cases [of external inflammation] frequent applications of heat and moisture may entirely remove the obstruction, restore the circulation, and thus the life of the part, although the inflammation may have already caused much effusion." The late Professor Liston, who was so prejudiced against poultices that even their very name was to him "associated with putrefaction and nastiness," substituted for them the "water-dressing" "as a means of conveying and preserving heat and moisture;" "by which qualities," he says, "a poultice produces its soothing and beneficial effects, by which the surface is relaxed, its capillary circulation encouraged, and discharge promoted;" while Sir Astley Cooper, when speaking of the local treatment of inflammation, says not a word on poultices until after he has alluded to their active principle, which he does in the following words:—"The next mode of relieving inflammation is by the application of heat and moisture; heat alone would do harm, but the reverse is the result where united with moisture; for the two produce relaxation, open the pores, give rise to perspiration, thereby removing congestion, and occasioning all the beneficial effects that would arise from the application of leeches. The sedative effects of heat and moisture are well exemplified by what happens when a person takes a warm bath; a man, for instance, with a pulse at 75, goes into water heated to 100°; his pulse soon rises to 100; presently he perspires freely, his pulse becomes less frequent yet soft; great relaxation follows, and if he were not removed he would absolutely die, so extreme is the exhaustion that it occasions. Here, then, is direct proof of what heat and moisture can do, when they are applied generally; and, when used locally, their action on the part is precisely the same."—("Lectures on Surgery.") It follows, then, from these quotations, that, when we apply a poultice, we do so solely on account of the warm fluid it contains, and not under the impression that bread or linseed-meal has anything to do with its effect. This being the case, we cannot wonder that medical men should have long since desired and sought for a better, more effectual, and less objectionable vehicle than that of a farinaceous substance. It is true, however, that there are still some few in the profession who are so wedded to a certain routine of practice, that they have not the courage to deviate from it even in the slightest degree, however unsuccessful they may find it. They prefer an old, almost obsolete, and disgusting remedy, from which, in the emphatic language of Liston, "putrefactive fermentation, stench, and filth are inseparable," to a clean, efficacious, economical, and, in every sense of the word, useful substitute; and refuse to their patients the benefit of a remedy of which they really seem afraid to know the value, until at last, when the patient has determined to have his own way, and not submit to the prejudices of unenlightened individuals, the medical man has been obliged to acknowledge the error he has committed in withholding from him a material which has produced such excellent results, and against which he was so unjustly prejudiced. I am not giving the heated imaginations of the brain, I am speaking facts; and the case I allude to was one of puerperal peritonitis, where the medical attendant would not allow his patient to use spongio piline, notwithstanding the entreaties of herself and friends, who had seen and experienced its good effects. However, at his visit one day he found her so much improved that he was led to inquire the cause. "Why," said the lady, "I have been using just what you told me not to use, and you see with what result." I have even been informed by the manufacturers that, in introducing this material to the notice of some of my professional brethren, they have been met with such remarks as these:—"I don't want any of your stuff; I use linseed-meal, and that is good enough for me!" Another, even more unpolite, said—"Don't come here with your humbug; its all nonsense." Another, who had neither tried it himself nor seen it tried, objected to it, but, being told that his own brother and others in the same town were using it with great satisfaction, replied—"Ah! well, you need not mention what I have said." These are exceptions to the rule, and contrast remarkably with the opinions of those who are not backward in resorting to anything calculated for their patients' good, and which fully convince me, as they must do every impartial and unprejudiced person, of the truth of the remark I made when first I introduced the material, viz., that "warmth and moisture applied by means of the spongio piline would be found to produce effects far more decided and beneficial than they had hitherto done."

The following are some of the opinions to which I allude. Dr. Conquest in his late work, "Letters to a Mother," observes:—"Poultices of every description are now almost wholly banished from practice. There are many valid objections to their use, and equally with fomentation, flannels, and cloths; they are superseded by the spongio piline, which is cheaper, cleaner, and more efficacious than an ordinary poultice or fomentation." Dr. Badeley remarks "that he has found it very beneficial wherever it has been used by his direction." Dr. Barham says, "I may most unhesitatingly state that, as a substitute for poultices and fomentations, I have found it of the greatest utility, cleanly, economical, saving money as well as labour, and this in hospital as well as private practice." Mr. Smith Brennan writes—"I am able to express my approval of its superiority over ordinary poultices and fomentations, being much more comfortable, more cleanly, and much cheaper; my sick wards are now sweet and wholesome, which before were sour and unwholesome from the stench arising from the common poultices. Independent of these advantages, I calculate to save our union £15 per annum by using the spongio piline, compared to what it usually cost for bread or linseed-meal." In bringing forward these statements, my object is not to puff an article with which my name may be associated, but, on the contrary, simply to prove to the profession the merits of a remedy which needs only to be tried to be approved of.

In conclusion, I may take this opportunity (although somewhat unconnected with the subject) of alluding to one of the precautions to be observed against cholera, lately published by the Russian Government. It is as follows:—"To beware of catching cold, and particularly to protect the stomach from cold, for which purpose to wear a broad belt of cloth or stout flannel upon the skin round the waist." Now, as warmth appears to be so essential, nothing appears to me so well calculated to afford it as the "impermeable piline." A belt of this material placed round the waist would answer far better than either of the fabrics above mentioned. I am not able to speak from experience of its efficacy in the true Asiatic form of the disease, but I can bear testimony to its good effects in severe forms of the English variety.

19, Langham-place.

REMARKABLE CASE OF POISONING BY ARSENIC, IN WHICH THE SYMPTOMS WERE DELAYED.

By WALTER CLEGG, Esq., Surgeon, Boston, Lincolnshire.

On Sunday, Aug. 27, at four o'clock in the afternoon, a woman requested me to visit her niece, who had taken poison. Her own suspicions had been aroused a few minutes before, by finding a white powder at the bottom of a cup when she was preparing the tray for tea. She accused her niece of attempting suicide, and the girl sullenly admitted having taken a teaspoonful of "white mercury" before dinner—that is before half-past twelve o'clock.

I accompanied the woman, and found a heavy stupid-looking girl, aged seventeen years, sitting in a chair, more asleep than awake. On being roused she reeled about the room as if intoxicated; indeed, I at first suspected poisoning by a narcotic. But a paper parcel was brought to me evidently containing arsenious acid, and from this parcel the girl declared she had abstracted and swallowed the poisonous dose. She appeared to be in no distress; she had no acrid eructations; no burning pain in the throat or at the epigastrium; no vomiting, no diarrhœa. She had been once sick after dinner, but now the stomach was not irritable. All she desired was to be allowed to go to sleep; and narcotism appeared to be the only present symptom (if symptom it may be considered) of poisoning by arsenic.

The sulphate of zinc soon produced free vomiting, which was maintained for half an hour, mucilaginous drinks being also administered. At the expiration of this time, Mr. Small, another medical man, arrived with a jar of the hydrated peroxide of iron; and, having a very pressing engagement, I left the patient with my friend, who administered large doses of the antidote. At nine o'clock the same evening we visited her together. She was in bed, making no complaint, and disposed to sleep quietly. The belly was not tender; diarrhœa was still absent, and all vomiting had ceased.

At ten o'clock the following morning the aunt called upon Mr. Small to inform him that her niece was quite well: "Might she go a gleaning?" Up to half-past eleven o'clock the girl continued more than ordinarily cheerful, and was busied in preparing the family dinner. At half-past eleven o'clock she suddenly complained of an excruciating pain in the body, with excessive prostration of strength. She went to her bedroom to lie down, and at twelve o'clock was discovered dead, having fallen by the bedside. How many minutes she lived after the first expression of pain, and the nature of the symptoms immediately preceding dissolution, I am unable to relate; but, as she was never heard to move or to speak after going up stairs, I am of opinion that she was just able to crawl to the side of her bed, and died instantly. Thus the fatal result occurred in about twenty-four hours after taking the poison, and within half an hour after the first decided symptom of poisoning was manifested.

Sectio Cadaveris, forty-eight hours after Death.—The mucous coat of the stomach was much corrugated; the stomach itself appeared small and contracted, and numerous reddish-brown patches were diffused over the inner surface; the peritoneal coat was not affected. Slight traces of inflammation were apparent in the duodenum and intestines. Six ounces of a thin, shreddy, brownish-coloured fluid were removed from the stomach for the purpose of analysis; and I may add, briefly, that the vomited matter, the fluid removed from the stomach after death, and the fluid in which the stomach and first part of the intestines were boiled, most carefully tested by Mr. Small and myself, yielded abundant evidences of the presence of arsenic.

OBSERVATIONS.

This case is one of exceeding interest in a medico-legal point of view. In ordinary cases the symptoms of poisoning by arsenic are manifested within half an hour; very rarely have they been delayed for one hour. Two, three, and four hours have, however, been known to elapse. Orfila relates a case in which symptoms were delayed for five hours, and then but feebly developed; the patient died, nevertheless, within nine hours; and this case he considered the most extraordinary on record. The trial of Mary Smith, at Edinburgh, in February, 1827, may also be cited. Poisoning by arsenic was undoubted, "but," says Christison, "the symptoms did not begin till more than eight hours after the only occasion on which the prisoner was proved to have administered anything in a suspicious manner:" upon this evidence she was acquitted. In the late editions of his "Treatise on Poisons," Dr. Christison observes, in reference to this case, "The intervening state of sleep probably affords an explanation of the long interval, and I am not sure that I should now feel the same difficulty."

These circumstances considered, I have thought it highly important to place upon record the case above related, as it demonstrates clearly that arsenic, in a dose sufficient to produce death, may remain in the stomach for a period of twenty-three hours without producing the well-known and decided symptoms. One observation more I think it requisite to make. The lower classes in Lincolnshire are much addicted to the abuse of opium, and I have reason to believe that this girl was a laudanum-drinker. It has since occurred to me that her case might be an example of compound poisoning. Is it possible that the action of one poison could so far mask the evidences of the other? Did the opiate suppress the intolerable agony which ordinarily attends the administration of arsenic, whilst it possessed not the power to interrupt or prevent the deadly result?

REVIEWS.

A Practical Treatise on the Causes, Symptoms, and Treatment of Spermatorrhœa. By M. LALLEMAND, formerly Professor of Clinical Surgery at the University of Montpelier, &c. Translated and edited by H. J. M'Dougall, M.R.C.S., &c. London: J. Churchill. Pp. 333.

There are certain classes of diseases which appear, by the common consent of the profession, to be handed over to the superintendence of quacks: spermatorrhœa is of this number, which, being generally the result of a disgusting vice, ought more especially to receive the attention of medical men. It is a remarkable circumstance that, in the lectures on surgery delivered in the English, Scotch, and Irish schools, there is scarcely reference made to this serious malady. A false delicacy has, no doubt, produced the omission, and it is time that it was rectified.

Few works upon the subject have been written by the learned; though we find, so far back as the days of Hippocrates, that it received some attention, as his writings prove. In modern times M. Lallemand appears to have made spermatorrhœa a subject of close observation; and he has conferred a great boon on the profession by publishing the results of his experience.

Mr. M'Dougall deserves well of English surgeons for having undertaken and executed a translation of the work of the late surgical professor of Montpelier. The editor of the English edition has used much judgment in selecting some of the principal cases, and much tact in giving the author's meaning in a few words.

The causes which give rise to spermatorrhœa are thus recapitulated by M. Lallemand:—

"The first I considered was *blenorrhagia*, tracing the inflammation from the orifice of the glans penis, and considering all the changes produced by it in the tissues. Secondly, I spoke of cutaneous affections, pointing out the mode in which, by propagation of the cutaneous irritation through its continuity with the mucous lining of the urethra, involuntary seminal discharges arise. Thirdly, I considered the influence of the rectum. This I divided into two kinds: the one being mechanical, arising from an obstacle to defæcation, or from constipation; the other a vital action, producing its effects by the extension of irritation from the rectum to the prostate and seminal vesicles. The fourth cause of which I treated was abuse. Here I pointed out the various causes of abuse, their importance, and the varities of abuses. The fifth cause that came under my notice consisted of venereal excesses; and here I showed the circumstances which constitute excesses, and the conditions in which slight sexual intercourse may be injurious. Sixthly, I considered the action of certain medicines in inducing involuntary seminal discharges. I showed the effects of astringents, purgatives, and medicines which stimulate the urinary organs, such as nitrate of potass, &c.; I also mentioned the action of coffee and tea when taken in excess. Seventhly, the action of the cerebro-spinal system occupied my attention. I here considered the action of the cerebellum and spinal cord. Eighthly, I considered congenital predisposition; and here malformations came under my notice, with phymosis, exuberant prepuce, vitiated secretion of sebaceous matter, hereditary predisposition, congenital debility, &c. I also passed rapidly over the symptoms by which debility of the genital organs may be recognised, and the conclusions to be drawn from incontinence of urine during childhood."

The symptoms of spermatorrhœa are divided into *local* and *general*, both these being intimately connected. In the treatment the remote causes are not to be considered, while too much importance cannot be attached to the actual condition which keeps up the disease. M. Lallemand, in severe cases of pollution connected with chronic inflammation or irritation of the urethra, recommends cauterization of the mucous membrane of the prostatic portion by means of the nitrate of silver. In most cases this operation is successful; and in no instance has it been known to act injuriously when properly applied.

We hope that Mr. M'Dougall's effort to direct professional attention to a subject which has been too long neglected will be successful; and we strongly recommend the work to the attention of our readers.

Pharmacopœia ad usum Nosocomium Phthisicorum et Pectoris Morbus ægrotantium accommodata. Londoni: apud Bradbury et Evans, 1848. 12mo., pp. 37.

This small pharmacopœia contains numerous formulæ, judiciously selected, which may be used with advantage in diseases of the chest.

FACULTY OF PHYSICIANS AND SURGEONS.—At the annual meeting of the Faculty of Physicians and Surgeons of Glasgow, held on Monday, the following gentlemen were elected office-bearers:—Dr. William Weir, president; Dr. David Gibson, visitor; Dr. William M'Kenzie, collector; Dr. John M'Ewan and Joseph Fleming, Esq., boxmasters; Dr. J. G. Fleming, seal-keeper; R. G. Maxwell, Esq., Dr. John Crawford, William Lyon, Esq., Dr. John Panton, Dr. A. M. Adams, and Joseph Bell, Esq., examinators; Dr. J. M. Easton, and Dr. R. M'Gregor, visitors of drugs; Dr. Francis Steele, registrar; Dr. Alexander Forbes, vaccinator; George Watt, Esq., librarian; Laurence Hill, clerk; Rice Jones, officer; J. M. Menzies, assistant ditto.

MORTALITY IN THE NAVY.—It appears, from the Government report on the climate and the diseases of the African station, that the average mortality on the different naval stations of the British service is as follows, calculated per 1000 of the mean force employed:—South America, 7·7; Mediterranean, 9·3; Home, 9·8; East Indies, 15·1; West Indies, 18·1; Coast of Africa, 58·4.

IMPORTANT TO DENTISTS.—An importation of teeth into London, from Paris, is advertised; the teeth "having been extracted from the jaws of the insurgents and their opponents slain in the late insurrection."

Ague, fever, and dysentery prevail in Jerusalem.

NOTICE.

*** Subscribers who have paid their subscriptions in advance will be faithfully and regularly supplied with their copies; and, as this is only the second number of a NEW VOLUME (the first of which can be supplied), gentlemen are solicited to avail themselves of this advantage by forwarding post-office orders for the year, 25s., made payable to the Publishers, WM. S. ORR and CO., 49, Essex-street, or 147, Strand, London, where all communications for the Editor may be addressed.

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THE MEDICAL TIMES.

SATURDAY, OCTOBER 21, 1848.

THE NEW PROPRIETORSHIP OF THE "MEDICAL TIMES."

It is proper to inform our readers that, although the proprietary of the *Medical Times* has changed hands, the Journal will be conducted by the same Medical Editor who for the last eighteen months has been connected with it, while the most distinguished members of the profession will contribute articles of the highest interest to science.

The columns of the *Medical Times* will be devoted to the fearless discussion of matters relating to the general welfare of the profession, and will at all times be open to the exposure of abuses and the suppression of quackery.

The volume which has just been commenced will be enriched by the most valuable lectures and contributions. While continuing the Lectures on the Races by the celebrated Dr. Knox, and on Surgery by the venerable Samuel Cooper, new courses will immediately appear by Dr. Waller, the obstetric physician of St. Thomas's Hospital, on Clinical Midwifery; on Toxicological Chemistry and Medical Jurisprudence, by Dr. Letheby, of the London Hospital; and on Professional Hygiene, by M. Hipp. Royer Collard, of the Faculty of Medicine, Paris. In addition to these and other lectures, the volume will contain Memoirs of the French Academy, in which are recorded the opinions of the most celebrated military surgeons of the Republic and the Empire, on Gunshot Wounds.

The Progress of Medical Science will receive especial attention; in fact, the great amount of highly valuable and practical information which will be weekly contained in the pages of this journal will render it all but essential to every medical practitioner.

ON THE ELECTION OF THE MEDICAL OFFICER OF HEALTH FOR THE CITY OF LONDON.

On Monday last the Commissioners of Sewers for the city of London met in the Council-chamber to select from the candidates two gentlemen to be returned to the Common Council, which will appoint one of them as officer of health until the month of January. The post is an honourable and useful one; and the promptness of the authorities in selecting a member of the profession to watch over the sanitary condition of the metropolis reflects great credit upon them. As the new law requiring the appointment of a medical officer of health does not come into operation till the beginning of next year, the City authorities were not compelled to elect one before that time; but with a praiseworthy desire to shield the inhabitants of the City, as much as possible, from the fatal attacks of a threatening pestilence, it has been resolved at once to place the machinery of the Sanitary Board under the guidance of one whose education gives the best guarantee that he will discharge his duties in the most efficient manner.

From the reports which had been circulated, the impression had become general that the City was about to follow the example of poor-law guardians in offering but a scanty pittance as a reward for important medical services. We are glad to find, however, that, instead of the new officer receiving the insignificant sum of £150 per annum, this is only to be his quarter's salary, and he is to be permitted to practise his profession. We think, under these circumstances, the profession will not complain of an attempt to depreciate the services of its members, while it will be an assurance to the public that the authorities intend carrying out with vigour those means which are best calculated to increase the salubrity of this densely-populated city.

We view this appointment as an indication of an improved state of public feeling towards the members of the medical profession. Their services, it is true, have always been sought in cases of emergency, but they have not been always rewarded in proportion to their value. It has been thought that the indirect advantages resulting from public appointments were sufficient to compensate for small salaries; and what has been the consequences? The profession has been degraded and the public injured. Doubtless, if the salary of the officer of health had been only £150 per annum, there would have been candidates for the place. But would the best men have presented themselves, or would the duties have been as efficiently performed as if the salary had been more in accordance with justice? We think not; and we maintain that public functionaries commit gross errors in offering unremunerating incomes for services to be performed by medical men.

While we thus speak in commendation of the city of London, in promptly appointing a medical officer of health, we hope that additional proofs will be given that the authorities are in earnest as regards sanitary improvements. One appointment is this day (Thursday) to be made; but, if the cholera should invade us with the same severity as it has some of the continental towns, it will be necessary to have a well-paid medical staff, the number of members composing it being regulated by circumstances. We think the proposition of the daily *Times*, to divide the City into districts, appointing medical officers over them, is good, and these would constitute a Board of Health, to which the public would look with the greatest confidence.

The duties which the medical officer will have to perform will be numerous and important. There are improvements needed in the City which it will be imperative for him to point out, and there is no doubt that he will meet with considerable opposition. The City has certainly, within the last few years, been greatly improved —its sewers have been extended and better constructed; many of its narrow lanes and alleys have been annihilated, and where these once existed well-constructed streets have been made. But these improvements are only steps towards sanitary perfection, which is yet far from being attained. It is not because the cholera slew fewer victims in London than in Paris during the last epidemic that we should be less anxious to increase the salubrity of our great metropolis. This fact alone ought to incite the civic authorities to increased efforts to remove everything that is injurious to the public health, and to adopt all the improvements which science suggests to promote it. The City should not rest satisfied till it has removed every ill-constructed house, every foul alley, and every filthy cesspool.

And yet, if we may judge from what took place in the Council-chamber on Monday last, the corporation is very unwilling to be told of its faults. Some of the candidates who had written on sanitary reform were closely questioned upon statements which they had made, and supposed to refer to the city of London. Dr. Gavin's pamphlet on the unhealthiness of London was evidently not in good savour with the commissioners of sewers; and the doctor, in his defence, stated that his condemnatory observations applied to the sanitary condition of Bethnal-green and other localities, but not to the city of London. Mr. Simon also, one of the successful candidates, upon appearing at the bar of the court, was questioned; but he denied in the most positive manner that he had ever made any attack upon the City, and he declared that he always held its numerous and admirable institutions in the highest estimation.

But why was all this necessary? Was the City anxious to punish those who had spoken of its imperfections? We hope not; and it will be the duty of the newly-elected officer to urge those reforms which he considers necessary, though he may experience opposition from influential persons.

We trust that other large towns will speedily follow the example set by London in appointing a medical officer of health, and that they will not be less liberal in granting pecuniary compensation for his services. Edinburgh, Liverpool, Manchester, and Glasgow need especially such an officer; and, as the cholera is at our doors, we would advise that no time be lost.

THE CHOLERA NOT CONTAGIOUS.—ABSURDITY OF ENFORCING THE QUARANTINE LAWS.

THE civilized world at the present time exhibits a spectacle deeply interesting to the politician and the physician. The one regards with intense anxiety the convulsions which are shaking the most ancient dynasties, and causing to totter the political fabrics which have stood for ages; the other watches the progress of a disease which has swept across the world from east to west, scathing the most populous cities, and leaving in its rear trophies of destruction more awful than those of victorious troops in the pursuit of a panic-stricken enemy.

In bygone ages the nations of Europe looked towards the East with the most intense anxiety, for from thence came the triumphant armies of the Mahomedan faith. The bastions and bulwarks of Christendom seemed for a time to offer but a feeble resistance to the turbaned warriors who fought under the banner of the crescent and for the doctrines of the Koran. Their victorious

career, however, has been terminated, and the vast empire which they established excites no fear now in the nations which were once threatened with destruction.

In the East, within the last century, a new enemy has appeared which has advanced into Europe in opposition to the most powerful military cordons and the most rigid quarantine establishments. The physician has watched its progress, and has learned much by experience. It is admitted that hitherto he has discovered no remedy that may be called a specific, but he has ascertained that this disease, once considered so contagious that persons trembled to approach those stricken with it, is not so. This fact has been so clearly established that most of the continental kingdoms have ceased to put faith in military cordons or quarantine establishments, to arrest the progress of the disease.

Our own Government recently sent Mr. R. D. Grainger to Hamburg to make inquiry as to the contagiousness or non-contagiousness of cholera, and his report is decidedly in favour of its non-contagiousness. He says, "The medical officers of the hospital and of the town are quite satisfied the disease does not spread by contagion in the hospital or elsewhere; and in support of this conclusion the following facts may be mentioned: Up to the 4th of October the official returns give 1846 as the total cases of cholera that have occurred at Hamburg; and if the total population be taken at 150,000, as it is here reported to be, the attacks of cholera will be one in eighty-one. At the General Hospital, up to Oct. 4, there have been twelve cases of cholera among the common patients and lunatics; and, as the total number of patients and attendants is 1602, the proportion of cholera cases will be one in 133. It is particularly interesting that not a single nurse or attendant of the hospital has been attacked, nor have any of the medical officers suffered. It is also proper to state that, although the locality of the hospital is considered to be healthy, there have been some cases of cholera among the inhabitants in its immediate neighbourhood."

Observation has produced a complete revolution in public opinion at Hamburg. Formerly, every cholera patient was considered a doomed and dangerous individual, and, when hurried out of life by the pestilence, was hurried to the grave by the fears of the survivors. Even the profession was hard to be convinced, and the surgeon who made the first *post-mortem* examination secured his hands in gloves, lest he should contract, in the discharge of an important duty, a fatal disease. It would be absurd to suppose that the prejudices of the profession and the people have been removed without the clearest reasons. It is natural for men to think that a strange and fatal malady is contagious, and they must have the strongest proofs to the contrary before they will be convinced. The Hamburg people have become converts to doctrines which they once repudiated; fear has, in consequence, given place to curiosity. We are told that lately, when cholera patients were admitted into the hospital, the doors of the wards were crowded to such an extent by those anxious to see the patients, that the physicians found it necessary to give orders that the doors should be kept shut.

Our Government has recently established a Board of Health, and professes to be directed by it. The medical men who *advise the board* have declared themselves against the doctrine of contagion, and an official sanction has been given to their opinion. Yet what is the conduct of the Government in reference to those countries where the cholera has appeared? Why, it has ordered the establishment of a most rigid quarantine. We can scarcely believe it true when we hear that some vessels have been compelled to hoist the yellow flag, and that those on board have been subjected to an imprisonment of many days.

The recent enforcement of the quarantine laws is a gross insult to science and a great injury to commerce. Nations which we have been wont to consider as far behind us in civilization have been convinced of the inutility of enforcing quarantine to keep off cholera, and have set us an example which we ought speedily to follow. It would not have been surprising if the Sultan of the Turks had ordered "steamers coming from places where cholera prevailed, to be detained full six days from the date of their sailing from the foreign port;" but for the English Privy Council to have issued this regulation, after having declared in the *Gazette* that the cholera is not contagious, is really astonishing. But the real fact is, there were gentlemen at the Quarantine-office who panted earnestly for action, as it brought with it increased pay. We suppose the Government commiserated their condition, and, therefore, took the first opportunity of doing them a service. The Board of Health, however, had spoken rather too soon; and the merchants, profiting by the timely announcement, have determined that the officials at the Quarantine-office shall not profit at their expense. The cholera, in spite of all precautions, has appeared amongst us. It remains now for us to employ sanitary regulations against it; and from these we may expect the best results. It is in the power of all to be moderate in their enjoyments, cleanly in their persons, and regular in their habits; and these give the best guarantees against disease. Our country may boast of an intelligent medical profession; let us have also efficient sanitary laws in operation, and we shall then neither want quarantine establishments, nor need we fear the cholera.

TRAMPS AND TYPHUS.

There is a clause in the act relating to the relief of paupers, which renders it imperative on every board of guardians to provide for tramps, who apply for it, a night's lodging, a supper, and a breakfast. This benevolent provision has been turned to some account by those who wander about from place to place, obtaining a livelihood by begging. Since this law has come into operation the number of tramps has been yearly increasing; and the expense entailed upon the country has induced the Government to institute an inquiry upon the subject. A volume has, in consequence, been lately presented to Parliament which contains the observations of four poor-law inspectors, one special commissioner, and persons connected with fifty-seven poor-law unions.

The facts contained in this "report" are not only deeply interesting to the public, but also to the profession, as vagrancy is there shown to entail upon the country a large expenditure of money and a vast amount of disease. It appears from the statement of Mr. George Pigott, an inspector, that the total number relieved on the night of the 25th of March, 1848, in 626 unions and places, under local acts, was 16,086! and the majority of them were utterly undeserving the relief which they obtained. The really deserving poor can scarcely be found amongst tramps; but the piebald multitude is chiefly composed of professional beggars, thieves, thimble-riggers, poachers, prostitutes, and scoundrels of the very worst description. They compose a ragged regiment which, divided into many detachments, march upon the different towns, levying contributions upon the inhabitants, and make their head-quarters the union-houses. They have proved themselves such good tacticians that they have defeated all the attempts of persons in authority to put them down. The labour test has been unable to check them; prisons have no terrors for them; and the right of search has utterly failed in abstracting from their pockets their ill-gotten gains. At the present moment the whole corps of poor-law officials are so thoroughly beaten that they are at a loss how to prosecute the campaign against the vagabonds with any prospect of success. While these agree in nothing but being dishonest, yet they have their watchwords and their signals by which information is conveyed from one part to another almost with the velocity of the electric telegraph. Sir John Walsham informs us that in the North Witchford Union it happened that the stock of junk for oakum-picking was exhausted, and the guardians delayed to authorize the master of the Doddington Workhouse to procure a fresh supply. In the very next week the number of vagrants, which had for some time previously averaged about twenty per week, increased to forty-five, in the second week to fifty-seven, in the third week to seventy-five; and then, oakum-picking having been resumed, the number as readily decreased till it reached the usual average.

A most serious circumstance connected with vagrancy is, that it is the means of producing and propagating dangerous diseases. The morals of the class are infamous, and their persons disgustingly filthy; hence, as may be expected, the places they frequent are scarcely ever free from fever. At Stafford Workhouse there have been upwards of 300 cases of Irish fever from March, 1847, and it is stated that the house has never been free from it since; four nurses have had it, two of whom have died. At Kensington Workhouse 402 sick vagrants, about half of them with fever, were admitted last year; and the gaol is often preferred to the union, because of the better sanitary regulations which are in force there.

It has been a frequent matter of complaint that the vagrant wards of our workhouses are kept in a filthy condition. It is granted that into these places persons are admitted who hate cleanliness; but, when they come under the superintendence of parochial authorities, vagrants ought to be furnished with clean beds, and be compelled to enter them with clean skins. We think these circumstances have been overlooked, and frequently guardians have thought to punish tramps by putting them into filthy dormitories. Dirt, however, is their delight, and it would incommode them vastly to make the bath a passport to the bed.

It is evident that vagrancy is an evil entailing upon the country a great expense and a large amount of disease. As yet no effectual remedy has been devised to check it; and the last report made to the Government shows that the number of tramps yearly increases. This is a subject interesting to the members of the medical profession, as well as to political economists.

CASE OF HERMAPHRODISM IN ST. THOMAS'S HOSPITAL.

Our next number will contain the description of

a remarkable case of "Hermaphrodism," kindly communicated by our respected and talented contributor, Dr. Waller, of St. Thomas's Hospital, where this curious being is at present located. We understand no doubt was entertained by the individual or friends, as to the feminine construction of the generative organs, until examined by Dr. Waller, who, without hesitation, pronounced them to be of the masculine gender, though greatly deformed.

PROPOSITION FOR THE SUPPRESSION OF QUACKERY.

Sir,—Two or three weeks ago you kindly published a letter of mine in your journal. I do not know, but I think my letter has roused you a little. I see in this day's publication an excellent leading article, entitled "A Sheffield Quack Surgeon's Mode of Treating Periostitis—Death of the Patient." The case is a most extraordinary one, and I cannot help thinking that any professional man will read it with any other feelings than pain and disgust.

A thought has struck me with respect to the entire suppression of quackery, which, I think, may act well. We must be up and doing. There is a Medical Protection Society. This society will do good if all professional men, no matter of what grade, will support it. What I would propose is, that this society should issue a number of tracts exposing quackery all over the country, gratuitously, something after the manner of the Religious Tract Society. The public will then begin to learn something that they never knew or thought of. What would they think if they read of such a case as that you have kindly published? A number of such cases published, and a fair, common-sense meaning of the advertisements given which we so often read in the newspapers, would cause the people to be afraid of trusting their lives in the hands of those who care for nothing but money. If this plan was adopted, we should soon have quackery done away with, and the poor, more especially, thanking us for our charity, faithfulness, noble and holy intentions.

Hoping, Sir, that this suggestion may not be overlooked, and that you will soon give it publicity, I am, Sir, yours, &c., A Surgeon.

THE BENEVOLENT FUND.

REPORT—1848.

The committee of the Benevolent Fund rejoice to meet you with more cheering prospects; a new and, on the whole, a successful effort has been made to revive and extend the influence of the society beyond the limits which it had previously held; and notwithstanding that the pressure of the times, and the depreciation of every man's property, and the consequent diminution of income and disturbance of resources common to almost every individual, have operated grievously against their prosperity, yet they are able gratefully to record that the knowledge of their agency and their design has been diffused, that the interest on their behalf has been extended, that the number of their friends has been augmented, and that their pecuniary resources have been increased beyond their most sanguine expectation.

Yet your committee cannot disguise from you the fact that this knowledge, and this influence, and these resources, are not as yet what they might be, considering the number of their professional brethren who are able each to do a little, and the number and the urgency of the cases they are called upon to relieve; they cannot disguise from you the fact that as yet the Donation Fund is not available for the relief of present misery, and cannot be so for some years unless a greater effort be made to bring it up to that sum at which the wisdom of the association has fixed that the income arising from its capital may be distributed in the relief of the necessitous; and they cannot disguise from you another fact, that, in doling out relief from their Subscription Fund, they have been obliged to calculate the measure of that relief rather by their power to give than by their conviction of what was required to afford adequate assistance. Your committee, therefore, would earnestly entreat all their friends to keep constantly in view the necessity of supporting and of increasing the funds and the efficiency of each department.

As another motive for so doing your committee would mention the fact that every year places some portion of their funds in a position in which they are no longer available. Every year is marked by mortality among their friends; and those friends are exposed, like other men, to such change of circumstance, and such personal or family trials, as cripple their resources and render them unable to continue their wonted support; while the selfsame causes—mortality on the one hand, and adversity on the other—are constantly augmenting the number of claimants upon their resources; hence the great importance that each one should work while he has the power, and contribute something towards the permanence of so invaluable an institution.

Your committee have termed their institution invaluable, and they have done so advisedly, because it extends relief to worthy objects, to worthy objects in deepest distress, and for whom no other mode of relief is available; and they would further add that, by a trifling sacrifice from all their associates, their funds would be immediately placed in such a position as to enable them to give relief in some degree proportioned to the necessities for which it is claimed.

During the past year the number of cases relieved has been somewhat less than during the preceding, yet the extent of their destitution, and the urgency of their misery, have been such as very greatly to exceed the power of administering adequate succour; they cannot, therefore, but express their earnest hope that you will enable them in future to do more for supplicants, whom could you but see and hear, they are fully persuaded your hearts and hands would be largely extended.

Your committee would especially present their thanks to those individuals, and particularly to those ladies, who have, during the last year, so considerably promoted their object by collecting donations from their friends. They would remark that, even in the earlier days of the association, the ladies of Worcester, of Warrington, and other places, have been the foremost among their indefatigable friends; and they would earnestly entreat these ladies generally not to be weary in well-doing, but to apply themselves to this truly feminine pursuit, to become "ministering angels" to the sorrowing and the destitute, and to afford the institution, especially the Donation Fund, the benefit of their untiring exertions, and of their unsurpassed benevolence.

Your committee, finding it necessary to issue a new edition of their rules and regulations, have carefully revised the former ones, and, while they have retained their entire spirit, they have made certain changes which altered circumstances, or twelve years' experience, have appeared to render advisable: such revised rules are now ready to be issued to any person on application to the secretary.

Your committee desire to record their grateful sense of the services of their late treasurer and secretary, Dr. W. Conolly, and, anxious to connect his name as closely as possible with their institution, they have entreated him to become one of the trustees to the fund; to this arrangement he has kindly assented, and the appointment only requires your sanction by the adoption of this report.

Finally, your committee trust that, in humble imitation of the Divine Author of benevolence, you will never turn aside from the cry of fraternal distress, and that the blessing of the sick and the unfortunate, of the destitute widow and the helpless orphan, may rest upon your future path.

John Baron, M.D., President.
William Newnham, Hon. Sec. and Treas.

Donations and subscriptions on behalf of this fund are most earnestly and respectfully solicited, and will be most thankfully received and acknowledged, by any member of the committee, viz., Dr. Baron, Dr. W. Conolly, Dr. Bernard, Dr. Cannon, and C. T. Cooke, Esq., all of Cheltenham; by Dr. Hastings and Dr. Streeten, of Worcester; and by the treasurer, Mr. Newnham, of Farnham; or they may be paid to Sir John Lubbock and Co., bankers, London, in the name of "Newnham," to the account of the Farnham Bank.

YARMOUTH HOSPITAL.

Wednesday, Sept. 6.

Present: Mr. Fisher, V.P., Mr. Paget, Mr. Barber, Rev. B. Vaux, Mr. Dowson.

Mr. Vaux informed the committee that Dr. Borrett and Mr. Aldred had called upon him to complain that a misstatement of facts had been published in the abstract of the proceedings at the annual meeting on the 28th of June, appended to the annual report, by which it is made to appear that Mr. Costerton was the only candidate at the election of a consulting surgeon, whereas Mr. Norman was proposed and seconded, and three votes were recorded in his favour. They stated that they considered that Mr. Norman had been brought forward for the purpose of evading one of the provisions of the eighth rule, and that it was this by which they felt particularly aggrieved, and which was the immediate cause of their resignation.

The committee authorized Mr. Vaux to assure Dr. Borrett and Mr. Aldred that they utterly disclaimed any intention to misstate the facts of the case; that they had not authorized the publication of the abstract in question; that they are even ignorant by whom it was drawn up; and that they regret that it was printed at all.

Great Yarmouth, Wednesday Evening, Sept. 20.

Dear Sir,—At a meeting of the hospital committee to-day I was requested to forward to you a copy of the minute recorded on the 6th inst. in reference to the subject which you and Mr. Aldred requested me to mention to that body.

Perhaps I ought to apologize for not having made an earlier opportunity of communicating to you what passed on that day. I have been unwilling, however, to volunteer in any way my interference in a dispute which, from its commencement, I have regarded as very detrimental to the interests of the hospital, and with which I am only concerned as an individual member of the committee.

I am, dear Sir, yours very faithfully,
Dr. Borrett, &c. Bowyer Vaux.

DR. BORRETT'S REPLY TO THE REV. B. VAUX.

Great Yarmouth, Sept. 26.

Dear Sir,—I beg to acquaint you that it is the intention of the late medical officers of the Yarmouth Hospital to make the explanation of the committee forwarded by you to me as public as the printed report has made that part of it of which they complained.

On a subject of such general interest as the reciprocal courtesies and duties of the medical officers and committee of an hospital one towards another, it is right that all the governors should have a clear understanding. It is, therefore, not less a matter of justice to the late medical staff than an obligation to the governors and subscribers that the statements you were so obliging as to forward to me should be published.

Believe me, dear Sir, yours very faithfully,
James Borrett.

CHOLERA NOT CONTAGIOUS.

The following is extracted from a report to the General Board of Health by Mr. R. D. Grainger, who has been deputed by the board to make inquiry as to the progress of cholera at Hamburg:—

"It appears that, in 1831 and 1832, two hospitals were erected for the reception of cholera patients; in 1833 the plan was abandoned. When

the disease broke out in September last, the head police magistrate, who is one of the senators, and head of the Sanitary Board of Hamburg, applied to the trustees of the General Hospital (and, it is presumed, to the managers of the two small hospitals, the Jews' and the Freemasons') for permission that those cholera patients who, owing to circumstances, could not be attended at their own homes, such as sailors, emigrants passing through the town from the interior, destitute persons, &c., should be admitted into the hospital. This application was advocated by Dr. Bülan, the medical director of the hospital, and was acceded to by the trustees, who consist of respectable merchants, &c.

"In order to secure proper attendance, the number of nurses was increased, two day and two night nurses (male and female according to the ward) being attached to each ward. It is important to observe that the duty of attending in the cholera wards is shared in common by all the nurses, male and female, of the hospital, so that eight fresh attendants enter the two cholera wards daily. It is also worthy of remark, that, so far from any dislike to this particular service being evinced, the nurses sought the occupation. The ordinary patients of the hospital were not alarmed, according to express inquiries made to ascertain this point, in consequence of the admission of the cholera cases; on the contrary, they collected in the corridors at the doors of the cholera wards, and to such an extent that the physicians found it necessary to give orders that the doors should be kept shut.

"As soon as the cholera patients become convalescent, they are sent into the common wards, and are dispersed indiscriminately among the other patients.

"Those of the ordinary patients who have been attacked with cholera have remained in their wards.

"None of these circumstances have caused any alarm, as the general director of the hospital informed me that of the whole number of patients, upwards of 1000 (exclusive of the insane), not one has quitted from alarm. One lady, who was in the establishment in consequence of illness, left when the cholera patients were brought in. It has also been found that the friends of patients in the hospital have not come to visit them so freely as usual; but many still come, and the friends of those suffering with cholera come to see them, of which I had a pleasing example today. Being in the cholera ward, a young woman came in to see a fellow-servant who had been attacked; she took her hand, and stood close to the bed talking to her. On being asked if she had any fear of catching the complaint, she laughed, and seemed to treat it as a jest.

"The medical officers of the hospital and of the town are quite satisfied the disease does not spread by contagion in the hospital or elsewhere; and, in support of this conclusion, the following facts may be mentioned:—Up to the 4th of October the official returns give 1846 as the total cases of cholera that have occurred in Hamburg; and if the total population be taken at 150,000,(a) as it is here reported to be, the attacks of cholera will be about 1 in 81. At the General Hospital, up to Oct. 4, there have been 12 cases of cholera among the common patients and lunatics; and, as the total number of patients and attendants is 1602, the proportion of cholera cases will be 1 in 133. It is particularly interesting that not a single nurse or attendant of the hospital has been attacked, nor have any of the medical officers suffered. It is also proper to state that, although the locality of the hospital is considered to be healthy, there have been some cases of cholera among the inhabitants in its immediate neighbourhood.

"These facts, and many others, have quite removed the fear of contagion from the minds of all classes. As a proof of the great change that has taken place since 1831, it may be mentioned, on the authority of the general inspector, that when the first *post-mortem* examination of a cholera case was made, the surgeon put on gloves,—a thing quite unusual.

"The medical men of Hamburg and the authorities were anxious that all persons attacked should, if possible, be attended at home; and this has been carried into effect to such a degree, that out of 1846 cases only 263 have been taken to the three hospitals, the only public establishments for the reception of patients. The same evils that have been noticed in other countries as to the great alarm excited existed formerly here when special hospitals were established. The passage of those attacked through the streets has also caused ill consequences. When at the General Hospital to-day, I was informed that a young woman had been brought in who was sudddenly seized after a violent fright, caused by seeing the cholera cradle pass by.

"In connection with this subject, it may be stated that there is no special fever hospital in Hamburg, nor any fever wards in the General or other hospitals. The fever patients are dispersed indiscriminately through the common wards, and without ill effects. Dr. Neville, assistant physician of the General Hospital, who has studied at Berlin, Heidelberg, and Halle, states that the same plan, as to the dispersion of the fever patients, is adopted; and that he has, during the three years he studied in the above universities, never known nor heard of typhus or other fevers spreading in consequence of the adoption of this plan."

(a) Colonel Hodges, the Chargé d'Affaires, thinks the city population is altogether nearly 200,000.

THE QUARANTINE.

On Tuesday afternoon it was stated, in answer to inquiries made at the Board of Health by persons connected with the shipping of the port of London, that representations had been made to the Privy Council of the evil and inutility of quarantine, especially after cases of Asiatic cholera had already broken out in different parts of the country in spite of the quarantine. It was announced in the afternoon, however, that in consequence of the board's notification of the fact of cases of Asiatic cholera being in England, it had been determined, and orders would now be forthwith given, to have the quarantine removed.

Eleven cases of cholera were reported on Tuesday in the metropolis, making fifteen cases in addition to those reported by the Registrar-General up to Saturday. Active exertions were making in several districts by the local authorities.

From the information received in town it still appears that the progress of the disease was marked and decided in Edinburgh and its neighbourhood. The following were the cases reported of Asiatic cholera from the 4th to the 16th inst., and examined by the local authorities:—

	No. of Cases.	Died.	Recovered.	Remaining.
In Edinburgh ..	42	34	6	2
Newhaven ..	21	15	5	1
Leith	27	16	3	8
Total ..	90	65	14	11

The following are the localities in Edinbugh where the cases have occurred:—

Abbey-hill.	Grass-market.	St. Cuthbert's
Calton-street.	Heriot-place.	Poorhouse.
Canongate.	South St. James's-street.	Pleasances.
Clyde-street.		Tobago-street.
Cowgate.	Greenside-row.	West Port.

THE MEDICAL OFFICER FOR THE CITY OF LONDON.

On Monday a very numerous attendance of the Commissioners of Sewers for the City took place in the Council-chamber; the Right Hon. the Lord Mayor in the chair. Several of the members of the Court of Aldermen were present. The meeting took place in pursuance of the resolution agreed to at a former court to return two medical men from the list of candidates to the Court of Common Council, in order that one of the two so returned might be elected medical officer until January by the latter body. The gallery of the Council-chamber was filled by the candidates and their friends, and much interest was excited, the general impression in the City being, that whoever should be appointed to fill the situation until January will certainly be appointed when the act shall come into operation.

Mr. Daw read the following list of candidates, from which the commissioners were to select two, between whom the Court of Common Council will have to make their election:—Dr. Letheby, Mr. Simon, Dr. Gavin, Mr. Childs, Dr. Adams, Dr. Bentley, Mr. Chippendale, Mr. Ross, Dr. Brown, Dr. Sparke, Dr. Griffiths, Mr. Bowra, Dr. Bird, Dr. Byrne, Dr. Lownds, Mr. Radley, Mr. Smee, and Mr. Venables.

The court then proceeded to the selection or nomination of two of the candidates, and the chairman, at the conclusion, announced that Mr. John Simon and Mr. George Borlase Childs were returned to the Court of Common Council as fit to fill the office of medical officer of the City until the City Sanitary Bill came into operation.

The commissioners then adjourned.

The Lord Mayor subsequently appointed Thursday for the election of the medical officer from the two above-named gentlemen in the Court of Common Council.

GOSSIP OF THE WEEK.

ROYAL COLLEGE OF SURGEONS.—Gentlemen admitted members on Friday, Oct. 13:—T. Wheeler, T. Atkinson, R S. Stedman, F. Findlater, V. A. Brown, R. E. Unthank, and J. Owsa.

ROYAL COLLEGE OF PHYSICIANS.—The following gentlemen were admitted licentiates of the Royal College of Physicians on Saturday, September 30:—William John Fitton, Upper Harley-street; Charles Bland Radcliffe, Queen-square, Bloomsbury; William Addison, Great Malvern; Alfred Swaine Taylor, F.R.S., lecturer on medical jurisprudence, &c., in Guy's Hospital.—William Slyman, of Newtown, Montgomeryshire, was admitted an extra-licentiate of the college on the same day.

THE THORNBORROW TESTIMONIAL.—We perceive that Mr. Thornborrow has expressed his intention of handing over the balance of the testimonial presented to him, to the Asylum for Idiots, recently established.

THE CHOLERA.—WOOLWICH, Oct. 13.—The cases on board the Justitia up to this day are 25, six new cases having been reported within the previous twenty-four hours. Of that number five are reported as having died, and one discharged. The other 18 are not apparently in any immediate danger, but so debilitated that ther medical attendants have not considered themselves justified in entering them in the list of recoveries. There was no appearance of any symptoms of the disease in the town or parish of Woolwich, according to the returns of the medical practitioners, up to twelve o'clock to-day. The scarlet fever was abating, and a better state of health prevailing within the last two days. It has been observed that the Justitia convict-ship is at present stationed opposite the outlet of a sewer, and that it would be advisable to have her emoved farther down the river.

Oct. 15.—The disease still continues on board the Justitia, opposite the Royal Arsenal, the number reported up to twelve o'clock on Saturday being twenty-eight attacked since the commencement, there being three new cases in the Saturday's report and one death, making in all six deaths. There were three new cases reported up to twelve o'clock to-day, making a total of thirty-one attacked; six deaths and five recovered. The others are not yet considered to be out of danger. Fortunately there has not been a single case recorded by any of the medical practitioners in the town and parish, and not the least symptoms of the cholera on board the

Warrior convict-ship, opposite the dockyard, although the food, confinement, and general regulations of both the convict-ships are the same. The peculiarity of the disease being so exclusively confined to one vessel induced us to ask if it was more severe in one part of the hulk than the other; and the reply was, that the whole of the cases originated in the lower deck, on the starboard side and stern of the Justitia; that part being exactly opposite the mouth of a sewer, which empties itself into the Thames. Surely, when that fact becomes known to the authorities, they will not lose a moment in having the vessel removed from her perilous position, or, if that cannot be done for a few days, the unfortunate convicts should be removed on shore to some temporary and secluded barrack, where they would run less risk of being attacked by the disease.

Oct. 16.—There have been four new cases since twelve o'clock yesterday, making in all 35 cases of attack. There has been one death to-day, and, the names of those who died of cholera having been returned, it appears that eight have died of the disease. The following are their names and the date of the days on which they died: — Oct. 3, Owen Jones; 7, John Rutherford and James Jones; 8, James Bigwood; 10, John Debank; 13, George Mitchell; 14, William Eastman; 16, Edward Devine. The number of recoveries are returned five, being the same as yesterday. No cases or the least appearance of cholera have been returned by the medical practitioners in the town and parish of Woolwich up to twelve o'clock to-day, so that the disease is still exclusively confined to the Justitia convict-hulk.

There were four cases of cholera reported on Monday in the metropolis. There were scattered cases reported as having occurred in the Eastern ports to seamen from the Baltic. The cases at Edinburgh and Leith were of a marked and malignant character. Up to Saturday there had been 37 attacks, and no less than 30 deaths. At Leith there had been nine attacks, of which six had been fatal, and as yet there were no recoveries.

The highly favourable change in the weather, it is to be hoped, has checked the progress of fatal cholera cases in the metropolis. Only one fatal case was reported Sunday—that of a person in the Tower. The attacks of diarrhœa were reported to be numerous and severe, with, however, very satisfactory statements of the success of the treatment recommended for checking the disease at once in the first stage or in its premonitory symptoms.

Civic Precautions against Cholera.—Monday, upon taking his seat at the Mansion-house, the Lord Mayor acknowledged the receipt of a letter that morning from the President of the Royal College of Physicians. The following is a copy of the communication:—"Dover-street, Oct. 12.—My Lord Mayor,—Your lordship, I feel assured, will learn with satisfaction that the College of Physicians has appointed a standing committee, consisting of the physicians of the great metropolitan hospitals, and other eminent persons, for the purpose of inviting and considering communications on the subject of cholera, and, if necessary, of suggesting such measures and precautions as may appear expedient to ensure the confidence and safety of the public. I have the honour to be, my lord, your lordship's obedient servant, J. A. Paris, President of the Royal College of Physicians. To the Right Hon. the Lord Mayor." His lordship then forwarded the letter to the City commissioners of sewers.

Official Orders of the Police Commissioners.—On Monday evening the police commissioners issued an order directed to each superintendent of the metropolitan police, to make to them (the commissioners) a daily return of all cases of cholera occurring within their respective divisions every twenty-four hours; the reports so furnished to be transmitted to the Government and the Board of Health. The Thames police are to perform the same duties amongst the shipping in the river, and to make a return of all cases which occur that are not taken ashore.

Gravesend, Oct. 15.—Yesterday, as the William and Matthew, of Sunderland, was proceeding down the river from London for Sunderland, and when off this place, Dr. Saunders was summoned on board to see the captain, whom he found in the last stage of Asiatic cholera, and who lived but a few hours after the medical gentleman had used all the appliances necessary for a patient in such stage of this dreadful disease. Immediately the man died the vessel was directed by the Custom-house authorities to proceed on her voyage, and instructions were, as we learn, given to the mate and crew to commit the corpse to the deep on reaching the open sea.

Uxbridge.—We are informed that four cases, confidently stated to be of Asiatic cholera, were notified at Uxbridge on Monday. In London scattered attacks were reported, and very numerous cases of diarrhœa, but no fatal cases. From Hamburg we learn that up to the 9th inst. the total number of persons attacked was 2229, of whom 1043 had up to that day fallen victims; that 411 remained under treatment, and 775 had been cured. The information from Lubeck, where the pestilence had broken out, was unfavourable; it was rapidly increasing.

Birmingham, Oct. 16.—We regret to say that a case of decided Asiatic cholera is said to have occurred in this town last night. Mr. John Cheetham, a clerk in the bank of Messrs. Attwood and Spooner, was seized with unequivocal symptoms on Saturday evening, and expired on Sunday night. Mr. Cheetham was attended by Dr. Wright, Mr. Chavasse, and Mr. Blake, and no doubt is entertained of the disease being Asiatic cholera. The deceased was a healthy person, of regular habits, and resided in George-street, Edgbaston, considered to be a very healthy part of the town.

Hull.—On Tuesday last a fatal case of cholera occurred on board a Danish vessel, named the Catharina Maria, from Odense, which arrived in this port on the 28th ult. The deceased was one of the crew, named Christian Bruhn, and at the time of the occurrence the vessel was lying in the Humber Dock. The unfortunate man was taken suddenly ill on Monday morning, and died on Tuesday. As the vessel was about to sail that day, Mr. Burt, the customs inspector of the river, directed the captain to keep the body on board until he got to sea, and then throw it overboard, properly loaded to prevent its rising. These directions were given in pursuance of an order in Council, dated the 5th of October inst., received by the customs authorities at this port. The vessel proceeded at once to the roads, and left the following day.

Hull.—Since Thursday last there have occurred in Hull nine cases of cholera, seven of which have proved fatal. Of these seven, two have occurred on board of vessels lying at the port, the remaining five in the town. Up to Thursday last there had been no death from Asiatic cholera in the town, the disease having until that day been confined to the vessels visiting the port. The Baltic trade at Hull is suffering very severely from the quarantine laws, by which our steamers are very frequently detained in the river as many days as would suffice for a voyage to Hamburg and back. If Government be really convinced that cholera is not contagious (and certainly the circumstances of the cases which have hitherto occurred in Hull tend strongly to justify such a conclusion), then it does, indeed, seem strange that the trade of the port should be suffered to be shackled by regulations which can only be justified by a firm belief in the theory of contagion. The Danish war stopped the Baltic trade for the greater part of the summer; and, now that an endeavour is being made to recover lost time, the vexatious quarantine regulations interpose to render the attempt unavailing.

This dread disease, which invaded the harbour of Sunderland, has not made its appearance on shore, on either the north or south side of the Wear; but the local authorities are praiseworthily zealous and energetic in attacking every nuisance that may invite a visit of the epidemic; so that, if possible, the scourge may be averted.

The only accounts of new cases of cholera officially reported on Monday were, from the Thames police, of two sailors just arrived in the river. One was from Sunderland, who was attacked at eight o'clock on Friday evening, and died at half-past two in the morning. The other arrived from North Shields. In this case the attack commenced at four o'clock on Friday, and terminated fatally before morning. The police have hitherto entirely escaped.

The Cholera.—We are happy to state that not a single case of cholera in the metropolis was reported to the Board of Health yesterday (Thursday). Information was, however, received that the pestilence was spreading in Edinburgh.

Glasgow.—The occurrence in Edinburgh of several cases of cholera, having the appearance of the Asiatic type of the disease, has roused the authorities of this city to active efforts in the way of preparation. It is satisfactory to state that, with the exception of scarlatina, which exists in certain districts, chiefly in the west end, the city is unusually free from disease; and, should we be afflicted with the visitation of cholera, the authorities were never better prepared to treat it. On Monday, meetings of the city and Govan parochial boards were held. Orders were given for the cleansing out and fumigating of wynds and closes; and it was stated that, if deemed necessary to have hospitals, the Old Town's Hospital is at this moment ready for the reception of patients. We learn that the temporary fever hospital at the Infirmary could also be fitted up in a very brief space of time. Already, indeed, a great deal has been done towards cleansing the city. All the closes in the wynds, Saltmarket, High-street, the Vennels, and Havannah, have been washed out by the fire-engines; an immense number of the common sewers have also been washed out, and in nearly 600 cases chloride of lime and vitriol have been put down the gratings, with the view of neutralizing the effect of deleterious substances or vapours. There are nearly 5000 dungsteads and ash-pits in the city; of these a great number have been repaired, and it has been ordered that the contents of all of them should be more frequently removed. As a proof of the vigour of the police in the cleansing department, we may state that within the last month 400 persons have been brought before the police courts, charged with permitting nuisances, which they have been ordered to remove.

Wanted in Alnwick:—The Cholera!—When this long-expected visitor arrives in Alnwick, it will find "ready-furnished lodgings" at the foot of Pottergate-street, amongst the horrible abominations of the "Tunnel"—where no purifying gale ever flits across the putrid masses of filth—no scavenger, armed with *shull* and *buxom*, ever enters—where impurities of all kinds, moral and physical, are ever stagnating, and spreading over the neighbouring localities their pestilential miasma, laden with the diseases generated in that sink of misery and crime.

The inconsiderate blow to commerce inflicted by the example set to other countries in our quarantine against Hamburg has been a topic of conversation upon 'Change. An acute sense seemed also to be entertained of the absurd light in which it must cause us to be regarded, from the fact of its having been imposed just as the disease, after a duration of five weeks, was disappearing in Hamburg, and manifesting itself here; and also from the circumstance that persons are hourly arriving from the infected city viâ Holland, Belgium, and France, without in those cases the slightest detention being attempted.

Cholera and Quarantine.—The recent establishment of a quarantine for vessels arriving in the Thames from the Elbe had caused extreme surprise at Hamburg, the cholera having been

already five weeks in that city, and the testimony of all the medical men of experience being that the disease is decidedly not contagious.

THE ASYLUM FOR IDIOTS.—The council of this institution has elected Dr. Foreman, of Great Yarmouth, as the resident medical officer.

MISTAKE OF A FRENCH MEDICAL EDITOR.—It is stated in the *Gazette Médicale de Paris* that the Society for the Relief of the Widows and Orphans of Medical Men, established in this country in 1788, possesses a capital in the Bank of England of 11,250,000 francs—about £450,000. According to the same authority, the society allows yearly only 35,000 francs—about £800—for the benefit of thirty-eight widows and about twenty orphans. Our worthy brother editor has evidently been imposed on.

DEATH FROM PRUSSIC ACID.—Dr. Nesbitt, of Yeovil, died on Tuesday week, from a dose of prussic acid which he took on his return home from an evening party—it is supposed as a sedative. He had afterwards taken ammonia—probably as an antidote.

UNIVERSITY OF CAMBRIDGE.—The Regius Professor of Physic has given notice that the next medical examinations will commence on Nov. 6, at ten o'clock, a.m., in the schools under the Public Library. Those persons who intend to offer themselves for this examination are requested to send their names to Dr. Haviland on or before Monday, Oct. 30. The lectures on the Principles of Pathology and the Practice of Physic will commence on Monday, Oct. 30, at ten o'clock a.m., in the Anatomical Schools.

THE SUPPLY OF LEECHES.—A large proportion of the leeches brought to the London markets are obtained from Suffolk, Hampshire, Essex, Kent, and Wales; and a considerable number are obtained from the fenny districts of Cambridgeshire and Lincolnshire. But no fewer than about one hundred millions are annually imported from Bordeaux and other parts of France, whither many are brought from Spain, Bohemia, and the frontiers of Turkey; and some are imported also from Lisbon. In the spring and autumn, the English leech-catchers wade into the shallow parts of pools inhabited by the leeches, beat the reeds and rushes to disturb them and make them come to the surface, and obtain some by allowing them to fasten on their bare limbs, and others by taking them with their hands, and putting them into bags; and they are particularly alert to wade in for them just before a thunderstorm, as the leeches then come spontaneously to the surface. In summer, when the leeches retire into deeper waters, the catchers obtain them by means of a kind of net made of twigs and rushes. When the leeches are taken home, they are first washed in slightly saline water, and afterwards packed in wet linen cloths, and then despatched, in these cloths, to the leech-merchants or wholesale druggists of London or other large towns. One poor man, who lived at Baddesley, in Hampshire, amassed in a few years no less a sum than £500 from the profits of catching leeches. In some parts of France, horses and cows are driven into leech-ponds, in order that the leech may be so fed by their blood as to become unusually prolific.

THE MESMERISED.—One Cronan and three others (we learn from the *Limerick Examiner*) summoned Professor Barnett for wages due to them for having assisted the professor in his mesmeric lectures and exhibitions. Cronan said of their proceedings when mesmerised: "Your worship he (the professor) gave us tokens; when he put his finger on my chin, that was for to make me laugh, and when he put it ondher my ear, that was to make me speak; an' ondher my *oxther* (shoulder), that was to make me fight; an' I will do the same before your worship now, if you like—(roars of laughter)—an' savin' yer presence, whin I was lettin' on to be asleep, my breeches got loose, an' I was ashamed of the quality to put my hands down to pull it up again (here he put his hands to his nether habiliments) for feerd they'd know I was awake." (Immense uproar, laughter, and confusion.) The mayor decided that those men should not receive wages for gulling the public, and dismissed their claim.

QUACK IMPUDENCE.—A worm-doctor in the market-place at Bolton, a few days ago, was holding forth on the unparalleled achievements of his nostrum, displaying in illustration a bottle containing a wild beast of the intestines sixty yards in length, which he declared to have come from the person of a well-known pot-dealer in the same market. The individual alluded to happened to be passing at the time, and, attracted by the sound of his own name, immediately repudiated the allegation. The orator, abashed, was obliged to recant his wonderful story, after being threatened with an "upset" both of his bottles and himself.

A TRANCE OF FIFTEEN YEARS.—One of the most remarkable evidences of human suffering and credibility exists in Farrington, Devonshire. A young woman, named Ann Comer, daughter of James Comer, mason, has remained in a decided state of unconsciousness for the past fifteen years. It is thought by many that she is in a "trance." Her mother assured the writer that for eleven years she had not partaken of the least particle of food. She is certainly in bed, has a placid smile, and, though possessing vitality, has no consciousness of the approach of any party, neither can she distinguish any object. She has been visited by some of the most eminent in the medical profession; and others, since her case has been made known, have called to witness what might be justly termed this phenomenon in nature.

WATER OF LAKES.—There is no stream more celebrated for its prolific water meadows than the Itchen, in Hampshire; and in no part of England is the system of irrigation better understood, and more jealously followed. The water of this river, taken from above the city of Winchester, contains in 10 000 parts, after all its mechanically-suspended matters have subsided, 2.2-3d parts, namely—Organic matter, 0.02 parts; carbonate of lime (chalk), 1.89 parts; sulphate of lime (gypsum), 0.72; muriate of soda (common salt), 0.01. The water of lakes is usually still more surcharged with foreign substances than those of rivers.

MORTALITY TABLE.

For the Week ending Saturday, Oct. 14, 1848.

Causes of Death.	Total.	Average of 5 Autumns.
ALL CAUSES.....	991	1154
SPECIFIED CAUSES...	990	149
Zymotic (or Epidemic, Endemic, and Contagious) Diseases.....	448	270
SPORADIC DISEASES.		
Dropsy, Cancer, and other Diseases of uncertain or variable Seat.....	36	52
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.....	84	127
Diseases of the Lungs, and of the other Organs of Respiration	90	222
Diseases of the Heart and Blood-vessels.....	32	38
Diseases of the Stomach, Liver, and other organs of Digestion	40	67
Diseases of the Kidneys, &c.	8	12
Childbirth, Diseases of the Uterus, &c.	9	14
Rheumatism, Diseases of the Bones, Joints, &c. ...	1	8
Diseases of the Skin, Cellular Tissue, &c.	1	2
Old Age.....	32	64
Violence, Privation, Cold, and Intemperance.....	22	32

TO CORRESPONDENTS.

"An Old Student of University College."—While we agree with the remarks of our correspondent, we think that the letter had better not be published at present.

"An Army Surgeon" shall have his request attended to.

"T. A. B."—Yes; the rectum was punctured.

"Amicus."—An abstract has already been given.

"Edward."—The insurance-office is one of the few which give a fee to the medical gentlemen who answer their questions.

"Mr. Baker."—We cannot agree to the proposal.

"Juvenis."—Probably to the inelastic or ossified condition of the larynx.

"M. D."—Each filament is formed within a separate cell.

"Clifton" is thanked for his intimation.

"An Observer."—We cannot reply to such inquiries.

"Cholera."—The precautions are good, but not new.

"Nerva."—It consists of numerous filaments which are divisible into two fasciculi.

"Delta."—The house-surgeoncy is vacant in January, and the clinical clerkship in January and June.

"Graduate."—The degree of M.D. is necessary.

"M. R. C. S."—1. An inaugural dissertation is required. 2. The examination is conducted in French or English. 3. £18.

"A General Practitioner."—An account of the disease is given by Dr. Aikin in his "Biographical Memoirs of Medicine in Great Britain."

"Bianca."—The county magistrates have the appointment.

"Reformer."—We do not preserve manuscripts after they have been used.

"Democritus."—We have not forgotten the case, but will publish it at an early opportunity.

"An Irish Medical Practitioner."—"To visit, prescribe, and dispense legally in England," the Apothecaries' certificate is required.

"F. G., Bury St. Edmunds."—They cannot.

"Franciscus."—Our correspondent ought to state his reasons for requiring the answer he does.

"Mr. James."—The author is right in what he states.

"A Student," who writes to us from University College, should have sent his name.

"Philo-Chirurgus" is enthusiastic. In the present state of knowledge, however, there are many difficulties to be encountered.

"A. M."—Special certificates would be required.

"An Assistant."—The fee is a guinea.

"Galen."—We cannot undertake the inquiry.

"Glasgow."—"The University Calendar" will give the required information.

"Rusticus"—Injections of a solution of nitrate of silver have been found useful.

"An Injured Practitioner."—There is no redress.

"An Admirer" is thanked for the compliment. He must apply, however, to some respectable practitioner, as we do not prescribe through our columns.

"Mr. S. Bland."—The communication can only be inserted as an advertisement.

"O. P." has been received.

"Philo."—We have no account of the inquest. We shall be glad to hear from our correspondent on the subject.

"A Student" may graduate without any such preliminary.

"G. J., Liverpool."—Not in England.

"W. W."—The school is recognised by College and Hall.

"Erinensis."—The offer is accepted.

"H. L., Uxbridge," should apply directly to the secretary.

"Senex."—The preparation is a patent medicine of no value.

"Tenby."—Cressote combines, in all proportions, with alcohol, ether, and naphtha. Its virtues have been greatly overrated.

"Messrs. Braddon and White, Upton-on-Severn."—The communication shall be inserted in our next number.

"Trin. Coll., Dub."—They are only published in the *Medical Times*.

"Juvenis."—Dr. Williams.

"Dr. Barker, Dumfries."—The cases shall receive an early insertion.

"Mr. Joseph Pell, 8, Richmond-street, Newcastle-on-Tyne."—Communication received.

"H. C. C., City-road."—We do not know.

"Mr. G. Sayle, Lynn," "On Chlorate of Potash in Phagedenic Ulcerations," received, and shall be early inserted.

"Mr. R. W. Watkins, Towcester."—Communication received.

"Mr. H. Pyke, Barrister-at-Law, 87, Chancery-lane."—Communication shall receive insertion next week.

"Mr. J. Gordon Bailey, Pentonville."—Remarks on fungi hæmatodes received.

"Inquirer."—The paragraph in "Douglas Jerrold's Newspaper" on the income of quacks was from Mr. H. Pyke's letter in this journal.

Letters and communications have also been received from An Old Student of University College; An Army Surgeon; T. A. B.; Amicus; Edward; Mr. Barker; Juvenis; M. D.; Clifton; An Observer; Cholera; Nerva; Delta; Graduate; M. R. C. S.; A General Practitioner; Bianca; Reformer; Democritus; An Irish Medical Practitioner; F. G., Bury St. Edmunds; Franciscus; Mr. James; A Student; Philo-Chirurgus; A. M.; An Assistant; Galen; Glasgow; Rusticus; An Injured Practitioner; An Admirer; Mr. S. Bland; O. P.; Philo; A Student; G. J., Liverpool; W. W.; Erinensis; H. L., Uxbridge; Senex; Tenby; Messrs. Braddon and White, Upton-on-Severn; Trin. Coll. Dub.; Juvenis; Dr. Barker, Dumfries; Mr. Joseph Bell, 8, Richmond-street, Newcastle-on-Tyne; H. C. C., City-road; Mr. G. Sayle, Lynn; Mr. R. W. Watkins, Towcester; Mr. H. Pyke, Barrister-at-Law, 87, Chancery-lane; Mr. J. Gordon Bailey, Pentonville; Inquirer, &c. &c.

ORIGINAL LECTURES.

LECTURES ON THE RACES OF MEN.

By ROBERT KNOX, M.D., F.R.S.E.,
Lecturer on Anatomy, and Corresponding Member of the French Academy of Medicine.

(Continued from p. 20.)

HISTORY OF THE CELTIC RACE CONTINUED.
THE IRISH CELT.

The most important of all questions which can be brought under human consideration, namely, the right to hold as private property any portion of the earth's surface, and, as regards the race I now speak of, the relation of the Celtic mind to the tenure of land, and the mode of inheritance of land, may, with equal propriety, be discussed either in the present lecture or in that devoted to the history of the grandest section of the Celtic family—France. If I discuss it here, it is not, then, with any peculiar reference to Ireland or to Irishmen. My remarks will, I believe, apply to all Celtic men, wherever found: to the Scottish Highlander; *le bas Canadien;* the Welshman; the Irishman; the men originally called Welshes, and now, by by some misnomer, Frenchmen.

The element of race must and ought to explain the movements and thoughts of every race, wherever found, or it is no proper element in human nature. Had the Frenchman, when he colonized Lower Canada, dispersed himself through the country; plunged into the forest, and, with his axe, hewed out for himself, unaided, a path in the wilderness—a path leading to fortune and independence, as the Saxon uniformly does—then my theory would have been at fault, and, as a scientific man, I must have given it up. But did the French Celt do this? I appeal to the state of Lower Canada. What progress has it made compared to a Saxon colony? Have we not the monkeries and the nunneries, the seignories and the slaveries, of old France? The clinging together in villages? The dread of the forest? The fear to be alone? It is this dread, this want of confidence which has ever characterized the Celtic race: let us trace it in revolutionary France.

The greatest question which can possibly affect mankind is the tenure of land: the mode of inheritance of landed property; nothing can exceed this question in importance.

At the first period of the French revolution, when feudality was extinguished, a war commenced in France against the accumulation of landed property in any hands; it was a war against the accumulation of capital as represented by land. There is no concealing this fact. A thousand other results will and have been assigned, but it comes simply to this: a war *in perpetuo* was declared against the accumulation of capital as represented by land; the population declaring, with one voice nearly, "Accumulate wealth as much as you please, but you shall not do so by the purchase of land; you shall not henceforward accumulate land in the hands of a few families and of the court to the exclusion of the nation."

But they forgot in this sufficiently noble declaration against the real basis of all the despotisms which have afflicted humanity, namely, the possession *in perpetuo* of the soil of a kingdom by a court and courtiers (for every aristocracy really amounts to this): tyrants and slaves, despots and grovelling sycophantish flunkies, gold sticks and silver sticks, bedchamber lords and masters of the dog-kennel; they forgot that nation might, by the taking the soil into their own hands *as they thought*, yet exclude from a *balance of proprietorship* in land a *moiety* of the *accumulators* of *wealth*: might thus inflict on that moiety of the population the same evils from which they had themselves suffered so terribly; but above all, by so doing, declare war against capital and industry, inventive genius and productive ability.

Now, this is precisely what the French Celt has done, and what the Irish Celt most desires to do; it is a feeling which arises, as I shall endeavour to show, not from any love of agriculture, for the Celt is a miserable agriculturist, the worst of all on the earth: the squireen and the Parisian hold the agriculturist in utter contempt; the Celt, raised but a little above the mass, looks down with sovereign contempt on all the *gens laborieux*, no matter what the tie: *avocat* or *bourgeois*, it is the same to the Celtic gentleman, as he likes to be called; but it is upon the "*laboureurs de la terre*" upon whom he bestows his unqualified pity, commiseration, and contempt. This, however, was but an effect; the cause lay deeper—*it lay in the character of the race.*

Now, what are these unhappy qualities of the race (for such they surely are) which have led to so deplorable a result as the withdrawing the land from competition in the market (except by forced distress sales), thus destroying human industry and creating a miserable, squatting, poverty-struck class; for such the small proprietors of France are reported to be?

It might at first seem that to be "an independent proprietor" was the aim the French Celt had in view by his famous agrarian law. I, for one, do not believe it; it originates solely in the moral cowardice of the race. A man and his wife acquire, no matter how, a piece of land, say twenty acres. This answers well enough for a time; but by-and-by both die and leave the twenty acres to five sons and two daughters. Instead of bringing the land *peremptorily* and immediately into the market to be sold to the highest bidder, as by the eternal laws of Nature it ought to be, on the death of the persons whom the nation agreed should hold the ground as life-renters, husband and wife, thus restoring the land to the nation to whom it always belongs, by whom it was gifted on certain conditions to the last life-renters for the term of their natural lives, and no longer; by whom it can, of course, be at any time recalled; instead of setting up these twenty acres for public sale to the highest bidder, realizing for this land the utmost possible value in ready money, offering to the industry, ability, talent of the nation, as represented by its capital, all that any person can reasonably demand—namely, a chance for the possession of land so long as he is able to hold it against all fair competitors; for, at a sale such as I speak of, it is perfectly open to any of the family who may be rich enough to repurchase the land, handing over in ready money their respective shares to brothers, sisters, and other heirs, and thus the estate may remain in the same family for centuries;—instead of this, the revolutionary Celt sets his face against the accumulated capital of the nation—against the chance of all others of his race and people. These twenty acres, says he, are mine, and I am resolved, if I can, to exclude from them all else on the earth, saving myself and mine. I drove out the great landed entail ruffian who lorded it over provinces, and I have put myself in his place in as far as I possibly can. But the real aim of the Celt in holding his wretched patch of bog, or meadow, or arable land, is not with any view to independence or success in life; he knows well this cannot be: *it arises from his moral cowardice.* It is the same feeling which keeps him, when a colonist, lounging about the banks of rivers and outskirts of towns, never plunging boldly into the forest or facing the prairie. He cannot move onward without a leader; he fears independence; he has no self-dependence, no self-confidence. This it is which makes him divide and subdivide his bit of bog, his patch of vineyard; this it is which has induced him to declare war against capital by shutting up the land against the industry, talent, and wealth of France, destroying competition, and beggaring his agricultural population. Equality, fraternity, liberty, are fine words, no doubt; but do they authorize any individual or family to shut out the soil of France from free competition? And if it is not to be permitted to one family, nor to a hundred families, to hold the soil of a nation, it ought not to be permitted to ten millions, for the same argument strictly applies. No class of men are entitled to be considered *landed proprietors par excellence:* the injustice and the amount of injury inflicted on others is always the same. The land which belongs to the nation must represent its capital, for nothing else can; and to it, therefore, no one can be entitled for a longer period than a life rent: it then reverts to the nation—that is, *de jure*—that is, by the eternal laws of nature. Now for nation let us substitute the word *capital*, the natural representative of the population. This capital, then, however accumulated, is entitled to demand all the land to be so brought into the market and so purchased as to represent the industry of the country. Feudal rights, laws of primogeniture, crown privileges, equal division amongst the family on the death of the father,—all these are but contrivances to rob the real inheritor who has accumulated capital from taking his position as a landed proprietor on the soil of his birth.

I entreat the men of all races to consider this question dispassionately; to lay aside prejudices, and to ask themselves these questions:—Can mere human tricks, chicaneries, and frauds authorize the partitioning of the soil amongst any class, no matter how numerous that class be? Is any portion of a nation entitled to say to another, We have divided the land amongst our sons and grandsons, to the exclusion of all other men?

This is the Celt; he would be just, no doubt, and he fancies that in justice he framed his agrarian law, his subdivison of property, and his war against the accumulated capital of his nation. But this *law* in France, which has been alternately so praised and attacked by party politicians, is devoid of equity, as a few words may clearly show.

The land or soil of any country belongs to the men born on that soil, and not to any individual or class, but to the people who inhabit and politically protect that land from the aggression of others. The soil of the earth neither belongs, nor can belong, to any kings or emperors, or classes of men, but to mankind. From it they derive their food; into it all things return. A people whose land is mainly in the hands of a single despot, or of an armed aristocracy, are simply serfs or slaves. This is the condition of three-fourths of Ireland; of a large section of Wales; of two-thirds of Scotland. I speak of facts which are notorious.

As from the land the food of the people is derived, the owners—that is the nation collectively—have a right to dispose of it to the best possible advantage. This means, I presume, the obtaining from it as much food as possible for the people. To obtain, then, from the soil the largest return is clearly the object which a nation must keep in view—food, or money to purchase food elsewhere. But to do this there can be no other means than the bringing the land and what has been built upon it into the market on the death of each life-renter (husband and wife, as the case may be), so that the highest value may be obtained for it from the stranger, that is, in fact, from the people, or from an individual of the family, he handing over at the same time the respective shares to the coheirs in gold and silver. Let the money thus raised be divided *equally* amongst the sons and daughters of the deceased; let it be paid in equal portions to the legal heirs of the deceased; let them embark in the great world with the money so obtained, diffusing themselves amongst the population, not lingering and starving on their field of potatoes or scrap of vineyard—vegetating, steeped in sloth, ignorance, and misery.

To this it must come at last in all countries. Ultimately no race of men will submit to the exclusive holding of land by any class, no matter how few, as in Ireland (where some twenty or thirty courtiers hold the island), nor how many,

as in France. There must be no fixed class of landed proprietors succeeding each other by hereditary descent. Let children inherit what you like *in perpetuo*, but not land. The moment you deprive one man of his chance of purchasing land *when his turn comes* you commit a mighty injustice,—you deprive him of his birthright; but, above all, you declare war against capital—capital accumulated by the industry of the nation. See what an entail confined to a few has done in Ireland! Look at the condition of France, where the entail of hereditary descent, under a pretence of justice and equality, has withdrawn the lands of France from the operations of the capitalists! Return, therefore, to the original Saxon law, which was, I believe, the one I have now briefly sketched.

The history of the Celt in Ireland is still in some measure to write: the early part is unknown, or fabulous; the present most disgraceful for humanity and for England; the future gloomy and disastrous. I need not dwell, then, much on it; a repeal of the laws of entail and primogeniture would in a century drive the Celt from Ireland, which would then become peaceful and prosperous. The safety of Saxon England demands the Saxonizing of Ireland; peace can never subsist between two races so discordant as the Anglo-Saxon and the Hiberno-Celt. America is open to emigration: let him migrate, therefore, and follow the great tide of his countrymen. But why does he not employ the language of the great section of his race? why cling to the English? or use as he still does a language—the Celtic—without literature, without recollections? One thing is certain — he cannot remain in Ireland; in the event of a continental war, he must be driven from an island so dangerously near to Britain. There is in Ireland sufficient Saxon blood (the Orange party) to drive the Celtic race from that country. Extreme measures seem to me best; expediency has done its worst, and the miserable sham is quite worn out. The statesman knows this well, but he knows not how to escape the danger; he knows that Celtic Ireland and Saxon England can never form *one united kingdom*. The mere bayonet unites nothing well; let Posen and Berlin, Vienna and Pesth, England and Ireland, Belgium and Holland, speak for themselves. Men occupy volumes with what they call the natural history of the aborigines of a country; of a miserable and remote island; of a tribe of Esquimaux, for example; they speak of a Corsican and a Frenchman as if they were men of the same race, slightly modified by external circumstances; of an *Englishman* called *O'Donoghue*, accidentally born in Kerry, but, for all that, in their eyes, a good loyal Englishman—*by act of Parliament*. Would it not be better to eschew for the future such solemn pedantry and folly; leave for a while Oceania and its unintelligible population; describe, for *the first time*, if possible, the *actual races* which now contend for mastery in Europe; watch the progress of the Celtic and Sclavonian races—the former centred in Gaul, the latter surging upon its original ground—the shores of the Danube, about to throw off the German rule, and meditating, no doubt, in their dream of independence, nationality and an empire distinct from the Muscovite and the German. These are *the races* which have never yet been described, and yet of all others they most merit the profoundest consideration.

I was in Belgium in 1815, and recollect when the first grand political error was made—an attempt, namely, in despite of the great *element of race*, to unite by force, by brute force, two distinct races of men: the dark Gotho-Celtic Catholic Belgian and the fair-haired, blue-eyed Protestant Low Saxon Holland. It was easy to see the result, but no one would believe me to whom I spoke; they could not be made to understand how two totally distinct races of men could not be governed in the same way—made to live under the same laws—think, act, and speak after the same fashion. At last the Belgians snapped the iron chain forged for them by England and Russia, and set themselves free. Even then, on talking the matter over with my literary and scientific friends, I could not get them to agree with me that *race*—the element of race—must ever enter into every calculation affecting the history of masses of men. It was in vain I pointed out the Celt in Ireland, and in Wales, and in the Highlands of Scotland, all of whom I knew well, having educated many hundreds of young gentlemen, natives of these countries, of the best families, and of Celtic origin; still I could not persuade any one of the correctness of these views. Now I most conscientiously believe that two circumstances prevail, and have caused this disregard of the element of race as affects British history. The first is, the profound ignorance, prevailing even amongst the most highly educated, as to the existence of *two races* of men in Britain and in Ireland, and the physical and moral differences which always have and always must divide them; secondly, the unwillingness of those who know better to admit that such differences exist. Statesmen know it, and have always known it, but have not dared to face the evil. Like men in presence of a great and increasing danger, they unwillingly admit its existence, and speak of it only in whispers. They knew that the Celtic family had been disunited—that the centre was in France, a branch in Wales, a third in Ireland; and they hoped, by bestowing the land in half counties to a few English families, they might quiet and extinguish the Irish people; for a people without land must perish. Look at the Highlands of Scotland. But the result has been a failure: the Irish branch of the Celtic family has grown to many millions—some say seven, but this is a great error: there are not 300,000 Celtic men in Ireland fit to carry arms. And then came the famous Lyndhurst declaration: the veil was torn off; the forbidden word had been pronounced; the Celtic population of Ireland were called aliens by blood, language, and religion in the land of their birth—in the country which ought to have belonged to them; the Celt and Saxon were for the first time made fully aware of the coming contest. Now with this, or its remedies, we have nothing to do. I came here to describe to you the races of men, and amongst them the Celtic race. I am too experienced to be deceived by names; with me a Celt is a Celt always, whether I meet him on the banks of the Rhone or the Shannon, or Ben Nevis slopes, or the gentler Cader Idris; residence alters not the race—there they are, in all these localities, as distinct from all other races as they were 4000 years ago — unaltered and unalterable. They call themselves French in France, but they are not Franks; they are Velshes—they are Celts—they know it perfectly. Civilization alters not blood, nor should it. The race which built the Louvre, gilded the dome of the Invalids, and fought the battles of Marengo and Austerlitz, inhabit the mud hovels of Tyrdrum, and of Connaught, and Plinlimmon. There is no concealing the fact any longer. I have lately heard some people hint that the war of races is assuming a particular form—they speak of it as a something new. Not in the least; it has never ceased. Look at Algiers! M. Guizot refuses to have it mentioned in his presence. (a) He traced civilization in Europe and most historic events, the Reformation of Luther for example, to accidental causes; the growth of the Sarmatian, the decline of the Gothic, race, all to accidental causes. He disliked, extremely, the word *race*, preferring such terms as *bourgeois*. (b)

But I trust to prove to you before the close of these lectures, that physiological laws exist—laws of nature—laws assailable, no doubt, but not extinguishable by man; explaining at least some of these great events on other principles than the inventions assigned as their causes by political historians and statesmen.

On several occasions I have already stated that the form of the cranium is merely one, though "an important one," no doubt, in the physical history of a race. Too much importance has hitherto been attached to it. The Hiberno-Celtic cranium, in so far as my observation goes, does not differ materially from the Celtic cranium generally all over the world. Why should it? But in Ireland there have been, and there still are, many other races (primitive races, perhaps, of whom we know little or nothing), not yet extinct; developed occasionally and unexpectedly amongst the subsequent waves of other races which have swept over or sojourned on the soil of Ireland; primitive races connected with these Lithuanian and Wendes races of the Black Forest, sources of the Danube and shores of the Baltic, not yet extinct in these countries, but influencing by their presence the blood of Central Germany, of Belgium, and the Rhine. The Phœnician exists in South Ireland, with his fine oval face, black hair, large expressive eyes, and Oriental feelings. My distinguished student, Mr. Percival Lord, who rose so rapidly to reputation in India, was a native, I think, of Cork, but evidently of the Phœnician race. The Dane, that is the Saxon, seized on Eastern Ireland; the Basque, probably, had a share in the population of South Ireland; the Celt of the north-western parts of Ireland has, it is said, his peculiarities. It is in Ireland also, and in one tract only of Scotland, where we meet those mysterious remains, the round towers; "monuments coeval, perhaps, with the Pyramids"! What an antiquity, no doubt, could we but trace it, belongs incontestably to Ireland; at all events, to its race! But may it not be that other races are just as ancient? This question touches that of origin—a question I intend discussing in my concluding lectures. At the commencement of my next lecture I may add a few more observations to those I have already made on the Hiberno-Celt; a speculation or two respecting a fair-haired, blue-eyed race of men still occasionally found in Ireland, and who yet do not seem to be identical with the Saxon; and proceed immediately with the history of the Continental Celt. Of Ireland as a Celtic kingdom or republic, the dream is past, its nationality has ceased; to prolong the dream they must first crush fifteen millions of the wealthiest Saxons the sun ever shone on.

(a) N.B. The lecture is in many parts published as delivered some years ago.

(b) This was spoken several years before the late revolution in France; yet even now it appears incredible to me how any intelligent Frenchman could, much less M. Guizot, have imagined that he could govern Celtic France by a corrupt majority in any humbug Chamber of Representatives.

LECTURES ON THE ASIATIC CHOLERA.

Its Stages and Symptoms, Pathology, and Specific Cause.

By GEORGE ROSS, Esq., Author of "Papers on Typhus Fever," and "Essays on the Processes of Digestion and Nutrition," &c.

(Continued from page 5.)

When the Asiatic cholera first appeared in this country every person was startled by the suddenness of its attacks, and the majority of opinions was in favour of its being considered a new disease. There were various forms of medical dissent upon this point. Some said that it was only another form of English cholera; others declared that it was not cholera at all; and a third party maintained that it certainly was cholera, but not the Asiatic disease. These were exceptional opinions—crochets; the bulk of the profession regarded it as a new and unprecedented malady.

At the present time there are emissaries—Government officials—abroad, who try to persuade us that it is usually preceded for some days by an ordinary bilious diarrhœa, or general discomfort, and that a timely dose will effect a cure. I respect the motives of these gentlemen, but I have no admiration of their science. If they wish us to understand that bilious diarrhœa is an integral part of the disease, and that its absence is exceptional, then cholera is merely an aggravation of an attack of bile, or, mayhap, of congestion of the mucous membrane

of the bowels—nothing specific nor extraordinary, a very simple affair when in the hands of very clever people. It is quite right to moderate the public's terror, and to convince men of the propriety of seeking medical aid for the slightest bodily ailment during the dominance of this plague. It is a universal observation that all diseases assume the type of the prevailing epidemic; thus, during the season of the year that typhus rages, most acute diseases are liable to run into the typhoid form, and the same circumstance occurs in relation to cholera; but the fact proves nothing in reference to the causation of cholera, or of its identity with the common diarrhœa of this country. This is not science, but it is such puerility that too often makes up the science of medicine. Though the observation is worth nothing as matter of science bearing on the speciality of the pestilence, it is, nevertheless, very excellent counsel.

I find, at the present moment, that there are several cases of hemorrhage in my practice—many of intestinal hemorrhage in children, and two in adults—and I have also two cases of miscarriage, which might have happened independently of any predisposing atmospheric cause, but, in my opinion, have in this instance been induced by the moist, relaxing condition of the atmosphere during the last fortnight. I have often observed that when intestinal or pulmonary hemorrhages were frequent, miscarriages in cases of delicate women have often occurred. Sore throat and erysipelas are also concurrent diseases.

A gentleman, the subject of one of the cases alluded to as having suffered from intestinal hemorrhage, was this day violently purged, and his evacuations were copious, watery, and slightly tinged of a dirty-yellow colour. Every medical man of observation must have remarked this concurrence of disorders. The state of atmosphere producing this form of disease is peculiarly favourable to cholera, and is no doubt preparing its advent; but we must remember that we have had the same atmospherical conditions and the same concomitance of diseases without cholera. Let it, then, be clearly understood that, although diarrhœa may precede cholera, and in such case should be immediately relieved, yet that the pestilence often gives no warning, and kills almost at a single stroke.

A form of diarrhœa often preceding or apt to degenerate into an attack of cholera is that observable where there is a congested mucous membrane and diminished tone of the muscular tissue of the bowels. It is of a slimy, pasty character, and is greyish in colour, not unlike thick chalk and water, showing an absence of the secretions of the liver and bowels; it is, also, generally of a very bad odour. This description applies to the relaxation of the bowels that occurs in winter during the prevalence of a chilly, damp, oppressing atmosphere.

STAGES AND SYMPTOMS.

An attack of cholera has been usually divided into three stages; but it might as judiciously be divided into four or five, or any other number. The reaction is undoubtedly a stage of the disease, and, as regards the treatment, one of the utmost importance; yet it is too generally dismissed from consideration. Although we may group together symptoms with a precision that is almirable upon paper, yet we must remember that Nature is not a mathematician, and rarely squares her operations in accordance with the strict limitations of art. One stage often runs into another so imperceptibly that no demarcation can be discerned; and sometimes one, two, or three of the scientific stages are wanting altogether, and death strikes the patient with a single blow. Nevertheless these divisions should not be despised, as they facilitate a clear comprehension of the disease, and are guides for our treatment. The disease, then, may be appropriately divided into the following stages:—

The *first stage* is precursory to the characteristic development of the disease in the second stage. It may last for two or three days, or it may be wholly absent. It occurs most rarely at the onset of the epidemic in any locality. It is a warning which every one would be wise to observe. It is distinguished by general uneasiness, giddiness, nausea, loss of appetite, with heat at the pit of the stomach, flatulent rumbling in the bowels; diarrhœa, at first feculent or pultaceous, of a yellowish cast; sleeplessness, nervous depression, slight cramps and twitches in the muscles of the legs. The diarrhœa is the most prevalent precursory symptom. There is no griping.

Second Stage. — Vomiting, frequent and copious, of a clear fluid, mixed with white flakes; rapid and abundant purging, of a fluid resembling rice-water, gruel, or whey, occasionally slightly stained with a yellow tint, or otherwise discoloured; flakes of a white substance float in it, and it is said to exhibit an alkaline reaction; but this is by no means a constant condition, and the dejections are frequently acid. Tenesmus absent; faintness and vertigo ensue, and the cramps are agonizing; the pulse is slow or intermitting; the respiration deep and laborious; the urine has ceased to flow, and the skin of the extremities becomes cold and damp; the tongue is moist and often loaded; orbicular excavation commences; the features sharpen, and the face is shrunk, pallid, and cadaverous. This stage runs rapidly into, and is continuous with, the

Third Stage.—All the symptoms are now aggravated. In the greater number of cases the vomiting and purging continue, in others they cease; but the malady, notwithstanding, advances with rapid strides to its termination and death. An overwhelming sense of oppression threatens instant annihilation; the coldness extends from the extremities to the trunk; the tetanic cramps continue; the inspiration is heavier, slower, and seems to be mastered by an immense effort; the expiration short, quick, and convulsive; the breath cold; the voice is peculiar, thin, and whispering, known as the *vox cholerica;* speech monosyllabic, in consequence of the deficiency of air in the lungs, and loss of power. The patient usually complains of great anxiety and pain around the region of the heart and pit of the stomach, where the muscles are powerfully drawn in, and occasionally the walls of the abdomen are hard and flat, like a board. There is a restless tossing to and fro of the arms and body—a struggle to breathe and to throw off the suffocating oppression of the disease. The heart's action may be scarcely, or not at all, perceptible, and the pulse at the wrist weak, slow, vacillating, or wholly extinct. The superficial veins are darker in colour, streaking the skin in their course; the tongue is blue, cold, and tremulous; the thirst quenchless, and cold drinks are greedily demanded. *Urine entirely suppressed.* The skin over the whole body is shrivelled, sometimes folded, and bathed in a cold clammy exudation. Discoloration comes on; the nails are first of a greyish blue tint, then the fingers and hands become, according to the hue of the complexion, blue, leaden, or brownish black. This tint gradually suffuses the lips and the cheeks, and more or less of the general surface. The face is more pinched and meagre; the eyes hollower, more staring and glassy, turned upwards, and injected where exposed to the air—speculationless, like the eyes of a drowned man. The toes and fingers are shrunk, the whole body icy cold and attenuated; in short, the patient is in the stage of confirmed collapse—a picture of anguish and horror.

In the worst cases, the patient, hitherto perfectly conscious, becomes insensible; twitching of the muscles or a paralytic state ensues; the power of deglutition ceases; a few convulsive sobs shake the frame, and death has arrived.

In other cases the vomiting and diarrhœa cease suddenly, or one or both become of a yellow or grass-green colour, indicating the presence of bile; hiccough supervenes, which is now, singularly enough, a favourable symptom; the pulse rises, the skin recovers its warmth, and the face its colour; the cheeks are frequently flushed up to a high scarlet hue. The patient has now entered on the stage of reaction. The cold stage may continue from twelve hours to two or three days.

This is a rapid but a faithful outline of the symptoms as they were observed to occur in succession during the epidemic of 1831-2; but, of course, there were many modifications of the disease, and, therefore, of its symptoms. Sometimes the first and second stages were entirely wanting; there was neither vomiting nor purging, but excruciating cramps, coldness, and lividity came on suddenly; the stomach was paralyzed, emetics were useless, and in from six to twelve hours the patient was dead. In these cases the person, apparently in good health, was seized, without the slightest warning, with vertigo, a sudden stoppage of the breath, and insufferable anguish at his heart, and he dropped to the ground as if he had been struck by lightning. The symptoms already recorded as distinguishing the last stage of cholera characterised this form of the disease, and were, if possible, more agonizing. This phase of the malady occurred chiefly at the commencement of the epidemic, when the mortality was always highest.

Fourth Stage.—This is the stage of reaction, distinguished by the ordinary symptoms of a continued fever. It is attended with headache and noise in the ears, and pain and oppression at the region of the stomach and abdomen. The pulse is quick, the skin hot, the tongue red at the edges and covered with a brown fur. The urine has recommenced to flow, but it is high coloured and scanty. Occasionally there is delirium. Local congestions take place in various organs; and sometimes the fever runs into the inflammatory type, and, in this case, is most easily managed.

On the other hand, low typhoid symptoms may supervene; pulse small, temperature low, sordes on the gums; tongue dry and contracted, with a brown fur; stupor, delirium, and death. In true cholera the mortality is as great during the reaction as during the cold stage; some authorities say even greater. How necessary, then, that the danger attending the reaction should be kept in view!

Diagnosis.—The epidemic cholera is distinguishable from common English cholera by the white serous character of the evacuations which flow from the body as from a pipe, with a total absence of pain, and also by an entire suppression of urine; from cyanosis—a rare disease in the adult—by its epidemic character, by the evacuations, when present, and by the sudden collapse and violent spasms.

After a minute and comprehensive examination of the reports of numberless cases by different observers, we may conclude that the essential or diagnostic symptoms of cholera are the cold and blue tongue, and the cold breath; the discoloration and collapse of the body arising from a universal congestion of the capillary and venous systems; and the characteristic vomiting and purging, unattended with pain or tenesmus. Any one of these symptoms may exist without constituting a case of epidemic cholera; but the aggregations of these symptoms would evidence a genuine case of cholera, whether spasmodic or epidemic. The spasm of the extremities is common to the epidemic and the English cholera; yet it always occurs in the epidemic disease, and in its simplest from is the most prominent and agonizing symptom.

THE PATHOLOGY OF THE DISEASE.

While the disease was a novelty in Europe there was a great and a laudable anxiety among scientific men to ascertain its cause, and it was conceived that the most orthodox mode of proceeding was to discover the organic lesions. Every malady was then believed to be traceable to structural impairment. *Post-mortem* examinations, notwithstanding the presumed peril of the operation, were performed with alacrity and perseverance; and, during the first few months of the disease's sojourn in Europe, more was ascertained of its pathological conditions than had been discovered in India during the preceding fifteen years. And what did this knowledge amount to? Mere negation. We learned that the disease was not what everybody had believed that it was. However, to be convinced

of ignorance is the first step to the attainment of knowledge.

In the beginning, hurried on by zeal and enthusiasm, investigators committed many errors. Delpech told the world that he had perceived an abnormal state of the similunar ganglion, to which the epidemic was attributable. Lizars strove hard to confirm this view. Of course it was not difficult to frame a theory in beautiful harmony with this discovery; the idea became fashionable among medical men; similar theories were promulged in multitudinous pamphlets. At Edinburgh, where Delpech tried to demonstrate his notions on the dead body, he pointed out the semilunar ganglion in a state of *ramollissement* to Dr. Harrison and others, who proved it to be a lymphatic gland! The semilunar ganglion on the opposite side was healthy.

Then a war raged as to the inflammatory character of the disease. Many contended that because the mucous membrane of the intestines was on almost every occasion found congested, and sometimes of a fine red colour, with softening or ulceration, that the disease was essentially inflammatory; others denied it. Broussais, in Paris, was at the head of the champions of phlogosis; he treated his patients upon this principle, accelerated their deaths, and then changed his practice for another equally bad or worse. Thus phlogosis sustained a shock from which it did not easily recover. However, the best answer to the advocates of inflammation was in the results of repeated *post-mortem* investigations; and these were pursued with a commendable intrepidity and zeal.

It would be idle to recount the various observations made by different pathologists on the dead body. Similar facts were remarked by all, but were by some more carefully discriminated as to their real pathological character and relations to the disease. The red congested state of the mucous membrane of the stomach occasionally seen, and of the intestines more frequently, might in some cases be attributable to inflammation, either excited by the imprudent exhibition of powerful stimulants, or as a sequel of the disease during the period of reaction; or it might be only a mere change of colour in the capillaries owing to the administration of saline remedies, which, coming in contact with the blood corpuscles in the minute capillaries on the surface of the membrane, changed their colour without affecting that of the corpuscles in the adjacent veins: at any rate, inflammation was not an essential element of the disease, as many bodies of patients dying in the worst forms of the epidemic showed no such signs.

The glands of Peyer and Branner were also found enlarged in some cases, and in others more advanced in a state of suppuration; but in these latter instances the patients had died during the stage of reaction, when, as the victims exhibit all the symptoms of a continued fever, this condition of the intestinal glands can offer no matter of surprise. Other organs presented variable characters. In Berlin, deaths occurring during the early stages of the disease were said to be attended with an undue hardness of the cerebral structure, but in more prolonged cases by as remarkable a softening of the same tissue; and this condition was associated with the paralytic form which the disease sometimes assumed in its last stages. These observations were undoubtedly correct, but they exhibit no peculiarity; least of all can they be said to indicate the essential pathology of the epidemic. The conditions were variable, and often absent altogether.

The following appearances were those most universally found:—

Blueness of the surface, with rigidity of the lower extremities; emaciation; dark, thick grumous blood flowing like tar when the vessels were cut. This gory fluid filled the large vessels and one or more of the cavities of the heart, which also contained fibrinous clots, and it was likewise found in the aorta. The various internal organs were congested with it, as were also the veins at the base of the brain, and the coronary arteries of the heart; the bladder, contracted to the size of a fig, either empty or holding a few drops of urine, mixed with mucus, or a dirty yellow substance.

The foregoing appearances might be considered constant; but there were other conditions very generally found.

The mucous membrane of the stomach was ordinarily pale, and in some cases softened, and lined with a creamy matter. This organ, as well as the intestines, contained the peculiar fluid vomited during life.

The small intestines were congested in patches of more or less magnitude, looking swollen, pulpy, and red, like velvet. It was sometimes coated with a pearly mucus, and so softened that in attempting to remove the one the other was torn away. This happened generally in the typhoid cases, when the glands were ulcerated. Mucous flakes were lying in the intestines, and are said to have borne a relation to the enlargement of the intestinal glands. The large intestines were commonly contracted, and exhibited similar patches of congestion to those in the small intestines, though not so frequently nor to the same extent.

The liver was usually congested, and the gall-bladder filled with bile.

These are the only structural lesions that are necessary to be recorded, as they are the only ones having a definite relation to the disease.

We have seen from the foregoing recapitulation that there is nothing in the pathology of the solids in cholera to indicate the cause of the disease. There is no change of a special character; the organs are not invariably either hardened or softened, inflamed or ulcerated; each and all of these conditions in one or other of the organs have been reported as effects, but no unprejudiced surgeon has presumed to designate them as causes; nor could any other result have been reasonably expected. The disease is occasionally rapid in its course, and solid structures are not disorganized in six hours,—frequently the period of transition from vigorous life to death. Congestion, extreme—universal, is the sum of all.

State of the Blood.—Let us now turn to the blood, and ascertain its condition. The investigations of Dr. O'Shaughnessy will form the basis of these remarks, though other writers—Clanny, Thomson, Wittstock, &c.—will be made tributary to our task. In lectures of this description it is not my duty, and it would be exceedingly futile, to recapitulate all that has been written and said about the blood in cholera. I shall, therefore, use the privilege of making such selections as experience may have declared true, or of which my own judgment may approve. I have already compared experiments and arguments, and now give the results.

The investigations of these experiments demonstrated—

1st. A *considerable diminution of water* in the blood of the cholera patient, the specific gravities ranging from 41 to 57.

2nd. A decrease, also, in the *salts* of the serum to the extent on the average of one-third of their normal amount.

3rd. That the solid constituents of the crassamentum, including its salts, retained their normal proportions, requiring only an additional quantity of water to raise them to their normal condition.

4th. A large excess of urea in the blood.

With reference to the first point all observers are agreed, as, likewise, there is a general accordance among them regarding the second point, so that these questions may be considered settled. The third point was disputed. Dr. Thomson stated that his experiments showed that there was a decided diminution of fibrine and excess of colouring matter, but I think that Dr. O'Shaughnessy incontestably proved that the experiments of Dr. Thomson were fallacious in this respect.

Dr. O'Shaughnessy also contended that the dejections were alkaline, and contained the carbonate of soda deficient in the blood. It does not appear, however, that the fluids in the stomach and intestines were generally alkaline; on the contrary, they were frequently acid; but the doctor maintained that the acid reaction did not alter the chemical argument, inasmuch as the stomach and small intestines naturally secrete so much acid that all the alkali of the blood would, if the secretion had been unusually profuse before the attack of cholera, be insufficient to neutralize it.

It is highly probable, therefore, that the salts of the blood passed off by the bowels, but it is not proved.

In respect to the fourth point—an excess of urea in the blood—Dr. O'Shaughnessy reports that there is sometimes as much as three grains of urea in 1000 parts of cholera serum.

Are these changes in the blood primary or secondary—proximate causes or induced effects? There can be no hesitation in replying, so far as experiment has yet revealed the mystery of this disease, that these changes are the mere results of the perverted actions of the system. The excessive discharges by the stomach and bowels carry off the water and salts of the serum of the blood, and the suppression of urine causes urea to appear in excess in the circulating fluid. Urea is found in the blood during the progress of other diseases from a similar cause. Besides, the amount of the water and salts diminishes in proportion to the length of time that has elapsed since the onset of the disease: in the first stage the relative proportions are normal; in the last stage the disparity is most extreme. In the blood of healthy persons during the progess of the epidemic there is no appreciable change.

Pathology has not yet, therefore, expounded the proximate cause of the malady; all the aberrations from the healthy standard that we have yet observed are simple effects.

Which organ receives the first impression of the epidemic influence, and in what manner? These are the questions for experimenters to solve. Is it nerve or blood? It is, perhaps, to the circulating fluid we must look for a practical answer. If the changes in this fluid be owing to an impairment of its coagulability, and of its vital affinities, how is this effected, and by what agent?

OF THE SPECIFIC AND EXCITING CAUSES.

The important questions relating to the causation of cholera are *sub judice*. Electricity, cometary influence, vegetable sporules, the generation of minute insects in the atmosphere—their larvæ or exuviæ—small black maggots, &c., were severally assigned as causes during the reign of the last epidemic. Flights of insects were seen then, as now, in certain districts during the prevalence of the cholera, and were, in accordance with the favourite mode of reasoning among our medical philosophers, considered as cause and effect. Black maggots were, also, found in the clothes of persons dying of cholera. Great stress was, no doubt, laid upon their being black rather than white—seeing that the cholera is, as the Russians call it, the black disease; but whether the cholera generated the maggots, or the maggots the cholera, the deponents do not aver. Vegetable fermentation found its admirers, and will again. I deny nothing, for everything is yet to be known.

Earthquakes and tornados having been experienced in the West Indies, where, in our simplicity, we might imagine they had never been felt before; a Titanic rigor having shaken the earth at Venice; and, moreover, a new volcano suddenly emerged from the sea, near Sicily, to the great astonishment of the lovers of marvels, it was suggested that perhaps the proximity of a comet had disturbed the equilibrium of physical forces, and visited us with cholera at the same time. The gentleman who published this sagacious notion added, with singular self-complacency, "that philosophers must steer clear of hasty and fanciful conclusions." I entirely approve of this judicious counsel.

Dr. Tytler tried to prove with great ingenuity that bad rice was a cause of cholera, but I do not think that this opinion can be admitted.

The gradual progress of the disease in two streams from Asia into Europe is opposed to any such notion. Diseased rice would be imported into England, and consequently cause the malady, much sooner than in Russia or Austria, yet England is generally one of the last European countries attacked.

The exemption of particular secluded districts has also seemed to favour the idea of contagion in the minds of its advocates, whilst, according to Dr. Tytler, such exemption constitutes a proof of his theory, as the employment of bad rice in some of these cases had been strictly forbidden. Thus, in Goruckpore 30,000 persons died, but not one of the persons in the prison was attacked. The same immunity occurred in the gaol of Allahabad, although 10,000 persons in the town and suburbs died of the epidemic during the first six months. Unsound rice was excluded from the latter gaol at Dr. Tytler's desire; and the contagionists would require us to assume that all communication with the town in the former case was cut off. I have observed the same immunity to exist in workhouses in England in respect to typhus fever, scarlet fever, and measles. At the end of an abstract of cases in my note-book for 1841 and the previous two years, I find this note:—"It is curious that these diseases *in* the house and *out* of the house do not always happen together. Why?" In fact, I often had thirty or forty cases of typhus or scarlet fever in the house, and scarcely one case out of the house; and when these diseases were epidemic out of the house, they did not prevail in the house. I at that time attributed the occurrence of the diseases in the house, when they did not prevail out of the house, to improper food and bad ventilation. Without, however, indulging in any problematical explanation, I offer the parallel fact to the reader, with a view to show that all epidemics exhibit this discrepancy; and, therefore, that the special causes assigned by various partisans should be received with caution.

Influence of Temperament.—I apprehend that physical temperament or diathesis is a prime agent in the dissemination of this disease. It has been observed in Russia during the present epidemic, that the descendants of persons who died during the first visitation are those persons chiefly attacked on this occasion. A few years ago two cases occurred in my practice which, taken in connection with other circumstances, tend to support this view. A young man, ruddy, vigorous, healthy, and powerfully made, in the act of pulling on his stocking after rising from bed, fell back insensible; blueness extended over his whole body, his lips and cheeks were much congested, and his pulse at the wrist was scarcely perceptible. There were no discharges. I attempted to bleed in vain. Stimulants were given, and he rallied in the course of the following day.

This man's uncle, eighteen months afterwards, came to me labouring under diarrhœa, caught, as he informed me, from working in a potato pit, where potatoes had been hoarded, and which, from decomposition, "stunk worse than a privy." It was a case of English cholera, with this exception:—the ears and lips became blue, the countenance cadaverous, and his dejections were, during twenty-four hours, perfectly white and watery, like gruel, and similar to the evacuations in genuine Asiatic cholera.

Further than this, the brother of this man died of cholera during the epidemic of 1832.

In this family, although they were to all appearance robust and healthy, there was a manifest tendency to capillary congestion. One died of Asiatic cholera; another had English cholera running into the characters of the epidemic disease; and a third was struck suddenly with universal congestion without any assignable cause. Similarity of idiosyncrasy is a predisposing cause that I desire to press in a distinct and forcible manner on your notice.

I may observe that during the present summer I have attended two well-marked cases of rice-water dejection, with collapse and spasms in the extremities, but without blueness, in females of a lymphatic temperament, and who had been debilitated, in one case by twelve months' watching a sick bed, and in the other by severe disease. These cases would have been called cholera if that disease had been epidemic. They suggest the question—In what does the epidemic cholera differ in its nature from these cases? Are they induced by the same cause, differing only as to the intensity and the universality of its influence?

Influence of Electricity.—The cholera, during its last visitation, was also ascribed to electrical aberrations; but extensive observations by eminent chemists tended to prove that there was no constant relation between the progress of the disease and electrical phenomena. We, therefore, know nothing with precision: all is mystery. However, inquiries in this direction should be zealously continued; and, since certain statements have recently been made in reference to the diminished power of the magnet at St. Petersburg during the time the pestilence raged in that city, it behoves all men having the opportunity to observe the facts, and closely to examine the matter, that the question may be set at rest. If we cannot discover immediately what is, at least we can determine what is not, the cause of the disease. Negative knowledge removes obstacles, and shortens the path to scientific truth. Direct inferences from indirect facts are nonsensical, childish—the rottenness at the core of all theory. How idle it is to infer that, because electricity will disturb and modify the molecular relations of inorganic matter, that therefore, and in the same way, it acts upon organized bodies, and produces the epidemic cholera! Of such stuff as this modern theories are made! We do not want, in the first instance, to know the facts respecting inorganic matter, but simply what are the facts relative to the electrical state of the human body during an attack of cholera. Are there any such facts? Where are the direct experiments upon which a philosophical explanation may be based? If there are none, or none worthy of credit, we must blow to the winds the gossamer speculations of dreaming theorists, though they may be dignified with the title of philosophers. I must, nevertheless, be understood to look with favour upon this subject of inquiry in reference to the causation of cholera, as I think that there are several facts that countenance the probability of magnetic influence being engaged in the production of the disease. Many of these facts appear to me to be inexplicable, except upon the assumption of such an influence; but these facts are not sufficiently precise to form the groundwork of a general argument, and mere theory, as I have already intimated, must be repudiated.

There can be no doubt, however, that errors and excesses in diet, mental depression, however caused, excessive indulgence in venery, prolonged abstinence, fear, and undue bodily exertion, are exciting causes of the disease. Many attacks of the most severe and fatal forms of cholera have occurred after a debauch, and relapses have frequently been traced to irregularities of diet. It has been also observed that timid persons who had a dread of an attack were always most liable to an invasion of the malady. Confidence and cheerfulness are admirable securities against cholera.

The causes enumerated above, and others, such as long-standing disease, meagre diet, composed chiefly of farinaceous substances, over-crowded rooms, bad ventilation, imperfect drainage, induce physical debility and mental despondency, and thus predispose individuals to receive the disease. Whatever, indeed, disorders the digestive organs or diminishes the vital powers of the system is a predisposing cause. I believe, however, that of all these causes the most pernicious are bad food, bad ventilation, and bad sewerage. Hence the pestilence is found to nestle in the narrow streets of dirty towns, and to ravage the filthy and noisome habitations of the poor. It gathers strength and virulence in these Augean stables of human pollution, and exerts its malignity to punish society for the cupidity and brutishness of an advanced civilization! The poor, the ignorant—those who cannot help themselves, are the vicarious sacrifices for the guilt of other criminals. This is as it has always been: the weak suffer for the misdeeds of the strong.

ORIGINAL CONTRIBUTIONS.

CASE OF HERMAPHRODISM.

Communicated by CHARLES WALLER, M.D., Obstetric Physician to St. Thomas's Hospital.

The distinction of hermaphrodism into the true and false is practically convenient and sufficiently simple: the former variety comprehending all those cases in which there actually exist, in a more or less perfect state, the distinctive organs of both male and female in the same individual; the latter being restricted to those cases in which there is no such admixture, but where, either from imperfect development on the one hand, or hyper-development on the other, the organ or organs of one sex present an appearance not very dissimilar to those of the other, at least on a cursory examination. The distinction may, however, sometimes be made, if proper care be exhibited, and the sex of the individual be tolerably accurately determined. In true hermaphrodism, however, during the life of the person, doubts may and do arise, so that by one the being is pronounced to be a male, by another a female. Nor is this to be wondered at, inasmuch as there are the organs of both present. One of the most remarkable cases of this kind is related by Varole ("Mem. de la Société Médicale de Paris," tom. iv., p. 342). This young person lived until about eighteen years of age, and then died in the Hôtel Dieu, when the organs of generation were found to be thus developed:—On the right side, the scrotum contained a testis, the vas deferens from which opened into the middle of the outer border of the vesicula seminalis. There was no testicle on the left side. On prosecuting the dissection within, there was discovered on this side (the left) an ovary; a Fallopian tube, with its fimbriated extremity; a small flattened uterus, without a cervix; the two ligaments lateral and round: the latter, passing outwards, was eventually lost in the cellular tissue of the left side of the scrotum. The vesicula seminalis on the right side, and the imperfectly developed uterus on the left, communicated by a canal of about an inch and a half in length. The external organs were male; the penis very small, having no corpus spongiosum, and was imperforate for half an inch at its anterior extremity. The mammæ were as well developed as in an ordinary female of the same age. This person during life had been considered a male.

A very curious case of spurious hermaphrodism has been related by Otto, which, in its external appearance, somewhat resembles the one about to be related. This person, it appears, had lived ten years in the married state with three different men. When she was thirty-five years of age, the third husband brought an action of divorce, accusing her of having some disease of the sexual organs which rendered the act of coitus extremely difficult and painful. The wife was referred to two medical men, whose opinions as regarded her sex were at variance; but at length it was considered that she was really a male, and this conclusion was confirmed by the members of the Royal Medical College of Silesia. There was in this case a penis about an inch and a half in length, but imperforate; a false vagina, nearly two inches in depth, lined with a vascular mucous membrane; a divided scrotum, the right half containing a testicle as large as that of a youth about ten years of age; the left testis lay external to the ring, but much smaller in size, and both furnished with spermatic cords. The general conformation was strong and muscular, the beard thin and soft; the face, mammæ, thorax, and extremities evidently masculine. I have

seen but *very few* cases of hermaphrodism in the course of a twenty-six years' practice; the following is, therefore, *to me*, one of great interest.

Margaret M., aged twenty-six, was born in North Wales, where she has resided until within the last few weeks; her employment has been that of a domestic servant; she has also been occasionally engaged in field labour. On her arrival in London she located herself with a married relative, to whom she complained of certain anomalous pains in the chest and stomach. A negative answer was given to the inquiry as to whether the menstrual discharge had ever appeared, which induced her friend to procure a letter of recommendation to the Metropolitan Dispensary, where she was admitted under my care, and from whence, at my request, she was removed to St. Thomas's Hospital. Her general appearance, clothed as she was in woman's attire, was that of a tall, stout, and somewhat coarsely-made female; the features strongly marked, and, *perhaps, with the exception of the eye*, presenting no trace of feminine delicacy; the nose large and very broad, and the lips also large and thick; there were evidences of beard upon the chin, which had manifestly been removed from time to time either by shaving or otherwise; the hair was of a black colour, long, and turned backwards behind the ears; the forehead broad and rather high; the limbs largely developed. As the individual could understand no language but the Welsh, I was under the necessity of communicating through the medium of an interpreter. This prevented my obtaining all the information I could have desired, as there are certain questions not easily put through the medium of a third person. I inquired, however, as to the structure of the genital organs, and, obtaining no satisfactory reply, at once proceeded to make an examination in the ordinary way. I found the pudendum covered with a profusion of hair; one of the labia (as I supposed) greatly enlarged; indeed, upon the first touch, it seemed as though the patient laboured under a left labial hernia. A solid substance could, however be detected within the labium, and, when the parts were exposed to the eye, the following curious malformation was seen:—Before the parts were separated by the finger the general appearances of the organs were certainly those of a female, with, however, an unusual degree of development of the labia, that on the left side being larger than the right. On separating these labia the left was found to be expanded into a tolerably well-formed half scrotum, containing a testicle within it which had descended considerably, although not fully. It is worthy of remark, however, that it appears now to occupy a lower position than it did four weeks ago, and that the scrotum is more largely developed. The right half of the scrotum is smaller, and the testicle has scarcely escaped from the inguinal canal. On separating the two halves of the scrotum as widely as possible, a small body, resembling a very diminutive penis, was seen, more pointed than usual at its extremity, covered with a well-formed prepuce,

but having no urethral opening. Underneath this there was seen an opening large enough to admit the point of the finger with ease, this being the commencement of a canal resembling the vagina, being, however, only about two inches in length, and then terminating in a *cul de sac;* just within this canal, on its upper part, the meatus urinarius could be distinctly felt. There were not the slightest traces of anything like the nymphæ. The frenum, stretching across the anterior boundary of the perineum, resembled the female.

Fig. 1 represents the general appearance of the countenance of the individual.

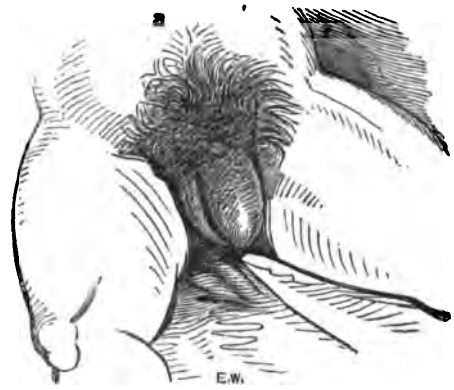

Fig. 2. The generative organs as they were first seen, and the left side considerably larger than the right, but still, upon the whole, presenting the appearance of being feminine.

Fig. 3. The two sides have been widely separated to show the appearance of the parts within. *a*, the left side of the scrotum; *b*, the right do.; *c*, the diminutive penis; *d*, its prepuce stretched back to its fullest extent. The canal below, and the frenum, are also well represented; their relative position has been a little displaced in order that the parts may be more completely exposed.

The chest, abdomen, and lower extremities are covered with hair, and there is no mammary development; the nipples are large. There have as yet been no sexual desires. The pelvis is remarkably wide. There is also but little appearance of the pomum Adami. The voice rough and harsh; the general behaviour modest and gentle. The gender of this curiously constructed individual is, I doubt not, masculine.

Finsbury-square, Oct. 25.

PHRENITIS.

Communicated by W. T. BARKER, M.D. Edin.; Physician to the Dumfries and Galloway Royal Infirmary.

The two following cases of phrenitis may very well be placed together as being somewhat analogous, occurring during convalescence from fever, although the symptoms and terminations were very opposite.

Case 1.—William Adams, weaver, Dumfries, aged forty-two, of spare make and dissipated habits, was admitted on Aug. 3, 1848, with the ordinary symptoms of fever, of five days' duration. On the 8th violent head symptoms set in, petechiæ appeared over the body, and the case was one of well-marked synochus.

The disease ran rather a lengthened course, and on the 26th the patient was pronounced convalescent, and was removed to the convalescent ward. He continued to improve till the 1st of September, when, without any visible cause, a state of stupor supervened, from which he was partially aroused by counter-irritants and stimulants, but soon relapsed. On the 2nd, general tremor appeared over the body, with rigidity of the flexors of the right upper and lower extremities; the respiration was laborious; the urine and fæces (the latter very black) were passed involuntarily; and there was hiccough. Notwithstanding the treatment, these symptoms continued till the following night (the 3rd), when he died.

Post-mortem Appearances.—The body was much emaciated, and the features contracted.

Head.—On removing the calvarium, the dura mater was found thicker than natural, and unusually tough. The arachnoid was also thick and firm; the subarachnoid spaces over both hemispheres of the cerebrum and cerebellum, particularly on the inferior surface of the latter, contained a great quantity of laudable inspissated pus. The substance of the brain was less vascular and softer than natural.

Thorax.—The pleuræ were natural; the lungs were emphysematous anteriorly, and much congested posteriorly; the heart had a fat and flabby appearance.

Abdomen.—None of the organs seemed to be affected except the kidneys, one of which was of enormous size, and very fatty; the cortex was much thicker than natural, very granular, and easily torn; the stomach and liver were perfectly healthy!

Under the Microscope.—Shreds of lymph were found floating in the pus which was observed in the subarachnoid spaces. The heart appeared to be in the first stage of fatty degeneration, and the transverse striæ were but imperfectly seen in its muscular fibres. The uriniferous tubes of the kidney were blocked up with epithelium, in which a considerable number of oil globules was observed.

This case is extremely interesting on account of the extensive disease found within the cranium after death, without a corresponding severity of the symptoms during life to lead one to expect any such *post-mortem* appearances. It is also interesting from the shortness of time in which the deposition of pus had taken place; for I scarcely suppose that it occurred on the 8th of August when the head symptoms were violent, and that it should have remained there during convalescence; for I think it impossible that the the patient could have been so clear, sensible, and collected as he was, previous to the 1st of September, with such a state of matters in the head. I would date the deposition subsequently to this, when he was attacked by stupor, followed by general tremor and rigidity of the flexors of the extremities of the right side, which would be more likely symptoms to characterize its having taken place; but it seems curious that there should have been no active symptoms at this time, and also that the rigidity of the muscles should have been confined to one side of the body, whilst the deposition of pus was on both sides of the head. It is rather curious, too, considering the man's habits, that the liver should have been found quite healthy.

Case 2.—Barney Gallocher, labourer, from Ireland, aged twenty-two, was admitted on the 1st of August, 1848, with continued fever of a week's duration, of the same type as that of the man Adams, which ran rather a more lengthened course, but upon the whole the symptoms were almost the same, and he was fairly convalescent on the 1st of September, from which time he continued daily to improve till the 9th, when he appeared to be very nervous, but he complained of nothing except slight pain in the epigastric region, to which a sinapism was applied, and he

had olei ricini ʒvj., after which he seemed a little better.

On the 12th he was very delirious, broke the windows, threw his clothes out, and was reckless of danger: his skin was hot, and the pulse 120. His head was shaved, and a blister applied to the whole of it, and he was ordered tart. antim., gr. ¼; hydrarg. submur., gr. iij.; pulv. opii, gr. ¼. M. ft. pulv. quâque quartâ horâ sumendus.

13. He was violently delirious till four o'clock A.M., when he became calm. The eyes were sunk and the features sharp; skin cool; pulse 50; tongue brown and dry; the teeth covered with sordes: he was now tolerably sensible and coherent. The powders were now continued every sixth hour, and from the 14th every eighth hour, as all the symptoms were relieved, till the 16th, when his mouth was affected. His convalescence was slow but complete, and on the 11th of October he was dismissed cured.

ON CHLORATE OF POTASH IN PHAGEDENIC ULCERATIONS.

By GEORGE SAYLE, Esq., Surgeon to the West Norfolk and Lynn Hospital; formerly Curator of the Anatomical Museum in the St. George's Hospital School.

In the *Medical Times* for April 6, 1844, two case of the above nature are reported by me: one occurring in the hospital practice of Mr. Cæsar Hawkins, the other falling under my own observation and treatment. The first was a case of cancrum oris, the other resulting from an over-dose of calomel. Since these cases were published many opportunities have occurred to me of watching the effects of this preparation, not only in the kinds of phagedena there mentioned, but also on the *external* covering of the body, where such ulcers also occasionally present themselves.

Before, however, I proceed further, I cannot help noticing a communication to the *Medical Gazette* for Nov. 27, 1846, by Mr. Allison, of Bridlington, pointing out the effect of this preparation in cases exactly similar to that I forwarded to your journal two years previously, and claiming originality, if any belonged thereto. As the more evidence brought forward in support of any statement must tend to strengthen it, I have extracted his report, together with the observations of the editor, who also appears ignorant of such a statement having been previously made.

It must still remain matter of conjecture in what manner it acts upon the human organism, no material alteration appearing in any of the secretions from the system under its admission. In my remarks four years since, when speaking of its action, it is stated that it was "perhaps by restoring to the blood some of its salts or properties, a deficiency of which is requisite for an ulcerative process." I am sorry that up to this present time I can add but little to it, and that entirely theoretical. I am inclined, however, to believe that the effect is produced by the decomposition of the salt, and by the absorption into the system of the oxygen contained in it. This supposition has been strengthened by observing that an application containing a similarly large quantity of oxygen—the largest equivalent known—has been found the most useful adjunct as an external application: I mean nitric acid, but, it need scarcely be said, in a diluted form. Reasoning in this strain also suggested further, whether in all idiopathic ulcerations the cause is not the same, *i. e.*, a deficiency of oxygen; it being only in constitutions broken down by accidental, hereditary, or other diseases contracted by the patient's own indiscretion that such ulcers are observable. They are also attended with increased respiration, partly doubtless from debility, but also, at the same time, for increasing the oxygenating process. The heart sympathizes with this increased action, but from the sluggishness of the circulating fluid, especially through the venous system, the object contemplated by Nature is materially frustrated. Some years since this salt claimed considerable notice in the treatment of phthisis; and if any good were derived therefrom, which many have averred was the case, I am prone to refer the benefit to the same cause, or in other words, the oxygen required by the blood in the lungs, not being attainable by respiration, was procured by admission into the stomach, and so sufficed to a certain extent the loss sustained by the system from destruction of the pulmonary substance.

It may be further stated, and as fully established, that granulations around any ulcer are the product of arterial blood, and hence the better the state of that fluid, by whatever means produced, must tend to promote the desired end; and, since the only product of respiration is oxygenation of the blood, any substance adding to the inspired stock must be beneficial. That the blood may be thus improved must, I think, be admitted, knowing not only the changes it undergoes in the capillary system, but that many medicinal substances are doubtless conveyed into it, either decomposed or not. Having admitted this, it cannot be considered unreasonable to conjecture the remainder.

I am perfectly aware much that is here stated will be looked upon as mere theory and of little avail; but no one can deny the reports of the subjoined cases, the success attending which is, I believe, far greater than the plan of treatment commonly adopted up to the present. In addition, also, to those here detailed, I may add that its exhibition in a case of large fungoid bleeding tumour above the left clavicle, accompanied with hemorrhage from the bowels by stool, has been attended with decided benefit, as far as suppressing the loss of blood; part even of the centre of the fungoid mass has cicatrized. This case certainly disproves the assertion of Mr. Allison, viz., that the exhibition of this salt cannot be continued any length of time without danger, the patient having taken a drachm and a half daily for weeks. Nor is it singular, having had many cases where its administration has been persisted in for several successive weeks.

Case 1.—Jacob Thompson, aged thirty-four, a sergeant in her Majesty's — Regiment of Foot, admitted into the hospital February 19, 1848. States he contracted syphilis five months since, whilst at Woolwich, and for which he was attended by the regimental surgeon. On his appearance at the hospital it was found that two or three of the incisor teeth in the upper jaw were gone, and the gums around were very spongy and ulcerated. The ulceration extended to the middle of the palate, and it had been on the increase for the week previous. There was an ulcer the size of a shilling occupying the centre of the crown of his head, with irregular edges and altogether unhealthy. There was a second ulceration in the back, over the sixth or seventh rib, about the size of a crown-piece, with everted edges, covered with an ash-coloured slough. The general health was much impaired. Loss of appetite; quick and irritable pulse; restless nights, &c. He was ordered a full diet, with a pint of porter daily.

℞. Potass. iodidi, gr. ij.; decoct. sarzæ co., ʒjss. M. ft. haust. ter die sumend.

℞. Pulv. opii, gr. ¼ omni nocte, in form. pil. Appr. ung. hydrarg. nit. oxyd. supra lint. ulcer.

24. Not improved. Ointment appears to irritate the ulcers. Omit. ung.

℞. Acid. nitric., ʒj. Aquæ, oj. M. ft. lotio. The ulcerations to be washed with this lotion three or four times daily, and, in the meantime, covered with linseed poultices.

℞. Potass. chlorat., ℈j. Aquæ ad ʒjss. Ft. haust. ter in die sumend.

March 2. The ulcers have all healed since last report, and from the palate a small portion of bone was discharged. The contrast is scarcely to be described between the date of admission and this report. Appetite has returned; sleeps well and feels in every respect quite well. Made o. p. Cont. med.

April 6. Discharged cured.

Remarks.—Few persons will deny that mercury was the great source and origin of this poor fellow's severe attack. Indeed, so severe that the union practitioner, who saw him previous to his admission into the hospital, assured me he would certainly die. At the date of his discharge he was quite fat, and wished to return to his regiment, where, I suppose, he now is and continues well.

Case 2.—Frances Munford, aged twenty-five, a married woman, admitted into the hospital March 18, 1848, with a large secondary venereal sore, the size of the palm of the hand, situated in the right groin, and involving the mons veneris. There is discoloration and tenderness of skin, with swelling over the left lachrymal canal. The general health is gradually failing. She states that about thirteen months since her husband gave her the venereal disease, and she had a sore on the inside of the vagina. She was treated by a medical man, and continued under his care until the following July. Is positive her mouth was never made sore. The ulcer in the groin first made its appearance five or six months since.

℞. Decoct. sarzæ co., ʒj.; potass. iodidi, gr. ij. M. ft. haust. ter die sumend.

℞. Potass. chlorat., ℈j.; inf. gentian., ʒjss. M. ft. haust ter die sumend. Hydrarg. c. cretâ gr. v. omni nocte; app. ung. hydrarg. nit. oxyd. ulcer. Full diet, and a pint of porter daily.

March 23. To use the nitric acid lotion and linseed poultices; omit the ointment.

27. The ulcer has healed; her health is quite restored.

April 7. Made o.p.; continue every medicine.

May 11. Still remains well; the discoloured skin over the lachrymal canal recovering itself.

June 8. Discharged cured.

Remarks.—The ulceration in this case could not be referred to mercury, and on that ground, although it healed in the short space of eight or nine days, I deemed it proper to continue the use of the medicines for some time to eradicate any syphilitic taint remaining, and which was doubtless the primary exciting cause.

Case 3.—Robert Milman, aged 27, labourer, was admitted an out-patient of the hospital April 15, 1848. States that four years since he contracted syphilis, and, under medical advice, the primary sore healed in two months. His mouth was affected with mercury. About ten months after primary sore healing, his tonsils began to ulcerate, and have continued to do so up to the present. His health has suffered considerably, and his existence latterly has been quite miserable. Has had a cough for some time. There are unhealthy ulcerations on each side of the fauces, extending some distance backwards. The body generally is in an anemic state.

Directed to live generously, and to take a pint of porter daily.

℞. Potass. iodidi, gr. ij.; decoct. sarzæ co., ʒj. ter in die sumend.

℞. Potass. chlorat, ℈j.; oxymel scillæ, ʒjss.; aquæ ad ʒj. ter in die sumend.

The ulcerations to be washed every morning with the nitric acid lotion.

27. The ulceration in the tonsils is nearly healed, and his general health and appearance have very much improved.

May 11. Presented himself again to-day, as well. Has been to work the last week. Directed him to continue his medicine.

Remarks.—I saw nothing of this patient from the date of the last report until a month since, when he was still well, and presented a very different exterior to that on his first appearance. I was, however, fearful that the medicine was not long enough persisted in to eradicate the disease, believing it to have arisen from the syphilitic poison, and was glad to find such was not the case.

Case 4.—Elizabeth Greenaway, aged—— admitted an out-patient Aug. 18 1848, with ulceration of nine weeks duration, having continued gradually to increase since first observed. The uvula and soft parts at the posterior part of the palate are entirely gone, leaving a triangular opening, the base of which is an inch, and each side at least an inch and a quarter. The edges

of the fissure are exceedingly irregular and unhealthy. States she has never had syphilis; had her mouth made sore.

℞. Potass. iodidi, gr. ij.; decoc. sarzæ co., ℥j. M. ft. haust. ter die sumend.

℞. Potass. chlorat., ℈j.; inf. gentian. co., ℥j. M. ft. haust. ter die sumend. Ht. hydrag. c. cretâ gr. iv. omni nocte. The ulcer to be washed with dilute nitric acid.

24. The edges of the ulcer have healed, and an irregular fissure is left. A piece of bone has come away the size of her nail. Pergat.

Sept. 7. Ulceration still healed; complains of ringing in her left ear, which was ordered to be syringed. To continue everything.

14. Apparently a small portion of palatal process of superior maxiliary bone exposed at the anterior angle of the fissure; still complains of her ear. To be again syringed. Cont. omnia.

21. The palatal fissure filling fast.

28. A portion of the bone came away yesterday.

Oct. 5. Deafness quite gone and palate healed.

Remarks.—This case was doubtless of syphilitic origin, although denied by the girl herself. It may appear to extend over too great a space of time to attribute any success to the chlorate of potash, but it must not be forgotten that the ulcer, which had continued to spread previous to her appearance at the hospital, was healed in a week, and would most probably have given no further trouble but for the bone which had to be thrown off. It was also this (the horizontal plate of the palate-bone) which, most probably, produced the deafness and uneasiness in the ear from pressure on the Eustachian tube, as she recovered from both immediately after the bone was discharged.

Mr. Allison's Case.—(From the *Medical Gazette*, Nov. 27, 1846.)

"Sir,—There are few, if any, of your readers who have witnessed the distressing or alarming local and general effects of the incautious or improper administration of mercury; the following remarks on a simple and certain means by which they may be obviated or relieved may, therefore, be useful and interesting:—

"Having on very many occasions had opportunities of observing the marvellously beneficial influence of the internal use of the chlorate of potassa, not the impure hypochlorite or bleaching compound, but the salt whose formula is K, Cl O^6, in the various forms of pure anemia, in which the intolerance of mercury is notorious, I was led to believe that as these present several striking features of analogy to the state of the system under the full action of mercury, and that as the remedial power of the salt was very remarkably manifested in the former, it might be so also in the latter; and the result of numerous trials has certainly exceeded my anticipations. Whether in severe ptyalism after the free exhibition of mercury in the phlegmasiæ, or in its more sudden and unexpected appearance after an almost homœopathic dose, in anemia, its salutary effects are alike satisfactory. Certain precautions, however, ought to be observed in the use of the chlorate; for, although no immediately bad consequences mark its power in comparatively large quantities, yet if its effects be not watched, and its exhibition suspended at the proper time, a state of the system seems to be induced the very reverse of that to correct which it has been employed; a state, namely, characterized by the phenomena of true inflammation. Viewing cerefully the pathological and therapeutical properties of mercury and the chlorate of potassa, I cannot resist the conviction that they stand to each other in an antagonistic relation, and that each in its own proper place has its specific powers elicited."

The Editor of the *Medical Gazette* remarks:—"Our correspondent here refers to the well-known deflagrating or detonating salt, commonly called chlorate of potash, and formerly designated oxymuriate of potash. Its formula is given by our best chemists as K O, Cl O_5. There is no oxacid compound of chlorine that we know of which contains six equivalents of oxygen. They run 1, 4, 5, and 7. Our correspondent's formula, besides, represents a salt of potassium, not of potash. Should the chlorate of potash be found, by further experience, to possess the property of counteracting the effects of mercury in all cases, it will become a most valuable therapeutical agent. It is well worthy of a trial, especially in in cases of profuse salivation from small doses of mercury."

CASE OF MEDULLARY SARCOMA, WITH AN ILLUSTRATION.

By B. BLAINE, Esq., M.R.C.S.L., Tenterden.

George Reynolds, aged nine months, the subject of this formidable disease, was born of healthy parents. His mother states that he was smaller at birth than her other children, but was plump, and apparently healthy. When two months old she observed a small, hard, colourless tumour, "like a pea under the skin," at the upper and inner part of the right thigh. Six weeks afterwards a second tumour made its appearance in the right groin; both rapidly enlarged and coalesced.

Two months ago the disease showed itself in the right shoulder; nevertheless, the child continued to thrive remarkably well, giving only occasional indications of pain.

The tumour—which now extends completely across the pelvis, involving the right thigh and buttock, the scrotum, and penis—is tense, elastic, and apparently lobulated. Numerous blood-vessels ramify on its surface.

The orifice of the urethra is marked by a slight puckering of the integument, and this is surrounded by faint indications of the transverse rugæ of the scrotum. The urine is voided with excessive pain and difficulty, from the great distortion of the canal.

The irritation arising from dentition seems, during the last fortnight, to have imparted an extraordinary activity to the morbid process, as the tumour has rapidly enlarged during that time; and a cachectic state of the general system has also supervened, so that the little patient is threatened with speedy dissolution.

ON SCARLATINA.

By J. W. TRIPE, M.D., M.R.C.S., and L.A.C., Londo

(Continued from p. 23.)

Mr. Robinson, in the *Med. Gaz.*, vol. 1, 184 p. 398, proved that congestion of the renal ves will cause the urine to be albuminous. Thi readily accounted for by the minute anatomy the gland (*vide* Bowman). We here see that capillaries of the Malpighian tufts are exce ingly thin, are deficient of any covering, and situated in the free space of the Malpighian bo so that but little resistance can be offered to transudation of the dissolved albumen of blood into this space; if the congestion be great, the walls of the capillaries will give Mr. Robinson tied the renal veins of rab when the urine was so albuminous as almos become solid by heat. When the congestion in his experiment, is caused by an impedim to the venous circulation, the congestion happens in the renal veins, and is thence pro gated to the plexus of vessels surrounding convoluted tubes, thence to the efferent ves and the capillaries of the Malpighian tufts; lastly, of the afferent vessel and the arteri the gland. When the congestion is active, i arterial, the reverse obtains: the general arte circulation and the afferent vessel become congested; next the capillaries of the Malpigh tufts; then the efferent vessel and the plexu the tubes. Neither of these appears to be precise point at which the congestion first oc in scarlatina, which is, as before stated, m probably in the plexus surrounding the co voluted tubes, so that the efferent vessels m suffer before the congestion can reach the ca laries of the Malpighian bodies.

In addition to the changes in the mucous me brane, the ordinary results of inflammation sometimes met with, but in a less degree th ordinary, as the convoluted tubes offer so rea an outlet for the fibrinous effusion; yet some the fluid—blastema—is effused into the fibro parenchyma, causing hypertrophy of the glan Those who wish for a minute account of the p thological changes which occur in renal dise had better refer to Dr. Johnson's, Mr. Bush and Mr. Simon's papers on the subject in "T Medico-Chirurgical Translations," volumes 1846-7. I had arrived at most of the conclusio mentioned here, by considering the minu anatomy of the kidney, and by deductions fr the microscopic changes in the urine, and the po *mortem* appearance of the kidneys in several cas previously to seeing the above papers; but I h never been able to make out the pathologi changes so minutely as they have done.

The treatment of this variety (*b*) of inflamm tory dropsy should be at first antiphlogist consisting in the exhibition of antimony opium, local depletion, milk diet, and especia in the use of hydragogue purgatives. When inflammatory stage is somewhat abated, the us tincture of the sesquichloride of iron is eminen useful, as the amount of blood and albumen the urine diminish under its use, and frequen subside altogether.

Diuretics are eminently injurious, as they crease the diseased action already existing. we examine the urine of any patient to whom have been giving diuretics for some time, shall find that, in proportion to the quantity urine, the epithelial cells are very much creased. The Goodsir's and others have pro beyond a doubt that all the secretions (as ur bile) are formed by the agency of the which cover the membranous surfaces of follicles and of the ramifications of the excret ducts of the secreting organs. These cells g by abstracting from the blood certain parti which they appropriate to themselves. In liver and kidney these substances are com mentary to each other; that is to say, the stances abstracted by the two together make the composition of the constituents of the bl We thus see that during their nutrition t cells abstract from the blood certain substa which, if allowed to remain, would prov

rious to the system; the azotized matters being moved by the renal, whilst the non-azotized e removed by the hepatic, cells.

On arriving at their full growth these cells st, and pour their contents into the tubes or icles which they line; at the same time they themselves cast off and replaced by the sub- ent layer of younger cells. We thus see that retion resolves itself into nutrition or growth. y one set of cells should have the power to ect from the blood certain substances only, cannot tell, but it is undeniably true. We tainly can distinguish between one set of cells another; thus the hepatic can be dis- guished from the renal, &c.

Anything, therefore, which acts on the cells so to cause increased action must cause increased trition and an increased supply of blood to organ. The cells must, therefore, under se circumstances, arrive at the full period their existence at an earlier period than y otherwise would do, and must neces- ly be cast off sooner than normal. It is, refore, very evident that if, as I believe, that virus of scarlatina produces this effect on ls of the kidney, and thus induces the nges in the urine already described, that any ans or medicine which aggravates this already reased action must necessarily prove highly rious. I consider diuretics to be as irrational ode of treating this variety of dropsy as at- pting to put out a fire by adding to the ntity of fuel.

(To be continued.)

OGRESS OF MEDICAL SCIENCE.

ACADEMY OF SCIENCES.

etings of Oct. 2 and 3; M. POUILLET in the Chair.

CHOLERA.

M. Burguières, one of the physicians commis- ned by the French Government in the Levant, warded from Smyrna some researches relative the fluids of the human body in cholera.

The blood, either obtained from venesection ring life, or from dead bodies, had preserved alkaline nature.

Perspiration, suppressed during the first stage the disease, presented during the period of anosis constantly a neutral reaction; in con- lescence that secretion resumed its acid pro- ties.

The substances at first rejected from the mach were always of an acid nature; at a ore advanced stage they became alkaline. The cous membrane of the stomach, in subjects o had died from cholera, was constantly nd to be alkaline. The alvine evacuations, d the intestinal mucous membrane, were of the ne nature. The practical conclusion to which ese researches have led M. Burguières consists the exhibition of acid drinks in cholera, for e purpose of neutralizing the alkaline condi- n of the mucous lining of the stomach and of secretions.

Meeting of Oct. 3; M. VELPEAU in the Chair.

GUNSHOT WOUNDS.

M. Bégin concluded a long communication on s subject by the following deductions:—

The injuries caused by war projectiles never aled by primary adhesion; they always caused certain amount of suppuration, with which re removed the disorganized portions of the unded tissues. He was of opinion that in se regions which are enveloped in dense neurotic textures it was necessary to enlarge wounds in order to prevent strangulation and ilitate the escape of pus. Foreign bodies and gments of bone should be, if possible, removed; d the best dressing which could be used con- ted in cold water. Injuries necessitating the noval of a limb or the resection of a bone re- ired the immediate performance of the opera- n, except in cases of general stupor or col- se, when stimulants, both external and in- ternal, should be exhibited previously to any surgical process being adopted.

PRESENCE OF SUGAR IN THE BLOOD OF DIABETIC SUBJECTS.

Hitherto the presence of sugar had never been clearly demonstrated in the blood of diabetic patients. Dr. Barnard has succeeded in proving its existence in the serum, by adopting the method in practice in the custom-house for the purpose of ascertaining the quantity of sugar contained in molasses. This plan consists in pouring into the serum an equal quantity of a solution of tartrate of copper and potass. The blue colour of the mixture is speedily changed by heat to a red-brick hue, caused by the decomposition of the salt of copper and the deposition of its oxide.

If this reaction be really due to the presence of glucosis, it offers, besides the merit of its simplicity, the additional interest of proving that diabetes is not caused by any change in the mode of secretion of the kidneys, but by a primary alteration of the blood.—*Annales de Thérapeutique.*

TREATMENT OF HOOPING-COUGH.—Dr. Levrat Perroton, physician of the Hôpital de L'Antiquaille at Lyons, recommends for the treatment of hooping-cough the internal exhibition of ammonia; the dose should vary from six drops to twenty in a six-oz. mixture, according to the age of the patient. In the cases brought forward a rapid cure was obtained by the steady use of this medicine during the spasmodic period of the disease.—*Journal de Lyon.*

THE ACTUAL CAUTERY IN UTERINE DISEASES.—In many uterine complaints M. Jobert employs the actual cautery with considerable benefit. Thus, in hemorrhage caused by organic disease, or attended by simple hypertrophy of the os uteri, or even unaccompanied by any appreciable alteration of the os tincæ, M. Jobert applies the hot iron, and generally succeeds in arresting the loss of blood. A large ivory speculum being previously introduced, the parts are burned with a broad cautery, and an abundant injection of cold water is performed immediately afterwards; hemorrhage is instantly arrested, and reappears only on the sixth or seventh day, when the eschar becomes loosened; a second operation is then resorted to, and its results are more permanent, the fungous vegetations having been destroyed. After a time cauterization is repeated only once in six weeks or two months, and the patients are thus preserved from those continual losses of blood which generally hasten the fatal termination of cases of cancer of the womb. The application of the hot iron causes no pain whatever, and depriving the disease of its most formidable symptom, viz., hemorrhage, arrests its progress, although it cannot, of course, prevent the final establishment of the cancerous diathesis. In passive hemorrhage, the os uteri not being diseased, M. Jobert still employs the same method; he employs it even with a degree of boldness which we do not blame, but which we would scarcely imitate, in the hemorrhages which are occasionally observed during pregnancy. Finally, in uterine neuralgia, so common in cases of hysteria, M. Jobert does not hesitate to recommend the adoption of the same measure.

D. M'CARTHY, M.D.,
Physician to the British Embassy.

On the Management of Twin Cases.—Drs. M'Clintock and Hardy, in their excellent work on midwifery, remark that the practice of the Dublin Lying-in Hospital in plural births is to apply the binder with a moderate degree of tightness after the birth of the first child. If the second fœtus is found after examination to present favourably, the membranes are immediately ruptured. Faintness or exhaustion might render some delay necessary. If an upper extremity present, the operation of turning should be immediately had recourse to before the pains have acquired any strength. If good uterine action does not come on within forty minutes after the rupture of the membranes, a stimulating injection is to be thrown into the rectum, which, with friction over the uterus, seldom fails to increase the energy of the pains. If these means, however, are not sufficient, the ergot of rye may be exhibited, and with favourable results.

Treatment of Porrigo Decalvans.—M. Devergie, quoted in "The British and Foreign Medico-Chirurgical Review," from the "Gaz. des Hôp.," lays it down as a general precept which applies to all diseases of the hairy scalp, that the head should never be covered in such a manner as to prevent the access of air, the contact of which is one of the most powerful aids. Hence covering the head with wigs, false hair, &c., is very mischievous. The skin secretes substances which in the normal state are acid, but which, by being retained in contact with it, become alkaline and irritating. The scalp, therefore, should be covered by some pervious material. Entire cleanliness should also be maintained by different washes, according to circumstances. The washes most preferred are those formed by the addition of two or three spoonfuls of chloride of soda to a quart of water, or 10 parts of subcarbonate of soda to 500 of water, to be employed every day. When in porrigo decalvans the patches are of a reddish colour, or puffed up, emollients and cataplasms, for two or three weeks, are indicated; and afterwards resolvent ointments, such as tannin 2 to 4 parts, camphor ¼ to ½, lard 30. Then follows the tar ointment, to conclude with the carbonate of copper ½ or ⅛ to 50 of lard; varying the strength for different patients, and for different spots of the same patient. When the hair begins to reappear, tonic and stimulating ointments, such as that of Dupuytren, or of cantharides, are required. As the disease declines corrosive sublimate lotions (1 part to 999) should be used four or five times a day, and every fifth day a gentle application of nitrate of silver (1 part to 10) should be made to the parts that have been affected.

Rigidity of the Hand after Fracture of the Forearm.—M. Hervez de Chegoin treats those cases of fracture of the forearm where there is no displacement by laying it on a solid surface; but when there is a tendency to displacement he puts the forearm on a thick and firm cushion, which reaches no further than the part where the bend separates the arm from the forearm, bringing the cushion more or less near this bend accordingly as the lower fragment projects forwards or backwards; so that in the one case it is this fragment which is brought against the pad, and, in the other, the lower extremity of the upper fragment. The hand is allowed motion by hanging down over the cushion. A splint and compress, four inches long, are substituted on the twelfth day, and kept on by two broad tapes tied over a single pad on the back of the arm. If there is displacement near the inter-osseous space, a compress may be then interposed. Complete union takes place towards the thirty-fifth day without gangrene, muscular atrophy, or adhesions, and perfect recovery is speedily brought about.

Rupture of the Unimpregnated Uterus from a Collection of Pus in its Cavity.—Dr. Guzzo, of Naples, relates in the "Archives Générales," the case of a woman aged thirty-four, married, but childless, who came under his care in June, 1837, with the uterus as large as the fifth month of pregnancy. Twelve months afterwards it nearly reached the umbilicus, and there was occasionally from the vagina a colourless discharge. In 1841, after the use of a purgative, the woman died, peritonitis having been induced, the uterus up to the period of her decease continuing to enlarge. A large quantity of pus was found at the *post-mortem* examination in the abdomen, the uterus adhering to its walls from the pubis to the umbilicus, and filling the iliac and hypochondriac regions. In the uterine cavity was a large quantity of inodorous white pus; its walls were thickened, and contained in their substance tubercular masses, varying in size from an olive to a walnut, in different stages of development. Some of these abscesses were about opening into the cavity of the uterus, which was ruptured at its posterior surface. The woman from puberty

had been subject to uterine pains and irregular menstruation.

The Rectum in New-born Infants.—M. Huguier remarks that the rectum in a full-grown fœtus is not found on the left, but the right side, especially in females. In these the gut corresponds with the right side of the womb, while at a later period it will be found on the left. It is important to bear this in mind in operating for artificial anus, as it is sometimes difficult to pass the canula.

Spigelia Anthelmintica Marylandica in Prurigo Analis.—There are many remedies the action of which it is impossible to explain rationally. The root of the spigelia anthelmintica has long been considered as a specific against anal pruritus produced by ascarides. Dr. Koreff has lately tried with success this medicine, and the case is given in the "Rev. Méd. Chir." for September. A young man, twenty-nine years of age, was troubled from his infancy with violent itching in the region of the anus arising from the presence of ascarides. Every means were employed without effect. The pruritus continued to increase till it became almost intolerable, and produced a serious alteration in the health of the young man. The mucous membrane had become permanently thickened from the efforts of the patient to allay the itching. In this condition he was seen by M. Koreff, who prescribed the root of the spigelia anthelmintica. The medicine was most successful, for in eight days the young man obtained repose, and the most serious symptoms were removed with the ascarides. It is necessary to remark that the root only possesses medicinal properties, the leaves being inert. The following is the formula:—℞. Radicis spigeliæ Marylandicæ, eight grammes; mannæ, sixty grammes; aq. bullientes, five hundred grammes. Infuse. A teacupful must be taken three times a day for three days consecutively. It is well to employ at the same time liniments of a concentrated decoction of the plant mixed with unboiled starch.

Belladonna in Incontinence of Urine.—Dr. Blache, Physician to the Hôpital des Enfans, says (in "L'Union Médicale") that he has employed with success belladonna in incontinence of urine, when mercurial and sulphurous baths, refrigerant and astringent applications, tonic and ferruginous medicines, tannin, ergot of rye, nux vomica, and all other means had failed. In six months he cured two patients upon whom these means had been unsuccessfully employed, but he continued to use the belladonna for some time afterwards. The ordinary dose was a pill composed of half a centigramme to a centigramme of extract, and of a centigramme to two centigrammes of the powdered root, of belladonna. The dose to be increased half a centigramme at a time at intervals, if necessary, more or less prolonged.

REVIEWS.

Rapport adressé à M. le Délégué du Gouvernement Provisoire sur les Traitements Orthopédiques de M. le Docteur Jules Guérin, à la Hôpital des Enfans, pendant les Années 1843, 1844, 1845. Par une Commission composée de MM. Blandin, P. Dubois, Jobert, Louis, Rayer, et Serres. President, M. Orfila. 1848. Pp. 202, 4to.

By a decree dated 7th August, 1843, the General Council of the Parisian hospitals appointed a committee, consisting of MM. Rayer, Serres, Louis, Breschet, Jobert, and Blandin, for the purpose of observing, during a period of not less than one year, the methods of treating deformities pursued by M. Jules Guérin at the Hospital for Children in Paris. M. Orfila, one of the members of the council, presided over this committee.

Subsequently, P. Dubois was appointed instead of Breschet, who resigned on account of illness.

This inquiry arose in consequence of a report by M. Guersant, also a surgeon to the Hospital for Children, by which it appeared that M. Jules Guérin had admitted into his wards and treated a number of cases not strictly belonging to the special line of practice with which he was intrusted. The council accordingly desired that the committee should determine a limit between surgery and orthopedy, strictly so called, practitioners not seeming satisfied on this point. After three years of attentive observation, the committee drew up the report which is now before us, and of which we propose to give a full analysis.

Some circumstances immediately preceding the appointment of the committee may be interesting to our readers. After the *concours* instituted by the Academy of Sciences on the subject of deformities in general, the science of orthopœdic surgery made a great advance; and, in order that the poor might profit by this newly-acquired knowledge, the General Council having the management of the Parisian hospitals set aside two wards in the Hôpital des Enfans for the treatment of deformities. These wards were consigned to the care of M. Jules Guérin, who had been the successful competitor at the *concours*. This took place in 1838. From 1839 to 1843 the treatment of these cases was carried on regularly, and the number of patients and of students attending seemed quite to justify the establishment of this new branch of practice. In June, 1843, M. Orfila, in the name of the council, invited M. Guérin to present a summary of the cases admitted, and the results obtained since the opening of the wards. The total results of this summary were as follows:—Cases admitted, 1394; completely cured, 377; benefited, 296; no amendment, 77; dead, 25; not treated, or under treatment still, 619. These results, from their number and importance, attracted much attention both among the profession and the public. But soon there commenced in the medical journals a violent attack on M. Guérin. His practice was not only accused of being illusory, barren, and dangerous, but the reality and even the possibility of the success he had announced were called in question. Not choosing to remain passive under the accusations brought against him, M. Guérin demanded that a committee should be appointed by the council from among the hospital surgeons of Paris to investigate such charges, and to inquire into the results of his treatment. In order to be the more certain in their decisions, the committee required of M. Guérin a written detailed description of each patient under their observation, together with a plaster cast and drawing of the deformity before the treatment commenced. These the committee examined and compared with the patient. In addition to this, M. Guérin pointed out in each case, before commencing the treatment, the points which he considered worthy of notice, and stated the different means he proposed to employ, and the results he hoped to obtain. The committee visited the patients frequently during treatment; and when operations or mechanical means were required they inquired particularly into the state both before and afterwards, so as to judge of the effects produced. Casts and drawings were made to show the condition of the deformities at different periods; and the patients were for the most part examined at a considerable period after all treatment had ceased, in order to test the permanency of the cure.

Having stated thus much, we may now come to the consideration of the facts themselves, as detailed in the report.

Sixty-three cases were placed under the inspection of the committee, viz., five cases of strabismus, five of wry neck, nine of spinal curvature, five of congenital luxations, ten of club-foot and subluxations of the toes, two of arthralgic deformities, two of deformities arising from the contraction of cicatrices, five cases of curvature and improper callus arising from rickets, six cases of tubercular excurvation (caries of vertebræ), and six cases of abscess by congestion (lumbar abscess).

The cases of strabismus M. Guérin arranges under two heads—primary, or natural strabismus; and consecutive, or secondary strabismus, or that arising after the improper division of the muscles of the eyeball for the relief of primary. Of the three cases of primary strabismus reported we need only say that M. Guérin practised the subcutaneous method of operating, confined his patients in bed for two days, with the eyes covered with wetted compresses, and on the third day, on removing the compresses, spectacles were used, with the glasses covered with blue taffety, a portion of which was removed from the inner or outer divisions of the glass according to circumstances. The cases were, of course, successful.

Of the two cases of consecutive strabismus, one was a very exaggerated divergent squint of the left eye, of three years' standing, which had followed an operation for converging strabismus. The patient was a young lady, aged seventeen, sent to M. Guérin by Dr. Sichel. There was excessive divergence with destruction of the caruncle, considerable increase in the opening of the eyelids, exophthalmia, and complete loss of the power of adduction; violent pains in the eye, photophobia, deplopia, and aberration of sight were also present. The operation practised in this case consisted of three principal stages. In the first stage a ligature was passed across the external portion of the sclerotic, so as to enable the operator to produce complete rotation of the eye inwards by drawing it, and to retain it in this position as long as necessary. In the second stage M. Guérin sought out, after dissecting the mucous membrane at the seat of the previous operation, the remains of the internal rectus which had been divided, and destroyed the adhesions which had taken place between it, the adjacent structures surrounding it, and the globe of the eye. In the third stage he turned the eye inwards and applied the muscle, with its sheath, to such points of the globe of the eye as he considered suitable for their union. The operation completed, he fixed the ligature passed through the conjunctiva across the sclerotic on the outside, at the commencement of the operation, by means of strips of plaster to the point of the nose. The patient stated that she had suffered very little during the operation. On the two following days the eye was kept covered with wet compresses, and on the third day the ligature was removed and the patient examined by the committee. The eye was red, a little swollen, and the seat of considerable congestion. The patient complained of no pain, but could not bear the light. The eye was straight, or, if anything, converged a little; adduction was re-established, took place well, in harmony with the motions of the other eye, and to such an extent that the inner edge of the cornea was only distant from one to two millimètres (a) from the internal angle of the eyelids; the deplopia was relieved, and objects appeared in their proper place.

Darkened spectacles were put on as in the other cases, the right glass being here covered. The case progressed favourably, and on the examination of the patient by the committee, more than a twelvemonth after the operation, the eye was found in all respects perfect and natural.

The other case of consecutive or secondary strabismus was double and divergent, following operations for converging strabismus of both eyes. Adduction on both sides was completely abolished; the opening of the eyelids was increased: there was marked exophthalmy, especially on the right side; the caruncles were partially destroyed; conjunctiva varicose, marked photophobia, and constant deplopia, with great disordered vision. The patient in this case was a lady, aged forty-four; and the former operation had been performed,—that on the left eye three years, that on the right two years and a half previously.

The operation just described was performed first on the left eye, and eight days afterwards on the right; the external rectus of this eye

(a) A millimètre is about two-fifths of a line.

being at the same time divided. The same after-treatment was pursued, and the success of the operation was perfect. We cannot but consider this procedure a valuable improvement. Many are the cases of divergent strabismus, the result of the rage for dividing internal recti which existed some years since, the frightful *leer* produced being as bad, if not worse than the previous squint. We recommend a trial of M. Guérin's plan to some of our professional brethren.

(To be continued.)

Chemistry no Mystery; or, a Lecturer's Bequest: being the Subject-Matter of a Course of Lectures. Edited by Dr. Scoffern. Second Edition, revised and corrected. London: Arthur Hall and Co. Pp. 308.

This little volume is published for the use of beginners in chemistry. It is written in a pleasing, familiar style; and the fact that it has entered upon a second edition shows that it has been well received by the public. We consider the work well adapted to impart the first principles of chemistry; and the neatly-executed wood-engravings with which it is embellished will make it additionally useful to those for whom it is published.

The Students' Clinical Memorandum Book; or, Medical Practitioners' Remembrancer and Vade Mecum. London: S. Highley.

Register of Cases of Cholera Professionally Attended. London: John Smith, Government Stationer.

Within the last few months various books have been issued from the press which are intended to assist medical practitioners to correctly register cases which they professionally attend. We believe that the profession is indebted to Mr. Farre for the first well-arranged memorandum-book, and his peculiar experience in the Registrar-General's office, doubtless, suggested the idea. It is highly desirable that both practitioners and students should take notes of diseases which come under their notice, and the modes of treatment adopted. The book published by Mr. Highley is intended principally for the student, and will be found by him useful in recording the cases which he may observe in hospital during his pupillage. Such memoranda will prove advantageous in after life; and we are glad that so many of our younger brethren are impressed with the importance of having more substantial mementos of hospital practice than those which the tablet of their memory furnishes.

The "Register of Cholera Cases" is neatly got up, and the ruled pages are well adapted for the practitioner to note the most important circumstances connected with the patient and his disease. We indulge the same hope as the publisher of this book, "that medical practitioners will adopt some such register, and speedily communicate to the medical journals the statistical results they may have arrived at as to the value of different modes of treatment, as shown by their case-books."

THE MEDICAL TIMES.

SATURDAY, OCTOBER 28, 1848.

THE COLLEGE OF PHYSICIANS AND THE GOVERNMENT BOARD OF HEALTH.

Amid all the dangers by which we are surrounded, it is a matter of rejoicing that the ancient College of Physicians of London is exhibiting signs of life. For once it has bestirred itself on behalf of that science of which it is nominally the patron, and this event in its history gives us some hope that it may yet become a useful corporate institution. In former times it only displayed energy when its own interests were supposed to be in danger, sleeping while science was awake, and preparing to leave for ever a patron so regardless of its best interests.

It seemed as if the big-wigged men of a former generation had taken up an everlasting abode within the college walls, and that they were determined to uphold from generation to generation the science which prevailed in the eighteenth century. They plumed themselves upon their degrees and their dignities, and fancied that medicine would be satisfied with an annual oration in a dead language in praise of those who had laid the foundation of the corporation's grandeur. Pride, however, proved an antagonist to corporate greatness, for the profession esteemed its patronage as worthless as the state did its advice.

It is a humiliating circumstance for the College that, in all the great movements to promote medical and sanitary reform, it has never been found, in a single instance, taking the lead; and is it, then, a matter of astonishment that Government should act, in matters relating to the health of the people, as if a College of Physicians did not exist in this metropolis? The bill which has just passed to promote the health of towns owes none of its success to the efforts of this corporation. It was a measure which originated with private members of the profession, and chiefly by their unwearied efforts has it been carried. It is no matter of surprise, then, that the Government overlooked the officers of the College when the Board of Health was constituted; and it was considered, perhaps, that an act of injustice towards private members of the profession would excite but little notice. A non-medical triumvirate was, therefore, formed, which, in these dangerous times, was to administer the laws relating to the public health. Was ever anything more preposterous? But the College was silent. The giant evil which aided the little band of sanitary reformers to accomplish their work, by exciting the fears of the rulers, produced no apparent emotion in the College. Within its walls a deathy stillness prevailed, while in the distance were heard the sounds of the coming tempest. Would it not have been graceful and proper for the first medical corporation in the kingdom to have been foremost in collecting information concerning the characteristics of the pestilence which threatened the kingdom, and the best modes of treating it? The work, however, was left for others to perform. Neither does the College offer any remonstrance when the members of the profession are excluded from the Board of Health; had this been done the whole profession would have applauded the act, and would have been ready to forgive all the past sins of the corporation.

A finer opportunity never occcurred for it to recover its lost popularity. The profession had been insulted by having three gentlemen selected to fulfil medical offices, of which they were totally ignorant. Such an occurrence finds no parallel in Christendom; for even the Czar of Russia intrusts to medical men the working of machinery which is intended to promote the public health. It is preposterous to imagine that any other persons can be so well acquainted with the best means of advancing the sanitary condition of a country, and it is unpardonable presumption in any not fitted by education to attempt it. Our Board of Health, however, is composed of men who are ignorant of hygiene and therapeutics, and they must look to others for instruction on these subjects. It would not have been half so absurd for the Cabinet to be composed of medical men, as for the Board of Health to be formed by two noblemen and a lawyer. These gentlemen have felt the awkwardness of their position, and have summoned to their councils one who is competent, from his education and experience, to enlighten their darkness. Ought not the College of Physicians to have been the first to have vindicated the honour of the profession? Yet it suffers those appointments to be made without remonstrance, and only comes forward to protest against an error which the non-medical triumvirate has committed in reference to dietetics. We are glad even of this single manifestation of life in the College; and we hope that it will further direct its efforts to accomplish such a change in the board as will leave the profession no real grounds of complaint.

The College has recently formed a Council of Health from its own members; and, in this respect, it has acted properly. It is an attempt to exercise functions which it has suffered the Government to wrest from it. A medical corporation, we consider, is only acting in accordance with the spirit of its charter when it undertakes to guard the public health in seasons of imminent danger. This, however, is not so profitable as the granting of diplomas, and it has, in consequence, been neglected.

The Physicians' Board of Health must not be inactive, as its labours may prove of great service to the Government and the public. Many of the cholera cases reported this week by the Registrar-General occurred in places where the air was impregnated with noxious gases. The disease on board the Justitia hulk was attributed by the surgeon to the emanations of a neighbouring sewer, while the captain ascribes it to the rotten condition of the vessel, and to the heat generated during the night by so many men being closely packed together. Other cases are ascribed to the vitiated condition of the atmosphere from causes which may be removed. These facts ought not to be disregarded by the members of the board, but should stimulate them to a vigilant investigation of the sanitary condition of the streets and houses of the several localities where they reside. It will be for them also to note particularly the cases which may come under their observation, and hereafter make known to the profession the result of their labours. We are sure that Dr. Southwood Smith, who is really the Government Board of Health, will not envy their efforts, but will recognise the members of the College Board as co-workers with him in the same field.

UPTON POOR-LAW UNION.—FINAL DEFEAT OF THE LATE MEDICAL OFFICERS.

The transactions which have recently taken place in the Upton Poor-law Union afford melancholy proofs of the divided state of the profession. It has been long proverbial that medical men are so opposed to each other that it is no difficult matter to cause them to undertake onerous duties without pay, or for salaries which cannot possibly be remunerative. The poor-law boards of guardians of this kingdom have entertained this notion and acted upon it, to the injury of the sick poor and the disadvantage of their professional attendants.

It was formerly the custom for parishes to let to the lowest tender poor-law medical appointments; and, while the new law has somewhat modified this state of things, still the same

principles are in exercise, by which the members of the profession are cheated of their just rights, and paupers of efficient attendance in times of sickness. We are aware of the arguments employed to defend the conduct of boards of guardians—arguments which have been often refuted, and which, therefore, it would be a work of supererogation in us to state and controvert. Under the present system the appointment of medical men to poor-law offices in many instances is little better than a show of charity to paupers, as it is neither believed nor expected that the surgeons can do their duty for the sums allowed for their attendance. It is only recently that guardians have been made to feel that they have a responsibility, as well as their medical servants; for, as the public did not understand the question of poor-law appointments, it was ready to condemn, in cases of neglect, the surgeon, forgetting that those were as much to blame who tempted him to undertake duties which they knew it was impossible for him to perform without great pecuniary loss.

The labours of the Poor-law Medical Convention and the press have not been altogether in vain, as guardians now occasionally come in for a share of opprobrium when untoward circumstances arise in reference to the sick poor. Yet there are many unions which still cleave to the old system of paying as small a sum as possible to the parish surgeon, and amongst them must be placed the guardians of the Upton-on-Severn Union. This worthy board thought that charity consisted in keeping down the rates by docking the salaries of their medical officers; they might neglect their duties as much as they pleased, provided no immediate and serious consequences resulted; in fact, the more paupers died, the fewer there would be to draw upon the union funds. Most unfortunately for the guardians, their late medical officers were men who felt anxious to do justice to themselves and their poor patients, and hence they asked a fair remuneration for their services. This was refused, and with admirable magnanimity they threw up their appointments and appealed to their professional brethren for support. They knew well the tactics which the guardians would adopt to make them succumb. Medical men had been frequently pitted against each other to fight battles which conferred no real benefits on those who obtained the victory. The seconds and bottle-holders were the real parties who reaped advantage by the conflict, as it amounted almost to a dead certainty that their favourites would come off champions. The profession had always proved too apathetic to come forward to support those who, in seeking justice for themselves, endeavoured to uphold at the same time the dignity of their calling. Messrs. Braddon and White, however, hoped that a better feeling had taken possession of their brethren, and they resolved to put it to the test. They appealed to the profession through the medical press, and *we* urged the justice of their claims. When the day of election came the victory was well-nigh their own, for the guardians were compelled to elect some whom they had on a former occasion permitted to retire from their service; and, as there were not candidates enough to fill all the vacant situations, the new medical officers were required to perform extra duties. Notwithstanding this apparent triumph of the guardians, hope yet remained to their ex-officers. The Poor-law Board was appealed to, the facts of the case stated, and a demand made that justice should be done. Mr. Greaves, the assistant-commissioner, was sent down to the scene of conflict, and the appointments of Messrs. Marsh, Thomas, and West were cancelled. The benevolent guardians were further ordered to readvertise the vacant districts, and to raise the salaries 20 per cent., unless a satisfactory reason could be given to the contrary. The members of the board, endowed with valour equal to their benevolence, rejected this order, and announced in the papers that surgeons were wanted who would be *rewarded* in the old-fashioned way. Mr. Waddam, of Malvern, obtained the Powick district, and a "new importation, under the auspices of Mr. H. B. Marsh, secured the Kempsey parish." This new importation has obtained parochial honours, and he proposes living in the enjoyment of them in the centre of Mr. White's neighbourhood.

The guardians have thus obtained a complete victory, and their ex-officers have not only to suffer the pain of being beaten, through the instrumentality of members of the same profession, but to encounter additional opposition in their private practice. Messrs. Braddon and White tell us in their latter, inserted in another part of our columns, that at the outset of the contest they knew their only hope rested in the profession. The Poor-law Board appears to possess no power to enforce its mandates; and guardians estimate them at the same value as the paper on which they are inscribed.

There is no doubt that this defeat of gentlemen who stood up for their professional rights will inflict a large amount of injury on poor-law medical reform. Other unions will take courage from the Upton victory, and will reward their medical officers in active service with half-pay. Thus, without a vigorous effort, things will speedily be as unpromising as they were before the labours of the Poor-law Convention were commenced.

Of the conduct of this body in reference to the Upton dispute we must speak in the highest praise. It espoused the cause of the ex-officers upon public grounds. The remuneration was degrading to the profession; the guardians had violated the orders of the Poor-law Board; and the circumstances of the whole case were such as to foster dissensions amongst the members of the medical profession. The committee has done its duty; and we wish that it had been able to accomplish all that it contemplated.

From these and other circumstances it is evident that some speedy legislative measure is required to consolidate the interests of the medical profession. We are a brotherhood apparently without natural affection; and a house thus divided against itself is in danger of ruin. If we are to progress in honour and usefulness, some great changes must be wrought in our behalf.

THE ASYLUM FOR IDIOTS.

The design and progress of this institution are so important to the profession, that we shall feel it our duty from time to time to lay before our readers such facts as we can make public as to the results of the experiments now advancing to a stage of the highest interest.

The institution was established in October, 1847, and the third election took place on Thursday, October 26, at the London Tavern, when Sir George Carroll presided, supported by Dr. Conolly and Dr. Little (physicians to the charity), Dr. Forbes, Dr. Burnett, Rev. Dr. Holloway, Rev. Dr. Reed, Rev. W. Champneys, Charles Gatliffe, Esq., D. W. Wire, Esq., R. P. Munt, Esq., John Gay, Esq., Thos. Callaway, Esq., and other gentlemen.

The Chairman stated that there were no less than 103 candidates, ten of whom only could be elected, and expressed the hope that, with the evidence of so much need of the effort now put forth, the friends of the charity would provide in future, by liberal contributions, for the election of a larger number of cases.

The poll then opened at twelve o'clock; and from that hour till the clock struck two the scene in the spacious room was one of deep and touching interest. In the case of this institution the candidates, very properly, are not allowed to be present; and, therefore, the sympathy is not one arising from the sight of the poor objects, but from a deep sense of their woful condition as forlorn and friendless imbeciles.

We wish our space allowed us to give an analysis of the cases, but this we are unable to do. The institution itself, we are assured, is open at all times to the inspection of medical gentlemen.

The cases approved of as candidates are of that class which, though of respectable standing, are neither pauper nor affluent. When the friends of a child can pay, the purchase is required in order that admission may be obtained into the institution.

At the close of the poll a vote of thanks was passed to the chairman, who announced some additions to the stewards' list for the annual dinner, and subsequently declared the issue of the election.

THE MEDICAL TIMES.

One of our contemporaries thought proper last week to make an attack upon this journal in consequence of its having passed into the hands of new proprietors. This circumstance is calculated to show that the *Medical Times* has attained a position sufficiently important at least to merit notice. Had it been the obscure and unsaleable journal which our contemporary would have the profession suppose, he would never have condescended to refer to it; nor is it likely that Mr. Churchill, the well-known medical publisher, would have offered nearly the same sum for the copyright as that at which it was purchased.

We wish our readers to understand that this journal has no connection now with the parties who have hitherto had the control of its movements, and that under no circumstances shall we be induced to enter into controversy of a personal nature with our contemporary. Our pages belong to our subscribers, to whom all matters of trading rubrics must be indifferent. To advance the dignity and watch over the interests of the profession shall be our grand aim; and to attain these objects we shall uninterruptedly pursue the onward path. No irritable personalities shall be allowed to occupy our pages or waste our strength. The utmost diligence shall be used to secure to the profession the earliest medical intelligence, and to promote the freest discussion; whilst the well-known names which adorn our publication may be deemed a sufficient guarantee of its character and ability, and upon these we are content to rest.

We repeat the statement that subscribers who have paid their subscriptions in advance will be faithfully and regularly supplied with their

copies; and, as this is only the third number of a NEW VOLUME (the two former of which can be supplied), gentlemen are solicited to avail themselves of this advantage by forwarding post-office orders for the year, 26s., made payable to the Publishers, WM. S. ORR and CO., 49, Essex-street, or 147, Strand, London, where all communications for the Editor may be addressed.

To advertisers the *Medical Times* presents the best medium for giving publicity to all advertisements interesting to the profession.

MR. MACILWAIN'S ANALYSIS OF FEVERS; BEING IN CONTINUATION OF HIS WORK, "MEDICINE AND SURGERY ONE INDUCTIVE SCIENCE."

THESE discourses will be about eight in number. They will commence the first week in January, and be continued in consecutive numbers until they are concluded. They will have for their object an analytical examination of the Phenomena of Fevers, with a view to develop, by a process at once practical and logical, their essential nature, and to define clearly the principles which should direct the treatment of these affections. The whole will conclude with the consideration of preventive measures, sanitary regulations, and contagion.

MR. ADAMS'S CASE OF HYPERTROPHIED MAMMA.

[To the Editor of the Times.]

SIR,—In your periodical for September 6 you have reported a clinical lecture of mine delivered at the London Hospital, on a case of hypertrophied mamma. In this lecture I ventured the opinion that the disease was an extension of true mammary tissue, rather than an adventitious structure. Since the report of my lecture amputation of the tumour has been performed at the Sea-bathing Infirmary, Margate, and I have received a portion of the tumour from Mr. Field, the surgeon to that institution. The entire tumour, it appears, weighed, after removal, six pounds, and was found to consist of about twelve lobes, separated from each other by cysts, containing clear yellow serum, with considerable adipose deposit around each cell; some of these contained nearly half an ounce of fluid.

A minute section of the tumour has been examined microscopically by my friend Mr. Birkett, and is found to be identical with genuine mammary glandular tissue; that is, it is composed of minute acini, or terminal vesicles, lined by a delicate epithelium.

I consider it my duty to send you this communication, as the examination of this throws great light on such tumours.

I am, yours faithfully,
JOHN ADAMS.

31, New Broad-street, Oct., 1848.

MEDICAL MEN AND INSURANCE OFFICES.

[To the Editor of the Medical Times.]

SIR,—There is no doubt of the truth of the axiom that "the labourer is worthy of his hire." Now, we who belong to that ill-paid and constantly-cheated class termed medical men are, to my own sad knowledge (and to that of thousands of others), subject to losses in professional matters which no member of any other science or calling is. It has often struck me that, with all the benefits conferred upon those who are careful enough to make an insurance upon their lives, there seems to be also a most anxious desire among the promoters and directors of companies of the kind to impress upon the public, through the medical body, the wisdom of so doing.

What apothecary or surgeon, who lives within the "ken" of directors, does not receive during a year, from four to ten prospectuses of different companies or associations for life-assurance, with a polite note asking for patronage or recommendation? But what does the office promise in return for one taking the trouble to look over their papers, and then, when consulted by our friends and patients, advising them to the best of our ability? Is not the benefit mutual to the contracting parties? but yet does not the constant stream of advertisements in the public journals show how most of the benefit is to be obtained by directors and proprietors of these useful institutions? Now, look over the *Times*, Mr. Editor, for a few weeks, and you will see humble appeals to the proprietary for a vote to get into the "directory;" claims put forth for votes, such as long service, constant and arduous attendance given in business duties; disappointment at not getting in at the last election; with an occasional whine and smirking etceteras. But who among those connected with these bodies goes without pay? I will tell you, though of course you know it,—in three cases out of five the medical referee. I don't mean the almost sinecure M.A. or M.R.C.S. of the company, but the home doctor, who generally has to give his opinion gratis.

I began by saying that the "labourer is worthy of his hire;" I then presumed that insurance-offices were good things for all actually concerned in them; and, lastly, that medical men are too generally overlooked with regard to remuneration for their services. Yet, when a disputed case occurs, who comes in for the onus in a court of law, if a saucy powder-headed man, with a black frock on, gets the opportunity of using his misapplied abilities in wresting truth into a lie? The man who gave the required certificate. Well, then, if by giving our opinions we hold ourselves (or are held by others) as responsible, let us by all means be paid for our taking such weight on us; believe me, it is no avaricious idea that makes the profession ask it. There are associations in our medical world which have for their end the bettering of our condition as a class, and the promotion of our lightly-treated respectability; and I now ask you, Sir, whether we cannot, by a unanimous effort, do something to force life-assurance offices into rendering justice to those whom they greatly depend on for recommendation?

The plan is simple, to my thinking, even in this our divided profession. Let every member of it absolutely refuse to give a certificate to any applicant for an insurance unless the office guarantees a fee commensurate with the responsibility incurred, if the life is received. (It will cost only a penny to ask whether it will do so or not.) From what I have stated or observed, the weight would fall much less heavily on the company than on the provident person who desires to insure his or her life. If the company should be fearful of losing by such a plan, an addition of one penny or even a halfpenny in the pound on the annual payment, if it chooses to make the charge, would be an ample remuneration for the fee they have paid the doctor, and a relief also to the insured in many cases, because it would be, in case of small insurances, more convenient for him or her to pay from a shilling to sixpence a year than to give a guinea at once where every five shillings is of consequence. By this plan, better matured perhaps, the three parties would be contented.

If you should think this note worth spending type and ink upon, I shall be obliged greatly by its insertion; and remain, Sir, yours obediently,
A REGULAR SUBSCRIBER.

CHOLERA.—MEDICAL AND LEGAL PROGRESS.

To DAVID WILLIAM WIRE, Esq., Vice-President of the Health of London Association, and Member of the Common Council of London.

DEAR SIR,—In corporation matters you are a man of unquestioned authority and influence; why, therefore, damage your public weight? You and I are vice-presidents of the Health of London Association. Has the *Times* correctly reported your speech "in council" on considering the propriety of appointing a medical officer at the miserable salary of £150 annually?—(now fortunately overturning by public ridicule, headed by *Punch* and the *Times!*) Prithee answer me. Why the marked difference in your advocacy on law and medical "rights"? Which profession stands best before the public on a question of "open danger"—law or physic? Which obtains the genuine sympathy of mankind, its respect, and the best feelings of our common nature, think you? The season is a perilous one. Why apply the term "humbug," and throw your weight (if the report be true) against the appointment? The reputations of good and great men have fallen beneath much less "items" than these. I think you owe an apology to the medical profession, and hence I publicly address you out of great respect for your private virtues. Lastly, why should your public and private career differ?

Obediently yours,
HENRY HUGH PYKE,
Barrister-at-Law (but silenced by the Courts), Originator of the Legal Education Movement, also of Medical Progress.—*Vide Medical Times*, Sept. 23 and 30, also Oct. 7, 1848.

87, Chancery-lane, and Verulam-chambers, Lincoln's-inn, Oct., 1848.

UPTON-UPON-SEVERN UNION.

[To the Editor of the Medical Times.]

SIR,—Since our last communication to you of August 15 events have occurred in this union which it is now our duty to report. On the 17th of August Mr. Greaves, the assistant commissioner, was here for the purpose of investigating the recent appointments made by the board of guardians. The result of this investigation was not fully known until the 28th of September, when a communication was received by the Upton board of guardians from the Poor-law Board in London, and Mr. Greaves was again present. The Poor-law Board cashiered the appointment of Mr. Marsh for the Kempsey district, of Mr. Nelson Thomas for the Eldersfield district, of Mr. West for the Powick district, and ordered the board of guardians to readvertise these districts, the salaries to be increased twenty per cent. unless a satisfactory reason could be given for not doing so! A loophole was thus left with an obvious intention. The guardians rejected this order by a majority of nine to seven, and determined on readvertising the districts at the late salaries. This has been done; Mr. Meears tendered for the Powick district, and Mr. White did the same for the Kempsey district at the twenty per cent. increase, to meet the concession of the Poor-law Board; and on Thursday, October 12, the appointments were filled up. Mr. Waddam, of Malvern, was appointed to the Powick district. A Mr. Crosse applied for and secured the Kempsey district. Mr. Crosse has been brought forward as a new importation, under the auspices of Mr. Henry B. Marsh, the "sympathizer with the too numerous victims to medical relief injustice,"(a) and is now placed at Kempsey with th e express and only object of opposing Mr. White in the centre of his neighbourhood, where there has been only one resident medical man for many years past! a threat of this kind was long held out as the inevitable punishment of Mr. White's obstinacy in rejecting the district at the advertised salary; thus the crime of upholding the dignity and honour of the profession has been revenged, and official favour secured. On Monday evening, the 16th of October, we called on Mr. Crosse for the purpose of ascertaining if he were fully cognizant of the peculiar circumstances which had induced the resignation of the late medical officers of this union. We saw Mr. Crosse, and with him Mr. Marsh. In reply to our question to Mr. Crosse, whether he had accepted his appointment with a full knowledge of all the circumstances connected with the recent movement of the medical officers, Mr. Crosse replied that he felt quite taken aback, that he was much fatigued, and would rather waive any discussion then, but would be happy to afford us an interview on the following day. We said that there really appeared to us no necessity for delay, as we only desired a plain answer to a very simple question. After much hesitation (and the introduction of much extraneous and irrelevant matter, most intemperately introduced by Mr. Marsh), Mr. Crosse stated that he was aware of all the circumstances of the case. We asked him if he had read our published statements in the medical journals; he replied he had not, and professed himself too much of a sceptic to place much reliance on the statements of the press; he preferred the public rumour of the neighbourhood, and had heard all particulars from Mr. Marsh, whose word he could not doubt. We deemed it our duty to have an interview with Mr. Crosse, from the circumstance of his being a stranger to the neighbourhood, and possibly unacquainted with the peculiar nature of the case. We here call upon Mr. Crosse, as a gentleman, to explain his conduct, and we publicly ask him to reconcile it with his duty to the profession.

Mr. Charles Sheward, notwithstanding his public repudiation of a previous nomination, has now thought proper to accept the Eldersfield district; and thus the Upton board of guardians has been suc-

(a) See Mr. Marsh's letter in *Lancet*, Sept. 2 1848.

cessful in obtaining, upon their own terms, from some quarter or another, a sufficient number of officers to undertake the duties of the different medical districts. Truly was it said of old, "A man's enemies are chiefly they of his own household." A "heavy blow and a sore discouragement" have been inflicted on the prospects of union surgeons throughout this kingdom by the disgraceful conduct of the profession. We say profession, for, until the whole body adopts a summary mode of ridding itself of such members as have here sold themselves individually to do the work and obey the behests of those who oppress them generally, the crime and its consequences must be charged on the whole profession. Four men have been found capable of betraying their brethren, and of sacrificing a great cause for the sake of a few paltry pounds. As long as the profession contains such characters, of what possible use are representations to Government, expostulations with poor-law boards, or memorials to boards of guardians? The more the question is agitated, the more notorious does the degraded state of the profession become. We invoke on our own heads the contumely of the many, and win by our own exertions and personal sacrifices the disrespect and reproaches of the public. The utter hopelessness of any appeal to the Poor-law Board for the redress of our grievances has been rendered apparent by the Upton case. We have appealed to that board; it has admitted the justice of our claims, and yet allows the guardians to continue to perpetuate their injustice. The Poor-law Board recommends without the power or, at any rate, the courage to enforce its recommendation. It orders yet lacks the spirit to compel obedience to its mandates. Where, then, is the remedy? It lies in the hands of the profession, and these only. We were aware of this at the onset, and we tried the experiment of appealing to our own body; and truly it has been an experiment, and one that has signally failed. The partial countenance and support which were at first afforded us have been withdrawn; the medical officers of the Upton union have been defeated, and by their defeat the deepest possible injury has been inflicted on the cause of poor-law medical reform. A more insane act of suicide (to the destruction of the best interests of the profession) was never perpetrated than has just been committed by Messrs. Marsh, Sheward, Waddam, and Crosse. To the medical profession we say, and we say it emphatically, "Awake, arise, or be for ever fallen!"

We remain, Sir, your obliged and faithful servants,

CHARLES BRADDON,
WM. FORD WHITE.
The Deputation of the late Medical Officers of the Upton-on-Severn Union.

Oct. 1.

(COPY.)

To the Right Honourable Charles Buller, M.P., President of the Poor-law Board.

The Memorial of the Committee of the Convention of Medical Officers of Poor-law Unions in England and Wales

Showeth—

That your memorialists being deputed and authorized at a Convention of Delegates representing nearly three thousand medical officers of unions, assembled at the Hanover-square Rooms on Oct. 27, 1847, to act in their behalf, with a view to obtain an amelioration of the present system of poor-law medical relief, feel it their duty respectfully to draw the attention of the Poor-law Board to the following statement:—

Your memorialists have watched with deep interest the circumstances connected with the recent resignation of the medical officers of the Upton-on-Severn Union, and the subsequent appointment of others by the guardians of that union to fill the vacancies thus created; and the feelings entertained by your memorialists on this subject are so strong that they do not hesitate to address your honourable board, to the effect that the case may be thoroughly investigated prior to those appointments receiving its sanction and confirmation.

Your memorialists, in thus calling attention to the subject, desire, in the first instance, particularly to state that they have taken no part whatever with the medical officers of the Upton Union, as respects any special grievance which they may have laboured under, and that their resignation has emanated from themselves without any bias or influence being exercised by your memorialists, who make this appeal upon public grounds, considering the following reasons amply sufficient to justify their doing so:—

1st. That, although the total amount of the salaries paid to the medical officers of the Upton Union may not be below the average paid to medical officers of agricultural districts, the scale of remuneration which is made the standard is so miserably degrading and inadequate as to give general offence to the medical profession, and both jeopardize the interests of the sick poor and prove a shortsighted economy to the ratepayers.

2nd. That the order limiting the extent of the districts of medical officers as ordered by your board has been violated by the guardians of the Upton Union, in assigning to their officers two districts exceeding the proscribed acreage.

3rd. That, as your memorialists are credibly informed, one, at least, of the medical officers appointed by the said union is not qualified in accordance with the judicious order of your honourable board for securing efficient medical aid for the sick poor; and that another of the medical men submitted for your approval was once suspended when holding office on a former occasion, and was even set aside by the very board of guardians which now considers him eligible to fulfil the onerous duties which his appointment necessarily imposes upon him.

4th. That the circumstances of the whole case are such as to foster dissensions amongst the members of the medical profession, and seriously to obstruct their co-operation for the benefit of the sick poor.

For these reasons your memorialists pray that you will be pleased to withhold your confirmation of the said appointments.

(Signed) THOMAS HODGKIN, M.D., Chairman of the Committee.
CHARLES F. J. LORD, Hon. Sec.

Sept., 1848.

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN IN LONDON AND ITS VICINITY.

A half-yearly general court of this society was held at the Gray's-inn Coffee-house on Wednesday evening, the 18th instant, Martin Ware, Esq., V.P., in the chair. It appeared from the minutes which were read, that since the last half-yearly meeting twenty-one members had joined the society. One widow had died, another with four children had applied for and received relief; thirty-three widows and sixteen children of deceased members were receiving half-yearly relief, for which purpose £629 had been distributed. Benefactions to the amount of £325 had been received, principally at the annual dinner, besides the subscriptions of members, leaving a balance at the bankers of £753, in addition to the capital stock invested in Government securities. This account shows that the income of the society keeps pace with the increased and increasing claims upon its funds.

It was announced that John Hunter, Esq., of Mincing-lane, had resigned the office of acting treasurer, and that the six senior directors on the list had retired in rotation.

A very cordial vote of thanks to Mr. Hunter for his services was resolved upon unanimously, and the ballot of officers for the ensuing year took place.

Dr. S. W. Merriman was elected acting treasurer; and Sir James Eyre, Dr. Seth Thompson, Wm. Pennington, Esq., James York, Esq., John Hunter, Esq. (late acting treasurer), and A. M. Randall, Esq., were elected directors.

After the meeting was dissolved, it was statied that the wife and four children ofa medical man, just arrested for debt, were in most urgent distress. The case, which does not come at all within the scope of the society's operations, was referred to the kind consideration of Mr. Newnham, of Farnham, the hon. secretary of the Medical Benevolent Fund. A small subscription was raised amongst the persons present.

GOSSIP OF THE WEEK.

APOTHECARIES' HALL.—Gentlemen admitted members on Thursday, Oct. 19:—John M'Millan, Hull; Robert Webster Gillespie, Newcastle-upon-Tyne; Robert William Ellis, Bristol.

APOTHECARIES' HALL.—It is reported that the Court of Examiners have come to the resolution of not allowing candidates who fail to appear on the day which their names are entered for examination to come up again till the expiration of one month from the time of their new entry.

APPOINTMENT.—Our respected correspondent, Dr. M'Carthy has been appointed Physician to the British Embassy in Paris.

OFFICER OF HEALTH FOR THE CITY OF LONDON.—Mr. Simon was unanimously elected to fulfil this office till January next, when the new bill will come into operation—Mr. Childs withdrawing from the contest.

GERMAN HOSPITAL, DALSTON.—Drs. Swaine and Straube have been elected physicians of this institution.

EASTERN DISPENSARY.—Dr. Southwood Smith has resigned his office as physician of this dispensary.

INCOME AND EXPENDITURE OF THE COLLEGE OF SURGEONS.—It appears that the receipts of the College of Surgeons during the past year were £9562. 10s. 10d., derived as follows:—Court of Examiners, £7796. 7s. Fees for the admission of Fellows, £220. 10s.; for admission to the Council and Court of Examiners, £21; sale of list of members, &c., £31. 16s.; dividends on investments in Government securities, £1492. 17s. 10d. Expenditure, £9468. 5s. 9d.; not including the purchase of Alderman Copeland's premises, which amounted to £6873. 4s. 5d., making a total of £16,341. 10s. 2d.

MANCHESTER MEDICAL SOCIETY.—The following gentlemen have been elected office-bearers of the society for the ensuing session:—President, Dr. Radford; vice-presidents, Mr. Hunt, Dr. C. W. Bell, Mr. Noble, and Mr. Wilson; treasurer, Dr. Ashton; hon. secretaries, Dr. Renaud, and Dr. H. Reid; librarian, Mr. Stone; councillors, Messrs. Brownbell, J. B. Harrison, Dumville, Lomas, Southam, Catlow, Spence, Allen, Bowman, Golland, Dr. M. A. E. Wilkinson, and Mr. Franklin.

THE FRENCH PROFESSION AND THE REPUBLIC. Only one physician, three medical students, and one chemist were condemned to transportation for having been concerned in the insurrection of June.

TESTIMONIAL FOR MEDICAL SERVICES.—The London and North-Western-Railway Company have presented to their medical officer in the Manchester district a set of rich cut-glass castors in a splendid silver frame, as a testimonial of his services at the late accident at Crewe.

ROYAL GENERAL DISPENSARY, ALDERSGATE-STREET.—A meeting of the governors of this institution was held on Wednesday week, to receive a report from the medical officers, relative to the steps necessary to be taken for the relief of cholera patients, and to prevent the spreading of the disease.

ANCIENT SCHOOLS OF PHARMACY IN SPAIN.—The College of Valencia was in existence as early as the year 1327, under the King D. Alphonse, who granted to the apothecaries of that town the right of accepting all those who wished to practise the profession throughout Spain. In 1441 these apothecaries obtained permission from the Queen Donna Maria of Aragon to unite themselves to the college as a fraternity, and to exercise charity among themselves. The charter granted to them provides that all apothecaries shall use similar weights; prohibits the sale, by those not accepted by the college, of all distilled waters, excepting orange-flower and rose water; and regulates a multitude of details respecting prescriptions and other matters. In 1512, at a general chapter of apothecaries, it was decided that no one could be admitted who had not studied eight years, in place of six as had been previously required; and rules, relative to the theoretical and practical examinations necessary,

were agreed on. In 1601 the college published a "Farmacopéa Valentina," a new edition of which appeared in 1829. The College of Barcelona was in existence as early as 1352, and published a pharmacopœia in 1535.

Death of Dr. Goldfuss.—The celebrated zoologist and geologist, G. A. Goldfuss, professor in the University of Bonn, died recently, at the age of sixty-six.

Singular Disease of the Eye.—A singular case occurred last week at the Glasgow Eye Infirmary. A girl, of sixteen years of age, having applied on account of loss of sight of her left eye, the cause was ascertained to be the presence of a living worm or hydatid (the *cysticercus* of scientific naturalists) in the eye, close before the pupil, which it completely obstructed. This species of animal consists of a round bag about the size of a small pea, from which on one side springs its body, which is a filament, consisting of numerous rings, and capable of being elongated and retracted at the creature's will. The body ends in a neck and head, and the latter is supplied with four lateral suckers. All this was plain to the naked eye in this instance, but appeared still more so when the animal was viewed through a microscope. As the existence of such a creature in the interior of the eye not only prevents vision, but ultimately destroys the whole textures of the organ, it was resolved to remove it by operation. This was successfully effected on Saturday last. The patient behaved with perfect steadiness, and found her vision immediately restored. The hydatid continued to live for more than half an hour after being extracted. As only four similar cases are on record, the worm excited much curiosity, and was examined by numerous visitors, both lay and medical.—*Glasgow Chron.*

Fishponds Private Lunatic Asylum.—At a recent meeting of the magistrates of the County of Gloucester, Dr. Bompas's case was brought up. The chief and only subject of discussion was the application for an inquiry into the grounds on which the last court refused to licensé Dr. Bompass as keeper of the Fishponds Lunatic Asylum; and it attracted a very large attendance of magistrates. The inquiry was granted really without opposition: the discussion turned simply on the mode in which it should be conducted; and even in this respect there was no substantial difference between the two propositions upon which the court divided. Eventually it was decided that the visitors to all the Lunatic Asylums in the county should be appointed to investigate the charges made relative to Dr. Bompas's management of the asylum. They are not, however, to make a report, but instead, the evidence taken is to be printed ane distributed amongst the magistrates, and the matter will be discussed and finally settled by the next court.

Abolition of Quarantine. — Order in Council.—A communication has now been received by the Commissioners of the Customs Department from Mr. Bathurst, one of the clerks to the Lords of her Majesty's Privy Council, stating that he has been directed by the Lords of the Council to inform them that an official communication having been received on the 17th inst. by their lordships from the General Board of Health, stating the actual existence of Asiatic cholera in Great Britain, although not in an epidemic form, and that such being the case their lordships are of opinion that quarantine precautions against that disease are no longer necessary; and that he (Mr. Bathurst) was further directed to state that in future it will not be necessary to report on or detain vessels arriving in Great Britain with cases of cholera on board; and further, that all vessels at present under restraint of quarantine might be immediately released. In pursuance of this communication from Mr. Bathurst, a copy of their lordships' order has been furnished to the principal officers of the Customs Department at the several ports and places throughout the kingdom, as well as to the port of London, with directions to take care that the same be duly obeyed.

THE CHOLERA.

Two cases of cholera were reported on Monday in the metropolis. Much sickness was reported to prevail amongst seamen who had been in the ports of the Baltic. One case was reported from Swansea and one at Rickmansworth. The following is the last return from Edinburgh:—

"Edinburgh, Oct. 22, 8 p.m.

"CASES OF SPASMODIC CHOLERA AUTHENTICALLY ASCERTAINED BY THE SURGEONS OF POLICE.

Places.	Cases.		Deaths.		Recoveries.		Remaining.
	Since last report	Since Oct. 4.	Since last report	Since Oct. 4.	Since last report	Since Oct. 4.	
Edinburgh	1	70	2	50	—	7	13
Newhaven	2	29	2	19	—	5	4
Leith	4	61	1	25	—	12	24
Total ..	7	160	5	94	—	24	41

"Additional localities in Edinburgh.

"None.

"George Glover, Surgeon of Police.

"E. Chadwick, Esq., London."

The Cholera, Woolwich, Oct. 20.—A board of medical officers assembled yesterday at the Justitia convict-ship, which caused a delay of yesterday's return to a rather later hour. The number of cases returned up to twelve o'clock on Wednesday was 36 attacked, 10 deaths, and 5 recoveries. On Thursday there were 1 new case, 1 death, and 5 recoveries, making 37 attacked, 11 deaths, and 10 recoveries. From twelve o'clock yesterday to twelve o'clock today, there have been no new cases, and, consequently, there are 37 cases of attack and 12 deaths, 1 having died this morning, and 10 recoveries. The result of the meeting of the medical board and an investigation of the cases on board the Justitia is an order that the convicts are to be removed out of that vessel, and for the present will be hulked on board the Hebe and Sulphur, receiving-vessels, opposite Woolwich Dockyard. The Justitia is also ordered to be removed from her present position, and will be stationed lower down the river, where she was formerly placed, or very nearly in the same spot, where the convicts were generally healthy. These excellent arrangements will, no doubt, soon relieve the convicts from any further fear of the cholera, the inhabitants of the town and the convicts at the dockyard having hitherto escaped the slightest symptoms of the disease.

Hull. — Since our last there have occurred nine cases of cholera in this port, seven of which have proved fatal. Two of the fatal cases have occurred on board vessels lying in this port, and the remaining five in the town. There have also been one or two fatal cases of English cholera. The deaths occurred in the following order:—The first case was a boy, about twelve years of age, named Hopwood, residing in Dansome-lane, who was taken ill on Friday evening, and died on Saturday. Niels Knudson, a seaman on board the Danish galliot Familia, was taken ill at five p.m. on Saturday, and died about noon on Sunday. David Hall, of Fetter-lane, aged fourteen, was taken ill at five p.m. on Saturday, and died early on Sunday morning. Jessie Tate, stewardess on board the Rob Roy steamer, also died of cholera on Sunday afternoon. The steamer, it appears, arrived at this port on Saturday night, with all on board apparently in good health, but in a few hours afterwards the deceased was seized with cholera, and died on Sunday afternoon. William Watson, a coach-painter, residing in Bishop-lane, was attacked on Saturday, and died at seven p.m. on Sunday. Thomas Brook, master of the Two Brothers, of Wakefield, also died of cholera on Sunday night. A young man, named Thomas Chapman, a bricklayer, residing in the Grove, was taken very ill on Wednesday night, after having been to the fair. No medical advice was called in until the next day at noon, when Mr. Nicholson, surgeon, attended on the sufferer. He was, however, at that time in a state of collapse, so that all hope of saving him was given up. He died about half-past eight o'clock on Thursday night. There have been no other fatal cases that we have heard of up to last evening.—*Hull Packet* of Friday.

The Belgian papers speak of a new and infallible remedy for the cholera having deen discovered by a young physician employed in the hospital at Berlin, where its effects, it is said, have been astonishing. The agent employed is the trichlorure of carbon. M. Dumas, the celebrated French chemist, is mentioned as being engaged in investigating its effects.

Malta, Oct. 18.—Reports that this frightful epidemic has appeared amongst us have been rife during the week, but I am happy to say that our most talented medical men scout the idea as perfectly illusive. His Excellency the Governor, who has manifested the most anxious desire to ascertain the fact, has assembled the medical officers of both services, and demanded their frank opinion, yes or no, without entering into motives or reasons. To this demand Dr. Barry, our principal medical officer; Drs. Armstrong and Robertson, 44th; Dr. Willocks, 69th; and Dr. Sankey, R.N.—all of them men of great experience in Asiatic cholera—declare its non-existence; whilst Dr. Richardson, Royal Artillery; Dr. Burton, of the Staff; Assistant-Surgeon Pratt, 44th; Dr. Scholes, 69th; and Messrs. Chetcuti and Portelli, local practitioners, as positively announce that it is here. Of these, however, as far as I can ascertain, the first and two last named gentlemen have alone had experience in the matter. From the island yet enjoying clean bills of health, it would seem that the Sanitary Board inclined to favour the opinion of those gentlemen who pronounce the island free. An epidemic does, indeed, reign, but it is confined principally to the soldiers in the barracks at Fort St. Elmo, and is now thought to proceed from effluvia rising from a large drain running through it, and water which is used for drinking being in a state of decomposition. It is a powerful argument in support of a local epidemic in that fort, and in favour that no cholera exists, that it has not spread for six weeks; and when the corps were removed on Tuesday, the 69th occupying quarters vacated by the 44th, three men died on the following day. It is not unusual, either, to register, at this season of the year, many deaths among the soldiers there located; for it is unhealthy, being below the level of the sea, and a new wall, lately built, excludes the air to a far greater extent than before. The 7th Fusiliers lost from 50 to 60 a week some years ago, when they were in Malta; and the 77th, 88th, and 42nd Regiments, when here, and in that fort, had also to deplore the loss of many of their men. Then there was no cry of cholera. It is raised now, probably, from the simple reason that people are more prepared to expect that dreaded visitation from its having broken out in Egypt, Syria, Turkey, and Greece, with which countries we are in daily communication. Leghorn and Naples have taken off the quarantine recently imposed on vessels arriving from Malta. The town continues healthy. For three days past the amount of deaths by the reigning epidemic is so trifling as to cause no further inquietude.

The cholera had totally disappeared at Skiatos, the only part of Greece in which the malady had manifested itself.

Prussia.—Letters from Berlin of the 14th state that the cholera is on the increase in that capital. Between the 12th and 13th, 28 new cases were declared, and during the following twenty-four hours 46 additional. Up to the present time the malady has attacked in Berlin 2102 persons, of whom 1312 have succumbed, 494 have recovered, and 296 remain on hand. At Königsberg the disease rages with the greatest intensity. During the day of the 10th inst. alone, 100 fresh cases were declared, and the number of deaths amounted to 42. Amongst

the victims may be mentioned Dr. Wohlgemuth, the head physician of the hospital for poor cholera patients. In consequence of the violence of the epidemic, the burgomaster of Königsberg has countermanded all the public rejoicings ordered for the King's birthday. Two of the deputies from Königsberg to the National Assembly, MM. Kussch and Jacobi (both physicians), have obtained leave of absence, to go and render assistance to the cholera patients at Königsberg. The cholera has also declared itself at Dantsic.

"The Belgian papers speak of a new and infallible remedy for the cholera having been discovered by a young physician employed in the hospital at Berlin, where its effects, it is said, have been astonishing. The agent employed is the trichlorine of carbon." M. Dumas, the celebrated French chemist, is mentioned as being engaged in investigating its effects.

SHEERNESS.—Great apprehensions are entertained that the town of Sheerness, surrounded as it is by pestiferous ditches, presents but too favourable an aspect for the introduction of cholera amongst its crowded streets. The garrison and arsenal, it is true, exhibit the most perfect models of neatness, order, and cleanliness, but they are surrounded by a town which, for filth, want of drainage, and a complete absence of sewers, has no equal in her Majesty's dominions. The narrowest streets and alleys are crowded with houses of the lowest description, mixed with piggeries, cowsheds, stables, slaughter-houses, heaps of fetid manure, and every abomination that can pollute the atmosphere and promote disease. The offal of a population of 8000 lies upon the surface of the streets and alleys in its most disgusting form. The only semblance to a drain is a ditch which surrounds the town, full of black and stagnant matter, and forms the last receptacle for all the carrion that is too bulky and offensive to wither in the streets. The malaria arising from these combinations is so deleterious that the men employed in the dockyard suffer severely from it by constant and prolonged illness. It is to be hoped that the Government, or the Board of Health, will not wait till cholera has committed its ravages in this well-prepared hotbed of disease. If the inhabitants will not take the proper means for securing the aid of the General Board of Health, surely the garrison and arsenal should not be exposed to such danger.

According to M. Demidoff, during the whole period in which the cholera attacked 1000 and killed 500 per day at St. Petersburg, the magnetic needle continued agitated and vacillating.

EGYPT.—NEW REMEDY FOR THE CHOLERA.—Dr. Willemin, the sanitary physician at Cairo, having recently had an attack of cholera, is now convalescent; he has also published a most interesting memoir in reference to this disease as it appeared in this part of the world. This memoir states an etiological and practical fact of considerable interest. The etiological fact is the rapid propagation and fatality of the disease in the more healthy and opulent quarters of Cairo and Bowlah. M. Willemin thinks this arises from the circumstance that these quarters are situated to the north of the town, and, therefore, were first exposed to the north wind, which was supposed to convey the miasms. The practical fact is the employment of Indian hemp (hachish), under the form of resinous extract, in the treatment of cholera; and he does not seem to doubt that, if he had employed this remedy upon himself, he would not have been seriously affected by the disease. He reports many facts which, if they do not amount to a peremptory demonstration of the efficacy of this new agent, encourage most powerfully to make trial of it. M. Willemin treated ten patients affected with cholera: four, with the most fatal symptoms, died; the six others were cured: and of these three had the disease in the most serious form, and the other three were very ill.

—The cholera is raging in Posen, as many as 40 deaths being registered daily.

MORTALITY TABLE.

For the Week ending Saturday, Oct. 21, 1848

Causes of Death.	Total.	Average of 5 Autumns.
ALL CAUSES.....	983	1154
SPECIFIED CAUSES...	981	149
Zymotic (or Epidemic, Endemic, and Contagious) Diseases.....	393	270
SPORADIC DISEASES.		
Dropsy, Cancer, and other Diseases of uncertain or variable Seat	47	52
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.....	87	127
Diseases of the Lungs, and of the other Organs of Respiration	102	222
Diseases of the Heart and Blood-vessels.....	29	38
Diseases of the Stomach, Liver, and other organs of Digestion	52	67
Diseases of the Kidneys, &c.	10	12
Childbirth, Diseases of the Uterus, &c.	4	14
Rheumatism, Diseases of the Bones, Joints, &c. ...	5	8
Diseases of the Skin, Cellular Tissue, &c.	3	2
Old Age	32	64
Violence, Privation, Cold, and Intemperance.....	17	32

Subscribers wishing to complete their sets may obtain the back numbers by an early application.

SUBSCRIBERS IN ARREAR are respectfully requested, in conformity with the terms of their subscriptions, at once to forward their remittances to the OFFICE.

TO CORRESPONDENTS.

"Lucius."—Blackhall described the disease under the name of inflammatory dropsy. It is found to occur sometimes after scarlatina, as well as after exposure to cold. In such cases anasarca sets in suddenly; the pulse is high; the skin hot; the urine high-coloured, of a specific gravity 1·020, and contains albumen.

"X. G."—Surgeons and apothecaries can charge for their visits.

"Scotia."—A full answer would occupy a column.

"A Medical Reformer" labours under a mistake.

"A Subscriber."—1. A jury will always grant a reasonable sum for attendance and visits. 2. A physician cannot sue for fees except under a special agreement.

"Chirurgus."—Four parts of cerate and three parts of pulv. sabinæ.

"Lector."—The account was published in the "Bulletin Thérapeutique."

"Weber."—The test is fallacious.

"Civis."—It is not exactly suited to our columns.

"Mr. Fitzgerald."—The chemical theory in no way affects the orthodox treatment now followed.

"B."—We are always careful in printing the lists whenever sent.

"A Dublin Subscriber."—We cannot admit the statement in reference to foreign diplomas, as it would serve no useful purpose.

"Utilis."—The paper shall appear.

"A Constant Reader." — Yes; Dr. Rigby's mode is the ordinary one.

"Juvenis." — 1. The first request shall be attended to. 2. Consult the Students' Number, just published.

"James B." — The remedy would be worse than the disease.

"A Medical Practitioner" must authenticate his "Three cases of Asiatic cholera" before they can be inserted.

"Querist."—Compliance with the request would be inconsistent with our public duty.

"Mr. Hampden."—We do not write private answers to such questions.

"A Pathologist" has our best thanks.

"Justitia."—It would be illegal and irregular.

"M. D., Leeds."—The draught is not explicit on the point referred to. It will, doubtless, receive all the attention it requires.

"L. A. C."—The magistrate had no right to refuse.

"Fides."—Any communication on the subject must be brief.

"A Medical Assistant." — There would be no impropriety in making the statement.

"A Constant Subscriber, G."—We do not know where the the numbers can be purchased for the sum mentioned.

"A Subscriber, Darlington."—1. There are no particular reasons. 2. The possession of the diplomas would not legally qualify to prescribe and dispense medicines.

"Káf."—1. The communication shall appear next week. 2. A private letter shall be forwarded.

"A Subscriber, Portsmouth."—We can give no information on the case.

"Mr. H. Mudge, Bodmin."—Communication received.

"Mr. J. Bell."—Communication received.

"Lucius."—We must decline the offer.

"Minor."—Yes; in the church of St. Martin's-in-the-Fields.

"O. I."—Two minims (Scheele's strength) dissolved in any mucilaginous fluid.

"Mr. Lambert."—The mistake has been corrected.

"A Manchester Correspondent" is thanked for his hints about students.

"T. W. W."—Yes.

"Dubitans."—It is better to accept.

"A Pupil" can spend a portion of his time in London, with the consent of his master, without endangering his indentures. The Apothecaries' Company would offer no objections.

"Fidelo."—The observations are much to the point, and will be serviceable.

"A Practitioner."—The note has been received, and shall not be overlooked.

"A Reader and Subscriber."—The portions cannot be obtained separately from the numbers.

"O."—A similar communication has already appeared in the columns of the *Medical Times*.

"A General Practitioner and a Subscriber."—The fee varies in different courts.

"Noel."—Potassa Fusa.

"Electron."—The theory is ingenious.

"Amicus."—It was decided at the second meeting.

"S."—The analysis shall appear.

"Mr. I. V. Asbury, Enfield."—Any day but Thursday, between twelve and one o'clock.

"Mr. Wm. Nisbit, Egremont," "On Cholera," received.

"T. S. B."—It is not customary to take back such copies.

"Cholera."—Persons will be appointed by the new Act for the Prevention of Contagious Diseases.

"A General Practitioner" writes:—"I see constantly in the *Weekly Dispatch* the following in the Notices to Correspondents: 'W.A.—Apply to the Institution for Diseases of the Ear, Sackville-street, Piccadilly.' Now, I believe this institution is nothing more or less than Mr. Y——'s own affair; and, if so, I would ask you whether it is proper that such announcements should constantly appear?"

"An Old Boy" is too personal in his remarks.

"Mr. J. Jones, M.R.C.S.," recommends the following method for the suppression of quacks:—"We cannot put them down, but we can raise them up. They want medical education—instruction in medicine, surgery, and midwifery. Most are poor, and the sums charged for lectures are high. If a plan could be adopted similar to the one in London University College for schoolmasters and their assistants, by lectures being delivered in the evening, and a small fee being charged for the course—say, of anatomy, surgery, medicine, and midwifery—to amount to about £1. 10s., it would be well."

"An Old Subscriber" will see that we have noticed the subject.

"Mr. R. W. Watkins, M. R. C. S. and L. S. A.," writes as follows:—"Permit me, through the medium of your journal, to expose the following case to the profession:—About a month ago I engaged, as an assistant, a person calling himself Wm. S. Saunders; he had referred me to Mr. H. Hewson, Reigate; and, in reply to a letter thus addressed, I received a letter, signed H. Hewson, strongly recommending him. In a few days my suspicions were excited as to the veracity of this letter, and, his subsequent conduct having confirmed them, I made inquiries at Reigate, and have ascertained that no one named Hewson is known there. The postmaster had, however, received a note, purporting to be written by H. Hewson, and requesting that letters addressed to him might be forwarded to a certain place in London; this note is in Saunders's handwriting; and the police have ascertained for me that he was resident at the place to which the letters were to be sent. I have made this statement as concise as possible; but shall be happy to afford further information to any gentleman who may require it. As a person who has already adopted two names may, very probably, assume a third, I subjoin a description of him. He appears about thirty-five years of age, about five feet eleven inches high, rather thin, and very upright. His complexion is very dark, eyes black; large black, bushy whiskers; while resident with me he wore a wig; his voice is very sharp and sonorous. By publishing the above particulars you will greatly oblige."

We beg to direct attention to the advertisement on the wrapper, in respect to the "Directory's" Annual Circular; and we hope that the profession generally has responded to it, so as to ensure the correctness of a work in which all must be interested.

Letters and communications have also been received from Lucius; X. G.; Scotia; A Medical Reformer; A Subscriber; Chirurgus; Lector; Weber; Civis; Mr. Fitzgerald; B.; A Dublin Subscriber; Utilis; A Constant Reader; Juvenis; James B.; A Medical Practitioner; Querist; Mr. Hampden; A Pathologist; Justitia; M. D., Leeds; L. A. C.; Fides; A Medical Assistant; A Constant Subscriber, G.; A Subscriber, Darlington; Káf; A Subscriber, Portsmouth; Mr. H. Mudge, Bodmin; Mr. J. Bell; Lucius; Minor; O. I.; Mr. Lambert; A Manchester Correspondent; T. W. W.; Dubitans; A Pupil; Fidelo; A Practitioner; A Reader and Subscriber; Aspirant; O.; A General Practitioner and Subscriber; Noel; Electron; Amicus; S.; Mr. I. V. Asbury, Enfield; Mr. Wm. Nisbit, Egremont; T. S. B.; Cholera; A General Practitioner; An Old Boy; Mr. John Jones, M.R.C.S.; An Old Subscriber; Mr. R. Watkins, &c. &c.

ORIGINAL LECTURES.

LECTURES ON THE RACES OF MEN.

By ROBERT KNOX, M.D., F.R.S.E.,
Lecturer on Anatomy, and Corresponding Member of the French Academy of Medicine.

(Continued from p. 34.)

HISTORY OF THE CELTIC RACE CONTINUED.

I. THE IRISH CELT.

II. THE CONTINENTAL CELT.

THE CELT OF GAUL.

At the close of my last lecture I was considering some characteristic, or rather differential traits in the physical and moral character, which I am willing, in the absence of sounder data, which one day will surely be obtained, to ascribe to his local position, without particularly specifying the influence, or presuming to arrange it, however small and unconsequential as I know it to be, under its own category, be it governamental, or climatic, or moral. This I am willing to leave to the sticklers for the old Hippocratic theory, pourtrayed so happily, but so hypothetically, and almost sophistically, in the PERI HEDATON, *aeron xai topon*; and to the utopian men of idealistic Slavonia, (usually, though erroneously called Germany,) and their imitators in England and in America. In the absence of correct data, enabling us to trace to physical causes *connected with Race*, the trifling differential character lies between the Celt and the Kymri, and the Celt and Kymri of different countries, admitting as I do, that their physical history is still to be described, their affiliations with each other, and with other races, extinct or existing. I shall conclude my remarks on this portion of the race by a very few observations as regards the Hibernio-Celt, and with a short section on the presence amongst them of a race of fair men, apparently not Saxon, clearly in no way Celtic; strongly, indeed, their antagonistic in every sense of the term.

As thirty-five years have rolled on, it has been my habit to point out to those with whom I discussed such matters, that in so far as I could judge, Ireland and France became every day more and more Celtic; that the admixture of Saxon and other blood at various times, by intermarriage with other races, must of necessity, unless continually supported, gradually become extinct, or at least that the mulish race produced between the Celt and Saxon population, would, in time, cease to be an important feature in the population; a law of population which my esteemed friend, Mr. Edwards, calculated upon data, however, not, I think, sufficiently extensive to secure entire accuracy. Now, this *à priori* reasoning from a physiological principle seems to me to have been completely verified by the events of the last half century. Ireland never was more intensely Celtic than she is now; and as to France, the homogeneity of her population is admitted with dread and alarm, even by British statesmen and popular writers of great ability and talent, who are, no doubt, paid by the Courts of Europe to misdirect the English and Continental mind on this all important point. Were Ireland thrown on her own resources,—were she made a part of England, by calling out the Orange yeomanry,—in one hour tranquillity would be restored. But this bold step England dare not take. The land of Ireland is the home farm of the Court; it is there courtiers are sent to fatten and plunder. An Orange yeomanry would or might endanger the system, by demanding, as they did before, "justice to Ireland."

THE IRISH CELT.

In love of showy dress the Irish Celt resembles his free cousin, the Caledonian Celt; brooches and rings, and gaudy-coloured dresses he much delights in; hence he dresses with much taste, but not so as to please the quiet-minded Saxon, who attaches to a certain style or manner his notions of a becoming attire. Without taste,—strictly so called, the Saxon sees in "the fashion," beauty in order and neatness, cleanliness and value of material, all that he seeks, and what with him forms the *beau ideal* of "the gentleman,"—meaning, of course, the English gentleman; for the Saxon, whether Englishman or Dutchman, never goes beyond this. In the ceremonial he sees religion; and he can see without being in the slightest degree shocked thereby, a jumping, dancing priest, whirling about like a dancing dervish; a gambling, boxing, horse-racing, sporting, farming priest. This is the Saxon. When he imitates the Celt in dress, it is amusing beyond all description; but, why should I touch on this? Have not the immortal quills of Douglas Jerrold and Albert Smith drawn him, when apeing the Continental man, the Celt, or Slavonian? Have they not described the satin stocks and the figured vests, and party-coloured shirts, which appear, from time to time, in England, the pink and type, the quintessence beyond all doubt of what is vulgar; debased in taste beyond all endurance. On the other hand, it by no means follows that the taste of the Celt is always good. I speak of him merely as a race; as a lover of trinkets and of showy dress; of brooches and skein-dhus; of belts and sashes; of pouches and daggers; of guns and pistols; of anything, in fact, but labour—constant enduring labour,—

"Labor improbus, omnia vincit"

The Celtic woman, too, is, *no doubt, Celtic*, though a woman. Women are women, all the world over, and agree in many points. Woman's mind is not masculine generally, any more than her brain. If all women like dress and finery, which is not strictly true, they differ much in degree, as everybody knows. It would be well for men to consider these matters carefully, and not imagine that they required to voyage to Africa or Australia, before they could meet with a race of men differing from themselves. Admirable specimens of all that essentially distinguishes race may be found, perhaps, next door, or street, or village. Look at Oxford-street, and then walk through some of the courts and lanes of Marylebone; you need not go further. But I hear you say, Does the *element of race* touch deeply the whole character, moral and physical? The day will speedily come, when no reflecting mind will venture to deny this.

I have already spoken of the Celtic women in Wales, and I think also in Scotland; of her fine feelings, her romance, her contempt for order and accumulation, cleanliness, and labour. Her deep and fine sympathies go not, as we Saxons would say, in the right direction. Listen to that shrill, piercing voice—discordant and sharp as steel—of the Englishwoman's voice as she orders her children instantly to proceed to school! How peremptory! You may say how unkind. But you are wrong. Look at the children. See the neatness and order of their apparel; the all-pervading cleanliness; their healthy looks implying abundance of fresh air at home, and wholesome food. And now contrast all this with the other woman. Her children in rags; no proper food prepared in time; her home or hovel in continual disorder; no windows opened in due time; a dark den, foul and pestilential. The excuse, in which they are masters, is poverty and want of time!

I have often bethought me of the curious ways in which race will show itself when least looked for, and least suspected. As I journeyed from the pleasant Lothians through Fifeshire, proposing to visit the very beautiful mansion of the Falkland Palace, so called, a lady and gentleman, evidently of the highest class of society, stepped from the mail, the inside tickets of which they had taken exclusively. They were dressed precisely as the highest class of nobility, and I remarked so to my friend who journeyed with me. But I further observed to him, that the gentleman must be an *Irishman*. As we had not seen the face of the party, my friend expressed his doubts; but knowing the race I pointed out to my friend that over the perfect dress of an English gentleman the stranger had thrown a loose muffler handkerchief of colours so gay, pattern so striking, and position so characteristic, as to leave in my mind no manner of doubt as to the race to whom the stranger belonged. The landlord of the inn solved all difficulties by informing us that the person in question was a man of great wealth and high birth, who had married a Scottish lady, of a family well known in East Lothian and in Fifeshire—and that he was an Irishman.

I mentioned in my last lecture the singular circumstance of my having seen a few native Irishmen of a colour and complexion, physiognomy and form, unlike the Celt, unlike the Saxon. Let me say a few words of these persons. They are rather tall than otherwise, of a square build, courageous and strong, of a perfectly fair complexion, fierce blue eyes, and regular features, I had almost said perfectly regular features; but of course it is not so, for they are not strictly proportioned, and the mouth resembles a straight line cut in a block of wood. Their whole features have a squared look, as if a statuary had made an outline bust of a good looking person on the model of the antique Greek, but forgot to finish it, leaving all the features—chin, nose, mouth, &c.—cut in straight square lines,—an unfinished model of an antique Greek head.

I know not whether, in these few words, I can convey to my audience a just notion of the form or not. After all, I may be only describing a modification of the Scandivanian Danes' forefathers of the present race of Eastern Ireland. But I have my doubts; that they are allied to the Saxon race, I do not doubt, and this I freely admit.

But be this as it may, I know not their location in Ireland; nor their numbers; nor in how far they remain distinct from the rest of the population; nor whether they contribute strength and numbers to the Orange Party, that party which, after all, must clear Ireland of its Celtic population—perhaps even of English misrule. These hints I throw out for the consideration of Irish antiquaries, who naturally abound amongst a Celtic race,—a race fond of looking back into antiquity—of discovering the unknown in the past—of tracing personal distinctions to great men—men of renown—great men in their day. Hence, the peculiar character of the portion—and a great portion—of the Celtic character. But they are also, as I shall afterwards show, the first of writers and speakers, with logical minds, and in literary composition superior to all others; followers and makers of systems; of *corps de doctrine*, systematic, logical, perfect; Lavoisiers, Laplace, Mongé, Bertholet, and a thousand others, were Celtic Frenchmen; so was Bichat. I shall speak of them by and bye; in the meantime let us return to the peculiar fair-haired men of Ireland, alluded to a short time ago.

In the British Museum, in one of the galleries leading into and connected with the Egyptian and Etrurian, there are some paintings, I think in fresco, of an ancient fair-haired race, seemingly from Italy, yet differing from the other figures representing the Etruscan race of men. These figures bear a striking resemblance to some of the Irishmen I have spoken of. I venture to throw out the hint to the Irish antiquary; my own inquiries are at present chiefly physical. (a)

Unbounded wit belongs to the Celt; seldom or ever coarse; often most refined. Rabelais was a Celt, and so was the immortal author of "*La Pucelle d'Orleans*," that terrible *epopée* which cannot now be read. But the critic of all critics, unsurpassed by men he, the lover of abstract justice, who spared not God nor man; he also wrote "*Lettre aux Velstes*,"—a letter not surpassed nor equalled perhaps,—and that is saying much,—by those caustic pens which delight us in the charivaris of French and English growth. Now, compare the Celtic Epopée and Celtic wit with the Saxon Epopée and Saxon wit, Rabelais and La Pucelle d'Orleans with Hudibras and Virgil Travestie, and Troilus and Cressida,

(a) Whilst reducing these notes to paper, I have received a very valuable communication on the ancient races of Ireland, from W. R. Wilde, Esq., of Dublin, which I hope to bring shortly before the notice of the readers of the *Medical Times*.

which is Homer Travestie, and you have at once the character of the races.

I may return to this when describing the French Celt; the Irish Celt has no Celtic Literature. He ought to abandon the language, and adopt the French, as spoken by the chief clan of his race. This would be the first step towards a union of race; for it must come to this. Ten, fifteen years ago, the possibility of the present state of Austria was foretold and foreseen,—the approaching struggle between the Democratic German or Saxon population and the patriarchal Slavonian race or races. But to return.

The Celtic wit, whether of the civilised Celt (Frenchman) or barbarous Celt (Irishman), is perfectly proverbial. In my younger days, there prevailed an amusing kind of physiology, which undertook to explain all things; it was a Dutch and North German or Saxon physiology, engrafted on the school or university of Edinburgh. It was never at a loss for an explanation—a theory. Some one had said that the Hottentots and Bosjemen had very small feet and hands, as compared with the Caffres. Blumenbach I think it was who explained it once. "They," he observed, "are stinted in their food, whilst the Caffres are well ed!" I wish Blumenbach had but seen the race, or reflected deeply on the depth of error he committed when he fancied the rounded half-Jewish head of the modern Greek to be a type of the Caucassian or highest breed of men; and could not see in the Hebrew race that development of face which excluded him from the list of a perfectly pure or ancient Greek race. But, even yet, the physiology I speak of lingers in the halls and in the academics. I, lately, whilst turning over the pages of a popular treatise on Digestion, met with the following profound observation: "The Dutch are dull and phlegmatic, and without wit or fancy, which may be ascribed to their living in a marshy country." Did it not occur to the author or compiler, that as the Irish live in a bog and in the moistest country on earth, as I have been told, this ought to have influenced the national wit? But, in truth, such works as those I allude to are popular, for the very reason that they doubt nothing, explain every thing, and satisfy all unreflecting minds.

I trust that, before this, my audience have seen the strong and the weak points of the Celtic character, rendering my description of the French Celt, to which I shall immediately proceed, an easy task. Keep in mind, that "race influences everything"—that in human history, "race is everything"—that we must expect to meet in France merely with a Celtic man and Celtic woman—civilised, no doubt, but still a Celt. Take care that you do not identify the history of a mind greater than any the world has yet seen, with the essential history of a race whom he merely led, to whom he was an alien by birth and race—with whom he had nothing in common. The history of Napoleon is still to write—it is not French. Celtic France merely furnished troops, and these, after all, not very willingly. Napoleon, who belonged to all time, should perhaps have led another race, who would not have sold and betrayed him—a bad and terrible figure in the Celtic character. Let us return for an instant to the Irish Celt. His race is run. There are some worthy and philosophic men, who still cling to the idea (as Lord Westmeath) that, were the three estates driven from Ireland, with all its see-saw, diverting buffoonery, and deplorable hypocrisy, and a regular, despotic, and firm Government established, the *nation* (!) might resume its place among the *nations* (!) of Europe. This is a great delusion. England's safety and prosperity depends on the extinction of the Celtic race in England, Scotland, and Ireland. I read to-day, whilst I reduce these notes of Lectures, in the *Daily News*, a petition from the Welch, the descendants of the ancient Cymri, beseeching the Government of England, the three estates and glorious constitution, to grant them such a system of education as may enable "your ancient and loyal Cymri to resume their proper station amongst the nations!" Alas, amongst the nations! What nations, most noble Cymri, do you allude to? The age of "*Nations*" and "*Nationalities*" is gone. I told you ten years ago that this must happen; but you would not believe it, or could not be made to understand nature's doctrine; and now, despite of the gold of England, and the bayonets of the Muscovite, the Jesuitism of Metternich, the truckstering tricks of the Nassau and the Coburg, the marriages and manœuvres of the Orleans and the Leopolds, the game is up with the imbecile house of Hapsburgh and of Brandenburgh, and the races of men are rousing in their might, inquiring eagerly why they should be crushed to the earth by about a dozen rotten families; the modern Dynasties of Europe: why the Slavonian should support the despotism of a paltry sop-brained German idiotic Prince against the free men of Germany? and why the free German should encourage the same imbecile in crushing the Slavonian, merely because he, the Slavonian, happens to belong to a different race? This, then, is the question; the Cymri, happy men, know it not. Theirs is the dream of antiquity. That their ancestors, the Cymri men, ruined Italy and all but destroyed the Roman Republic;—this they know;—of the passing moment they seem to know nothing. They seek for education: the desire is laudable; but the Saxon will not agree to educate a Celtic race, as a Celtic race ought to be educated. This question I may resume in my next lecture.

LECTURES ON THE ASIATIC CHOLERA.

By GEORGE ROSS, Esq., Surgeon to the Western City Dispensary, and Author of "Papers on Typhus Fever," and "Essays on the Processes of Digestion and Nutrition."

No. III.

ON THE DIFFUSION OF THE EPIDEMIC AND THE INFLUENCE OF RIVERS OVER ITS PROPAGATION.

The causes influencing the diffusion of cholera have been deemed as mysterious as those which generate it, and have frequently been treated of as identical. The latter assumption, if not erroneous, is, at least, unwise, as it must necessarily lead to confusion of ideas, and thus impede investigation. Differences, not resemblances, are the subject of philosophical inquiry. Analysis alone leads to the discovery of principles, which, when discovered, may admit of universal application. But the difficulty is the discovery! Of what value is the multiplication of resemblances if they are based on no common principle?

On Contagion.—The question of contagion or non-contagion has been discussed *usque ad nauseam*; and opinion, wearied with the altercation, has sought to crush the antagonism by adopting the latter proposition. The majority of opinions is, therefore, in favour of the non-contagiousness of cholera;—the preponderance of facts supports the doctrine; the present Board of Health have proclaimed their faith in it, and what can we do but believe? There are, however, many well-authenticated observations that seem to prove the reverse;—these are exceptions; nevertheless, they are deserving our regard, and ought to be carefully analysed, not only in reference to the principle of contagion, but in relation, also, to the community of influences to which the patients had been subjected;—such as peculiarities of diet and locality,—predisposition arising out of the family relation or constitutional similitudes. These exceptions have a truth in them, that must be elicited by comparison. Some surgeons are advocates of conditional contagion; that is, contagion dependent upon the intensity of the disease, and the degree of impregnation of the atmosphere by the morbific matter; for this word "contagion" has been understood to comprise communication by inspiration as well as by touch. This is very unphilosophic, and equally ungrammatical; but medical authors generally profess a heroic contempt of both; they like facts,—facts! and yet this is the very question upon which facts have not been accurately investigated. Opinions founded on partial observations are valueless. It is not merely necessary to accumulate facts in maintenance of the doctrine of non-contagion; but, while there is a single fact left unexplained, the doctrine is not proved. That single fact might invalidate the whole deduction. Are medical truths insusceptible of demonstration? Then they are not truths; they are mere opinions; and what is true to-day may be false to-morrow.

It would be idle for me to present evidence in support of the non-contagiousness of cholera. I could bring forward hundreds of alleged facts, whilst I could adduce as many scores on the opposite side. An *à priori* argument would be equally barren of useful results; it might be called ingenious, profound, whether my own or that of other persons; but it would, in all probability, be false. We must assume a principle to begin with; the very thing we desire to prove. What good can come of this? None; an hour would be wasted, and the subject made more obscure. I shall not, therefore, attempt to bias opinion upon the subject as a philosophic question, but as a practical one shall not hesitate to express my firm belief that no attendant on the sick need fear the communication of the disease by contagion. The pronouncement of the Board of Health, therefore, on this point, has in my opinion done great service. Do not let us weary, however, in collecting facts, closely observed and discriminated; for in this way alone can the question be finally settled. I feel confident that the enigma may be resolved. It is probable that, on a future occasion, I may enter upon a disquisition of the general subject of contagion; but at present it would be more curious than profitable.

The Influence of Rivers.—The progress of the epidemic along the banks of rivers was considered one of the most mysterious problems connected with the malady when it first attracted the attention of European physicians in the years 1831 and 1832. It was stated that the epidemic generally advanced against the stream, as was instanced in the cases of the Ganges in Asia and the volga in Europe, and that in its course up a river it would, in the most inexplicable manner, keep either to one side of the stream, and leave the other wholly untouched, or it would suddenly pass from a town on the left bank to a town on the right, and reappear as unexpectedly at some distant town on the left bank, leaving the intermediate towns on that bank unvisited. These erratic freaks caused universal astonishment, but unfortunately they did not induce inquiry, and the facts themselves were sometimes denied. Dr. Tytler asserted that the epidemic showed no such elective power in India, and that as regarded that country the statement was untrue. Nobody refuted him. Still, however, these observations might have taken place without the exercise of any mysterious power by this agent. All the great towns on the Ganges and the Jumna, for example, the region of its greatest havoc, are on the right bank; was it then so very extraordinary that the disease should have preponderated on that side of those rivers? Benares is the only great town on the left back of the Ganges. In India I have remarked, by referring to the map, that nearly the whole of the towns in which the visitations of the epidemic were most severely felt, were situated either on the sea or on the banks of rivers, and, in the latter case, almost invariably on the right bank. Is the right bank of rivers in northern Hindostan the more suitable one for human settlements in consequence of its alluvial soil and superior fertility? On the Godavery, in the Deccan, all the towns are on the left bank; there is not one on the right. Why is this? Is it a consequence of nationality, or the superior adaptability of the soil to cultivation? These are questions for the natural historian to answer.

It is probable, however, that the cause which accumulated settlements on the one bank or the other by preference, also influenced the mortality of the epidemic: and this influence might be altogether distinct from the single fact of the actual herding of human beings together in large masses. It is the influence of locality. With respect to the cholera advancing against the stream, it might be said that if it travelled up the Ganges it swept down the Nerbudda, and if it went up the Volga it came down

the Don and the Rhone. The cholera will be found especially to rage in large towns, and large towns will be generally situated on the banks of rivers; hence the cholera will be found in these situations. In Hindostan, which abounds in rivers, through whose means all traffic is conducted, this is almost an invariable rule. But Persia is differently situated—it is covered with deserts of sand, and internal communication is conducted by means of caravans; its great towns, Ispahan and Teheran, are in the midst of these sandy plains; and though the cholera scourged the towns on the coast of the Persian gulf, and in the Delta of the Euphrates, Ispahan was visited mildly, and Teheran escaped altogether. This latter town happens to be singularly situated in the midst of a salt, moist plain, near the foot of the Elborez-mountains. Did it owe its immunity to this cause? Yet the ocean is sufficiently salt, and did not guarantee an immunity to Bushier, where there was a tremendous sacrifice of life; nor did the towns in the neighbourhood of the salt mines of Europe escape. The long immunity of Teheran was the great theme of the contagionists in 1832, who declared that the King of Persia saved his capital from the ravages of cholera, by forbidding a caravan coming from an infected district to approach within forty leagues of the city. One word of the King of Persia could effect a greater prodigy than an investing army at Berlin. The Persian monarch could command the epidemic to stand still, —a power, fable tell us, that Canute the Great could not exercise over the waves of the sea. This notion may be left to the credulous.

THE DIFFUSION AND MORTALITY IN PARIS.

M. Gendrin showed, in his able work on the Cholera of 1832, that the mortality from that epidemic in particular districts of Paris, bore a direct relation to their contiguity to the river: thus, in those arrondissements lying on the banks of the river the mortality was 1 in 37·39 inhabitants; in those arrondissements adjacent to the first, 1 in 95; and in those arrondissements remote from the river, 1 in 126·64. This mortality did not appear to M. Gendrin to be at all influenced by the character of the habitations, trades, or pursuits of the persons living in those localities. Poverty or vice, according to him, was no aggravation of the disease. Thus, in the 3rd arrondissement, where the houses are high and dirty, and the inhabitants crowded together in squalid masses, but which is remote from the river, only 1 in 226·51 persons died; in the 6th arrondissement, similarly situated, 1 in 146·92; in the 4th arrondissement, one quarter of which touches the Seine, 1 in 126·01; in the 8th arrondissement, three-quarters of which lie on the river, 1 in 52·71; in the 9th arrondissement, similarly placed, 1 in 18·000; and in the open and spacious Faubourg St. Germain, three-quarters of which line the river, 1 in 35·02: thus showing that the mortality was in a general ratio to the proximity of the river to the infected district.

I have made similar investigations in respect to the mortality of Cholera in London during the same visitation, and my results are to a very considerable extent in accordance with those arrived at by M. Gendrin. This gentleman draws his estimate from the number of deaths in a ratio to population,—a fallacious method, inasmuch as the ratio of mortality to cases differs considerably under different circumstances, and bears no precise relation to the former. Great discrepancies may appear according to the former plan, which can only be explained by a more minute comparison of deaths to cases, and of cases to population. This plan I have adopted.

THE DIFFUSION AND MORTALITY IN LONDON.

Of 9,008 cases that occurred in the metropolis in 1831-2, 4,198 occurred on the south side of the river, and 4,810 on the north side, which, by a comparison of the cases with the population on the respective sides of the river, shows that the number of *cases* on the south side in a ratio to that on the north side was nearly 4 to 1, being, respectively on the north side, 1 case to 236 persons, on the south side 1 to 64.

What was the number of *deaths* to *cases*? On the south side the deaths were 1,878, or in a ratio of 44·73 per cent.; on the north side the deaths were 2,428, or in a ratio of 50·47 per cent. The table appended will show these results clearly. Greenwich is included among the parishes on the south side; but, perhaps, injudiciously, inasmuch as it is removed from the local influences existing in the other parishes on the south side, and consequently exhibits a wide disparity in respect to its mortality.

River Bank.	No. of Cases.	Ratio of Cases to Population.	No. of Deaths.	Ratio of Deaths to Cases per cent.
South Bank	4,198	1 in 64	1,878	44.73
North Bank	4,810	1 in 236	2,428	50.47

Thus, on the south side of the river, the epidemic was far more prevalent, but not nearly so fatal, as on the north side. At least one-half of the circumference of the portion of the south side of the metropolis, from which these cases are taken, is washed by the Thames, and, for the greater part of its extent, it lies close upon the river's bank.

We will now compare together the four districts on the south side of the Thames, from which the majority of these cases came.

Place.	No. of Cases.	Ratio to Population.	No. of Deaths.	Ratio of Deaths to Cases per cent.	Ratio of Deaths to Population.
Southwark	2,160	1 in 33	856	39.	1 in 83
Bermondsey	516	1 in 57	210	40.69	1 in 141
Newington Butts.....	476	1 in 105	200	42.	1 in 250
Lambeth.....	565	1 in 196	337	59.6	1 in 260

Now, Southwark and Lambeth are washed by the Thames, and yet are at the extremes of the table. This is a discrepancy not explicable by the mode in which M. Gendrin treats this question; but if we compare the ratio of deaths to cases per cent. with the ratio of cases to population, we observe indications of a new law,—that is, *that the rate of deaths increases as the rate of cases diminishes.* We shall hereafter expound this law at greater length; meanwhile, we cannot help observing, that, while in Southwark, for example, the relative mortality of deaths to cases was lowest, the absolute mortality, or whole number of deaths, in a given population was highest. This antagonism does not seem to have been suspected by M. Gendrin and previous writers; but it involves the essential law of mortality in relation to epidemics.

The following table is a summary of the results on the north side of the Thames, among those parishes most nearly allied by common influences.

Place.	No. of Cases.	Ratio of Cases to Population.	No. of Deaths.	Ratio of Deaths to Cases per cent.	Ratio of Deaths to Population.
Parishes on the river's bank, including Limehouse, Shadwell, Ratcliffe, Stepney	757	1 in 172	344	44.7	1 in 378
Central Parishes, including Clerkenwell, St. Marylebone, St. Luke, St. Giles, and the City	2,050	1 in 230	979	47.75	1 in 481
Central Eastern Parishes, including Whitechapel, Spitalfields, St. George's-in-the-East.....	752	1 in 393	443	55.86	1 in 667

The same results are obtained by this as by the preceding table. The absolute mortality of deaths to population is highest by the river's side, although the relative mortality of deaths to cases is lowest in that situation. The absolute mortality is, therefore, augmented by the increased diffusion, it being nearly double among the parishes on the river's bank, to that among the central eastern parishes. The central parishes hold an intermediate position. The City is included among the central parishes as it resembles them in regard to level and general sanitary condition.

In certain inland parishes, however, the rate of diffusion, or of cases to population, was twice as great as among the parishes on the river's bank, and the absolute mortality was also far higher; thus entirely contradicting the statement of M. Gendrin, as a general law. For instance, in St. Giles's parish the facts were as follow:—

	No of Cases.	Ratio to Population.	No. of Deaths.	Ratio of Deaths to Cases per cent.	Ratio of Deaths to Population.
St. Giles's...	628	1 in 86	280	44.58	1 in 193

Admitting, then, *cæteris paribus*, that the mortality is highest among the parishes on the river's bank, yet it is not invariably so, and, consequently, another cause must come into operation, and that it is to be found in the filthy houses, and filthier habits of the inhabitants in these localities. Is it not likely that bad drainage, and all its consequences, dirty homes, idle habits, bad food, and little of it, drunkenness, profligacy, and every moral and physical abomination, would augment the mortality from this pestilence? This is precisely the position that M. Gendrin denies; but, although I am quite prepared to receive that gentleman's figures as facts, yet I cannot altogether admit his inferences, misled, as I fear he was, by imperfect observations respecting the comparative cleanliness and squalor of the various *arrondissemens*. These observations would resolve themselves, to a great extent, into opinions, and, therefore, unworthy of credit as set against numerical facts. The fault committed by M. Gendrin was that of not entering deeply enough into the subject: his results will, therefore, require to be qualified before they can be received.

DEDUCTIONS.

From the foregoing analysis, we obtain the following conclusions:—

1st. That, as compared with the metropolis generally, a large increase in the ratio of cases to population, occurred in parishes on the river's banks.

2nd. That, in certain central districts, the ratio of cases to population was equally great with that of the parishes lying on the north bank of the river, —a circumstance owing to defective sanitary arrangements.

3rd. That, even among those parishes on the river's banks, a wide difference in the rate of mortality occurred—as between Southwark and Lambeth, —a circumstance apparently dependent on the rate of diffusion, and imperfect sanitary regulations.

4th. *That the number of deaths to cases was in an inverse ratio to the number of cases to population.*

The last proposition I intend to demonstrate, as a law of the epidemic in a future Lecture, and merely refer to it now to bring it under your attention.

INFLUENCE OF LEVEL.

Let us now ask ourselves this question, Why is it that there was such an immense majority of cases on the south side of the river? I answer, on account of the low level, and the warm damp atmosphere, and the scandalously bad drainage resulting therefrom, to which I might also add the filthy river-water consumed by the inhabitants. A river's bank implies a low level; and if that low level be increased in extent, it augments the difficulty of proper drainage, and encourages that stagnant, close, and moist atmosphere, which diminishes the vital energies of the system, and predisposes to disease.

I have ascertained the levels of most of the parishes ravaged by the cholera, and find that in all, except St. Giles's and Marylebone, the level is low, and is generally corresponding with the diffusion of the epidemic. Extensive districts on the other side of the water are under high-water mark: the Bricklayers' Arms is 6 inches below that level, and the Obelisk in Blackfriars-road is only 4 feet 5 inches above it. Lambeth is built upon a marsh. The

parishes on the north bank are generally on a higher level than those on the south bank, though still very low. Chelsea Hospital is only 11 feet 7 inches above the level; other situations are much lower: the water in the park at St. James is 5 feet 1 inch below the level! Westminster next the river is universally low. Limehouse, Shadwell, Ratcliffe are all low; the highest measurement that I have obtained, that of St. George's-in-the-East, being 30 feet. Even the London Hospital, Whitechapel, nearly 1¼ mile from the river, is only 36 feet 4 inches above the level. The exempted parishes are on a high level, and pour the filth of their sewers into these low-level districts, where it is kept in a state of suspension by the flow of the tide, and poisons the health of the inhabitants.

Writers have informed us, that level has nothing to do with the propagation of cholera, because, forsooth, it has appeared on the high table lands of the Himalaya Mountains—at Catmandoo, in Nepaul, for example; but these table-lands are difficult of drainage, and are often overhung with fogs; and a relatively low level will produce precisely the same mischief, and in the same degree, as an absolutely low level. This is the case with Scinde. A stagnant marsh one thousand feet above the level of the sea would produce ague as quickly as another fifty feet below it.

The rate of mortality among the cases that occurred on the river up to the 30th of March, 1832, was 42 per cent., which, I conceive, may be fairly taken as a measure of the intensity of the epidemic in the metropolis—a point we shall refer to hereafter. It would appear that an extensive low-land level increases the diffusion or the liability to attack; bad drainage, imperfect ventilation, &c., augment the intensity of the attack. That the liability to attack which a low land level creates tends to arrest the increase of mortality, by predisposing numerous persons to receive the disease not otherwise subject to the evils arising out of bad drainage, the enervation of poverty and vice, and constitutional cachexia.

Then it has been said, that the cholera, in running along the banks of a river, would often omit to visit towns and villages parallel to its course, although they were situated in the midst of marsh and jungle, as between Agra and Delhi on the Jumna; and, therefore, that defective drainage had no influence in causing or propagating the disease. This is bad logic. If imperfect drainage caused cholera, and if it must necessarily appear in towns where this condition exists, then it should never be absent whilst the drainage continues bad. This is the strict law of cause and effect. All that we contend for is this, what, indeed, the facts prove, that whenever the specific poison causing cholera visits a town, its diffusion there will be in a ratio to the level and drainage. Look at its ravages in the Sonderbunds on the Delta of the Ganges, in the towns on the rivers of Hindostan; in Bagdad, Bussorah, and Bushier—towns in the Delta of the Euphrates and on the Persian Gulph, where the sacrifice of life was enormous, being as much as from one-third to one-sixth of the inhabitants; then, again, in the towns on the Delta of the Nile and in Syria, where the mortality was fearful, and has been equally terrific during the present visitation;—in Moscow situated in a plain, St. Petersburgh built on piles driven into a marsh, and which is so far below the level as to have been often inundated, and here, too, the havoc, during the present visitation, has been tremendous. What is true of the different districts of one city, would doubtless prove true of different cities, as compared the one with the other, if facts had been carefully observed, and honestly recorded.

CLINICAL LECTURE ON GONORRHŒAL OPHTHALMIA.

Delivered Oct. 27, 1848, at the Central London Ophthalmic Hospital, by H. HAYNES WALTON, Esq., F.R.C.S. Reported by H. G. Nurse, Esq., Student at the Hospital, and at King's-college Hospital, London.

Gentlemen,—I shall first read over the case of the patient you have just been examining, and then proceed to the remarks I have to make.

E. H., aged twenty-two, ostler, admitted as an out-patient, Nov. 30, 1847, with inflammation of the conjunctiva of the left eye, but was lost sight of till to-day, Dec. 17.

Symptoms.—Great intolerance of light. In the left eye is a copious puriform discharge, with considerable tumefaction and inflammation of the palpebræ, particularly the upper. The conjunctiva is highly vascular and entirely chemosed, concealing all but a small portion of the cornea, which is ash-coloured. The right eye is similarly affected, but in a slighter degree, the palpebræ being less swollen and less inflamed; and the chemosis is partial, covering the upper half only of the cornea, the remainder being clear. The amount of purulent secretion, however, is about the same. He is thin, of a spare make, with a very languid circulation, and tongue not quite healthy. He suffers intense pain in the left eye, less in the right.

History.—Several weeks ago contracted gonorrhœa, and applied to the hospital, Nov. 30, on account of uneasy symptoms in his left eye: since then he has, of his own accord, used leeches and poultices. Two days before his re-admission (on the 17th Dec.) the right eye got affected, just as the left had been. He does not know that the matter from his urethra has been conveyed to his eyes.

The chemosis in each eye is freely divided by several incisions.

℞. Hydr. chlo., gr. v.; ext. col. co., gr. viij. M. ft. pil. ij. to be taken immediately. Aluminis, ʒj. Aquæ dest. oj. M. ft. lot. The eyes to be washed with it every half-hour, and some squirted between the lids with a syringe. Ung. cetacei to be applied to the edges of the lids. Emp. lyttæ behind the left ear. Milk diet.

19. Slept better than the night of his admission. Pain much abated; bowels moved twice yesterday; tongue clean; pulse 112, and very weak; he has no appetite, and complains of great prostration of strength. The tumefaction of both eyes subsiding. The conjunctiva in each is much reduced in vascularity, and the chemosis somewhat less, particularly in the right. The small portion of the cornea visible in the left eye looks sloughy. The knife is again used, and incisions made in two places in the right eye, and four in the left.

℞. Quinæ disulp., gr. ij.; acid sulph. dil. mij. Aquæ, ʒj. M. ft. haust. to be taken twice a day. Broth diet.

21. The right eye is free from pain, and he complains but little of the left; the chemosis in each gradually disappearing. His strength is improved: the lotion to be used less frequently. To continue with medicine.

22. The eyes are yet better. In the night he has been attacked with rheumatic pains in the right shoulder and right hip. There is no accompanying constitutional disturbance; he is unable to walk. Omitte haust. quinæ.

℞. Vin. sem. colch., mxx.; mag. carb. gr. x. Aquæ, ʒi. M. ft. haust. to be taken twice a day.

25. The rheumatic pains are better; he is able to move about the room. Appetite better.

Ordered meat diet, with porter.

26. In the right eye the chemosis no longer exists; the conjunctiva ocular and palpetral are much injected. That part of the cornea that was overlapped by the chemosis has lost a considerable portion of its substance, corresponding in extent to the amount to which it was covered, and in depth nearly penetrating to the anterior chamber. It looks as if a piece had been punched out—the edges are wavy and sharp. There is no opacity whatever. In the left eye there is yet slight chemosis; the whole of the cornea is opaque, that portion of it spoken of as being sloughy has separated. The rheumatic pains nearly gone. The urethral discharge has continued the same from the commencement of the ophthalmic attack.

℞. Haust colchici once a day.

Jan. 4. Left eye no chemosis remaining; the cornea is reduced in size and flattened, and is so opaque as not to allow the iris to be seen. He is still weak.

My notes do not continue beyond this date.

May 8, 3 o'clock, p.m. He again applied, with purulent discharge in both eyes, lids tumified and red, and chemosis passing over each cornea for about a fourth of its extent. The right cornea is clear, the left is partly opaque, evidently the result of former disease. He has a running from his urethra, and, according to his statement, it is a continuation of the original clap. He says that his eyes were free from any disease yesterday, but on rising this morning he found that something was wrong. They have been hourly getting worse. The same treatment was adopted as in the first instance.

May 12. Much amendment, and the discharge but slight.

15. All chemosis removed, and purulent secretion subsided. Conjunctiva still inflamed.

The clap continues as usual.

17. To attend as an out-patient.

Regarding his present condition, it is easy to observe, that, in the left eye, the cornea is smaller than its fellow, and opaque at its upper and outer side, the pupil being a little covered by the opacity. There scarcely exists any anterior chamber, the iris being nearly in contact with the cornea, it is not adherent. This you may the better observe by looking at the globe in profile. With it he has useful, although not perfect, vision; he can read "English type."

In the right eye no longer exists the channeled cornea spoken of in the notes, neither can you trace where it was. There has been perfect reparation. Vision is as good as it ever was. The lids in both have returned to their natural state.

I regret that the notes were not kept more regularly, and with greater precision, as well as carried to a later date; but, for all practical teaching, enough has been recorded.

The term "gonorrhœal ophthalmia," is, I suppose, familiar to you; but do not consider that it is a common complaint; far otherwise. And this is the more suprising, when we reflect that there are few men in the patient's rank of society—I shall say nothing of the higher classes—who have not had clap at some period of their lives, and many are repeatedly clapped. It is equally a mystery why both eyes are seldom attacked; for putting aside the probability of both being inoculated at once from the same source, from the proximity of these organs, and the consequent facility with which infection may be conveyed from the affected to the sound eye, particularly in the commencement, when the sufferer is ignorant of the communicability of his disorder, and is careless, one would regard it as an occurrence of the greatest likelihood.

Gonorrhœal ophthalmia is greatly dreaded from its rapid destructiveness; cases have been seen where in 24 hours all chance of recovery has been lost. A few months ago a patient applied here with his eye destroyed on the third day after the infection. I must tell you, that its ravages do not depend on the whole globe being involved in inflammation and disorganization ensuing, although this may happen, but on effects which it produces in the cornea—such as ulceration, sloughing, deposit of pus between its layers; the termination of these being penetration of the cornea, with more or less of loss of the humours of the eye, and prolapse of the iris, or opacity of the cornea, the remains of reparation, after some of superficies have been lost, just as you saw in the left eye. There is yet another effect exemplified in this patient,—atrophy of the cornea; this happens as well in other inflammatory affections, and occasionally the entire globe gets shrunken.

We witness here an unusual period supervening between the first evidence of infection, and the stage which immediately precedes destruction; or, more correctly, the stage of commencing destruction, for the left cornea had become dead in one spot. I cannot call to mind a similar instance; but Dr. Mackenzie, in his work on diseases of the eye, narrates the outline of one that came under his care, 13 days after inoculation, and partial recovery ensued: usually the eye is quite destroyed long before this. When he saw the patient, his left eye was violently inflamed, and chemosed with a great discharge of purulent fluid, eversion of the

lower lid, and the cornea totally opaque. Under treatment, the cornea cleared beyond his expectations, and a considerable share of vision was preserved. I dwell on this to impress you with the necessity of being guarded in pronouncing an opinion, founded mainly on the duration of the disease. You must be guided rather by the severity of the attack. The condition of the lids, great tumefaction denoting high inflammation, with much local suffering, are indications of great danger; the amount of chemosis; and lastly, by the actual state of the cornea, if you can see it, for rough attempts to expose it are dangerous. Before death, it assumes a hazy appearance, being still lustrous; but when its vitality is destroyed, its polish is lost, and this is quickly succeeded by slough of a dirty brown colour. The entire cornea rarely sloughs, but only parts of it; and these sloughs do not always penetrate its thickness as I have shown.

In the right eye, you have an instance of reparation of corneal tissue by transparent matter; an occurrence that has been questioned by some, and contradicted by others; but of the truth of which, I have satisfied myself. So long as the cornea is merely opaque, it is astonishing how great may be the restoration of its transparency. I have often seen recovery when it has been supposed to be permanently opaque.

About the origin of this disease much has been written and diversity of opinions yet prevail. I need hardly tell you that it is a well ascertained fact, that purulent discharge from the urethra, or clap matter, will, when applied to the conjunctiva produce the disease we are considering. Some of you may remember that a patient came to the hospital a few months ago with gonorrhœal ophthalmia, the result of bathing his eye (which was affected with chronic ophthalmia) with his urine, while a clap was on him. The same holds good whether the inoculation is from the same individual, or from another, although Vetch thought differently. To metastasis has it been attributed, and what is stranger still, there is "gonorrhœal ophthalmia, without metastosis or inoculation," spoken of. By this is meant, that the gonorrhœa and the ophthalmia are one and the same disease, and that without any metastasis or inoculation one passes into the other. I have no faith in the metastasis; and as to the last supposed mode, or origin of the disease, I receive it as great twaddle. I do not see why because, in the majority of instances, we cannot trace the application of gonorrhœal matter to the eye, we should overlook or discard the greater probability of inoculation.

The constitutional symptoms were those of depression. It does not always happen that the system at large is influenced; and never forget, that when constitutional symptoms do occur, they need not be those of febrile excitement, but may be the opposite. The previous condition of the patient determining that.

As this is a clinical lecture, I must keep to the points of the case only, and not go beyond; hence I shall not be able to say more about the rheumatic attack, than that it was gonorrhœal rheumatism in a mild form. You will perceive that it yielded quickly to the remedies used. There is much peculiarity concerning the second attack in both eyes simultaneously. I shall not theorise on it, but merely leave it as a fact before you remarking, however, that it commenced and progressed more severely than the first appearance of the disease in other eye, and probably would have soon ended in destruction of both eyes. Nearly a year has elapsed since the patient came under my care, and it is only just now that all trace of corneal injury to the right eye has passed away, and I think it not improbable that the opacity of the left cornea may become less. This will give you some idea of the protracted period that affections of the cornea endure. The conjunctiva in each eye entirely regained its normal character some months ago.

No doubt the question has occurred to you, How are we to distinguish gonorrhœal ophthalmia from other purriform discharges of the eye, and in what respect do they differ? I believe that they are one and the same sort of disease, notwithstanding their different modes of origin, differing only in degree or intensity. You know that scarcely a day passes without patients presenting themselves here with catarrhal ophthalmia, and that, for the most part, it is an affection yielding quickly to topical remedies. It is the mild form of the purulent ophthalmia which you see in infants and adults; in the latter also called Egyptian, or contagious ophthalmia. Now, the gonorrhœal variety, although closely allied to the latter, is even a more aggravated malady, its termination being more disastrous; but the diagnosis must rest on the history of the case, and an examination of the urethra, since there are no set of symptoms proper to either that can be depended on, and the more particularly when the patient is seen at a late period of the disease. If you have suspicions that clap exists, and it is likely that the patient's statement is questionable, request, or even demand, an examination of the penis. It is astonishing what lies men will give utterance to, in order to conceal the existence of a pox or a clap from a medical man, when a knowledge of its occurrence is of great importance. You must recollect, that although the symptoms are so much alike, a diagnosis, if it can be made, is valuable, for you are then the more prepared to check a malady which, I have told you, is the most dreadful of the purulent ophthalmiæ. The best observers state, that purulent ophthalmia of adults commences in inflammation of the lids, which then spreads to the conjunctiva of the globe; but in the gonorrhœal form the reverse is the case, the correctness of which I have verified; and hence perhaps the greater amount of chemosis in the latter, and therefore the greater probability of sloughing, or ulceration of the cornea. Also, that the second eye seldom escapes in the Egyptian ophthalmia, and in it the lids are more swelled and inflamed. One of the peculiarities of this case is, that both eyes were affected.

The treatment should form a very important part of our consideration, both on account of the direful end of the affection when left to itself, and the small success that generally attends attempts to control it.

Fortunately, within the last few years much knowledge has been obtained, whereby its termination has been rendered more favourable, or in other words its treatment is better understood; it is not now generally considered necessary to reduce a patient to death's door to attempt to cure his complaint, and after all to do more harm than good. For this, and indeed for much that is valuable in the treatment of eye diseases, we are greatly indebted to Mr. Tyrrell. It is surprising, however, with what tenacity some of the old opthalmic surgeons adhere to the "strict antiphlogistic system" of treatment, of which blood letting is the principal means. Their want of success seems to render them the more desperate. Mr. Morgan used to tell his pupils that to control this disease it was necessary to produce a degree of depression very little short of that occasioned by profuse and continued hœmorrhage.

If depletion be the remedy, my patient must have been in a sad plight; I never should have lowered him beyond his already depressed state; on the contrary, you see that after securing a proper condition of his secretions by the pills given, I gave Quinine. Except the blood that escaped from the incisions, not a drop was lost. I do not condemn the judicious employment of depletion, even blood letting. It is the abuse of it by excess, together with its adoption when it cannot do good, and will probably do harm, that I reprobate. Now I will tell you when to deplete: when the patient can bear it, *i. e.* when the circulation is greater than natural. But do not attempt it if there should be any contra indication,—and I particularly allude to a depressed condition of the vital powers; neither must you reduce your patient too low when you deplete; if the circulation be brought just under what is considered the standard of health that will suffice. Depend on it that, for reparative action to ensue, there must be a certain amount of power, not too much, or too little, and only practice and close observation can teach the surgeon this nice point. Local bleeding is almost always required, either in the form of cupping or leeching; I prefer the former, but this case did not even call for that.

From the local application of stimuli and astringents great good is effected, and in the early stage of the disease, if the patient be brought into the condition I have described, will suffice, but beyond that we must seek for something else. I shall give you Mr. Tyrrell's opinion here, and I do it with satisfaction, because I had the opportunity of seeing his practice for several years, and have personally confirmed its correctness.

He says, that when the chemosis is incomplete, which can only be in the early stage, and I must remark, that the danger of the cornea suffering is in proportion to the amount of chemosis, the measures I have described will suffice to cut short the disease, but not so when complete; and, as regards depressing the patient, he has often seen it carried to an extreme degree unavailingly; and, further, he is satisfied that the excessive depletion he used to adopt and witness often tended to hasten an unfavourable termination of the disease, and during several years he had watched many cases in which the chemosis was complete, and not in a single instance did the cornea escape, in spite of active general and local depletion, and the local application of the strongest stimuli or astringents. As if to be more impressive on the subject, he goes into the case of a male adult, both eyes chemosed, one with a clear cornea. He was bled twice to fainting in twelve hours, and had thirty leeches applied, added to which he was kept nauseated, and took calomel and opium every six hours, the bowels being freely acted on before the exhibition of the latter medicine; yet both corneæ sloughed.

What practice, then, are we to adopt when the chemosis is entire? Why, to cut through the chemosed conjunctiva in several places. You must have seen me adopt this line of practice in such cases. I pointed out to you before lecture some of the marks of the cuts in this patient. It had been recommended before Mr. Tyrrell's time to "excise and incise" the chemosed conjunctiva, but not after his plan, and from which he and others have experienced such good results. It is not necessary to examine Mr. Tyrrell's theory about the cornea perishing by reason of its nutritious supply being cut off by strangulation; and however much that may be questioned, the beneficial effect of his practice has been fully attested. His method is to divide the conjunctiva and the subjacent cellular membrane, from the cornea in a direction between the two attachments of the recti muscles, making two incisions in each of these positions, and carrying the incision towards the edge of the orbit, avoiding immediately the transverse and perpendicular diameter of the globe; that the larger vessels passing to the globe may not be injured. His observations on its success are, that a hazy cornea that still reflects light will probably be restored to its original integrity, or suffer but triflingly; that even when the cornea has in part lost its vitality, the extension of mortification will be checked, and the yet healthy portion will be saved. The latter statement we have this day had a proof of. He thinks that its beneficial operation is not increased by means tending to depress the general power, nor likely to be interfered with, but by the two conditions of great excess of arterial action with fever, and extreme feebleness of vascular power.

With the conjunctiva entirely chemosed, you are as well to direct your attention to the general condition of the system, and to carry out those views that I have propounded, when treating of the early condition of the affection. You must support if too low, and deplete if there be more power than I have described. The best plan, if the latter be required, is, to produce a quick impression on the articulation, by the abstraction of blood from the arm. Usually, six or eight ounces will suffice, and to produce further effect, if occasion require, as well as to maintain the desired state, employ purgatives, or nauseating medicines.

Not long since, a private patient was brought to me, with gonorrhœal ophthalmia in one eye. There

was entire chemosis, and the cornea slightly hazy. He was aged 18, with hard pulse, and feverish. I bled him to 8 ounces, divided the chemosis, and ordered him an aperient draught and local stimuli. His circulation, which was at first reduced, again rose. I now purged him till it was brought to the state I desired. The result was complete. His eye was quite restored.

It is, I think, easier and safer, after the lancet has been once used, to regulate the state of the circulation by the means mentioned, than to resort to a second blood-letting, or to take a large quantity of blood at first.

The advocates for large bleedings say, that the after-condition of their patients is not the worse for it. This is not true, either as regards the general health or the affected organ. On the latter point, Mr. Tyrrell's evidence is—"Since I have abandoned the means which are calculated rapidly to exhaust the general power, I have not had to combat an obstinate chronic stage of the disease, which formerly was of frequent occurrence, and generally troublesome in proportion to the severity of the means used to check the acute disease, and its effects upon the system." Page 94. "Tyrrell on the Eye." You must have remarked that I employed a mild local astringent. I do not confine myself to alum, but use other things: among them nitrate of silver, the latter not stronger, however, than two or three grains to the ounce. I attach the greatest importance to the *frequent* use of the lotion, and before each application the purulent secretion should be removed, as far as practicable, with a soft rag and warm water. I firmly believe that all applications to the conjunctiva that produce actual pain are productive of harm; they greatly irritate that membrane, and if persisted in produce troublesome chronic inflammation. If you take the trouble to follow out cases where burning applications are used, and particularly strong solutions of nitrate of silver, you will see the truth of what I say.

I must just make one remark about the division of the chemosis. I do not always select the spot where Mr. Tyrrell directs the incisions to be made, between the attachment of the recti; but invariably observe the direction he advises, from the cornea to the margin of the orbit. The form of knife best suited, is one like this:—a small curved bistoury; and as to its use, you must introduce it just where the chemosed membrane overlaps the cornea, and carry the point through the entire thickness of the swelling to the palpebral sinus, taking care not to injure the sclerotic coat; then depress your hand, and make it cut its way out. I am of opinion that these incisions may be advantageously employed more than once in the same case, and that they are useful even when the conjunctiva is not entirely chemosed. I have carried out that practice in this instance.

ORIGINAL CONTRIBUTIONS.

OBSERVATIONS IN THE HOSPITALS OF PARIS AFTER THE REVOLUTION OF JUNE.

By CHARLES KIDD, M.D., M.R.C.S., Limerick.

(Continued from p. 25.)

I have spoken already of the treatment of general gunshot accidents, together with the management of gunshot wounds of the chest and abdomen; it now remains that we say a word or two of wounds of the other great cavity, the head, and that we append the ultimate results of the late eventful occurrences.

Of 700 cases in the larger hospitals (about half the original number wounded), exactly 63 were wounds of the head, presenting, as may be easily fancied, every possible variety of cerebral lesion. Your true Frenchman is made of very excitable materials, and in my daily pilgrimage through the hospitals it was quite wonderful to observe the curious variety, the terrible fatality of some cases where little apparent mischief had been done; while in others large pieces of brain had been actually cut away with much less visible effect. As a general rule I found the least dangerous cases were those in which the mass of the cerebral lobes had suffered injury; large pieces of this part of the brain, in many instances, sloughing away without any very evident symptoms. Those cases, on the contrary, in which the base of the brain was implicated being marked with very evident symptoms, in almost every instance proving fatal.

At one of the little flying hospitals, under, I think, M. Monod, there were no less than five desperate cases of wounds of the brain. In one, the great cerebral lobes seemed reduced to a half fluid, pultaceous mass, coming away through a great open wound, and moved very sensibly by the pulsations of the heart; the wretched man was brought in the very first few hours of the battle, and lived four days. In two others, wounded at a barricade in the Faubourg St. Denis, where the carnage was most frightful at one particular epoch, the brain was similarly injured, coming away through the wounds, yet they spoke quite rationally, and it was with some ingenuity one could detect the failing memory and faulty association of ideas that spoke but too plainly of what was going on. Of five cases in this little place, two died.

Of six cases of wounds of head, under M. Jobert, at St. Louis, there was only one death. At the Hospital Rue St. Antoine, a wretched being was brought in with his two jawbones swept nearly altogether away; the palatine arch was destroyed, and the tongue severely injured. Another case, not very dissimilar, was to be seen in another ward. They both sunk from the hemorrhage and fearful injury done to the base of the skull. Three other cases were followed by recovery. At the Hospital for Incurables were some very instructive cases. In one, though there seemed evidently no penetrating injury of the bone, epileptic convulsions set in; after some large bleedings, however, he recovered. In another, where the right parietal bone was broken into splinters, considerable paralysis of the left arm was observable, followed, after some days, by delirium; this man was bled two several times, and ultimately recovered. In another case, in the same wards, a man wounded in the same part of the head, and in the same manner, no paralysis existed, or anything except a most inordinate craving for drink. For three nights that he lived he never stopped raving with the most intolerable thirst. In a fourth case, exactly similar as to the site of the injury, the man was in possession of all his faculties up to nearly the last moment, though large quantities of his brain actually came away at every dressing. The recital of such facts is enough to terrify the greatest revolutionists. In another case the skull was completely cleft in two, fully one half of the wretched man's brain being left on the roadway; yet he lived for some short time. Of these five cases three died.

At this hour of the day, when the physiology of this wonderful cluster of organs, the brain, is so well understood, it would be idle, perhaps, to offer any comments on the peculiarities of these cases. To our friends of the last century, pondering very amazingly on the properties of mind and matter, and very perplexingly at sea as to the precise part the brain plays in all such operations, some food for wonderment, it is true, might be discovered.

There was nothing, however, after all, very peculiar about them, and, as to treatment, a leaf out of our own book. The very judicious rule, "wait for symptoms," seemed very generally observed; in the matter of treatment, indeed, I cannot say I saw anything with which our faction fights in Ireland had not already familiarized my eye.

In one or two hospitals the cases of this kind appeared somewhat less dangerous. At Val de Grâce, for instance, eight cases (military men) were under treatment, all of which recovered. In one, the ball went in at the mastoid process, crushing the jaw in the most desperate manner, going out at the nose. In others severe contusions, with fracture of the skull. In none, however, any very severe symptoms. The treatment was essentially antiphlogistic, and in no way very peculiar.

These cases were very slight, though the building itself was at one time in the very midst of the battle. On the opposite side of the river from the Hospital of St. Antoine, of which I spoke before, this establishment was in the same way surrounded at one time by insurgents. Adjoining the Gardens of the Luxembourg—the Vauxhall of these transporting regions—all this place, indeed, seemed marked out for destruction. Fifteen hundred of the enemy, fighting here with barricades and cannon, were put to flight after a long and fearful resistance,—the entire of the Rue Faubourg St. Jacques nearly left a heap of ruins. At the Pantheon, not far off, two beautiful statues, one representing the "Republic," the other "Immortality"—something emblematic, perhaps, of the entire revolution—were broken into pieces, the building itself for a time more a hospital and barrack than a tenement for the "dwellers on Olympus." The dead and dying, as at other points, were lying all about, the worst cases huddled into passages and archways. Several of the insurgents, taken with arms in their hands, were shot immediately; some of the most horrible events of the entire massacre took place, indeed, here. On many of the barricades the heads of soldiers were cut off and put up to terrify *les autres*. One woman boasted she had thus mutilated three of the servants of the Republic. These things are now, I am quite aware, a part and parcel of the past. Nor does it require all the emphasised prolixity of Lord Brougham to tell us that this revolution differed from all others in Paris—past, present, and to come.

Its history is, however, yet to be written. If I have succeeded in putting together the few professional facts that seemed accessible, my object is attained. It is impossible, however, to separate one from the other. Forty thousand of the inhabitants of the low parts of Paris, all armed, miserable creatures; many of them only anxious for some horrid change; thousands killed and hurried out of sight; hundreds wounded and crowding the hospitals. Four days of preparation preceded the final outburst; shelter during this time was afforded the combatants, depôts of arms arranged, rallying posts assigned, and many an anxious council of war summoned. That no little leaven of common sense should change this fermenting mass, and tell of ruined trade, and bankruptcy, and starvation—ay, and broken limbs and gunshot wounds of every the most frightful kind—exceeds our limited comprehension.

Everywhere one moves, however, in Paris, some spot presents itself rendered memorable by some such acts of atrocity. The fountains dance and sparkle in the Champs Elysées, but here the English traveller must recollect the murder of Louis XVI. was perpetrated. In the Rue St. Honoré, Epremesnil, an idol of the people, was killed and thrown into the kennel. And then there is the Temple, and there is the Bastille, of which every one has heard; and a thousand other places of lesser note. One must understand all this, indeed, to understand the aspect of the hospitals,—to get familiarised with the character of this singular people, varying as the wind, full of all imaginable and most impulsive passions. Yes, the history of the little world of Paris, in the form of phrase used by Schiller, is that by which the little world of Paris is judged (die Weltgeschiste ist das Weltgericht). French surgery is better and simpler, perhaps, than our own; the many extraneous influences at work, however, prevent us, as a general rule, to carry the comparison further. The effects of a great defeat are, however, very palpably shown in the whole matter, and, if we have learned no other lesson of value, we have that of guarding against mental and other influences, but too often, even in our most approved treatises, disregarded; the whole thing, indeed, is a social and political study of the most remarkable interest.

Of the ultimate result of the late events, in a

surgical point of view, it now remains that we say something. It is Emerson, I think, who says somewhere, every establishment is the lengthened shadow of some one man—instancing Wesleyism, Pittism, and some other ism I now forget. We have many such bodily shadows among the hospital arrangements of Paris—no two men agreeing on any particular point, and no two establishments ordered in the same particular manner. The hospitals of Paris, for the most part, are adapted, I need scarcely say, each to some one particular disease. Who has not heard of Charenton, Bicêtre, the little world of the Salpétrière—with its squares and streets, the Hôtel Dieu, and the various other establishments already spoken of at some length; and all before the late disastrous events given up to some one "specialty"? In the Hôtel Dieu alone, before the late events, there were 1200 beds; in St. Louis a like number; in the various other hospitals over 6000:—as a general rule, all given up to specific diseases—an arrangement of no inconsiderable value, as far as the public is concerned, but one of rather questionable characters, when the different men are called on, as during the eventful days of June, to treat some one all-pervading class of cases, like gunshot wounds.

Some of the men evidently knew nothing of the matter at all; others had some traditional recollections of such things as gunshot wounds; while a third party—among which, of course, I would class the older men, as Roux—had long experience of such affairs. In this state of things it is easy to fancy the differences that existed often in the same hospital, not unfrequently in the same identical cases. In this thick jungle of opinion, indeed, it has been no little task to hunt out the truth. Patients as well as medical men may be differently constituted from what they are in this country; the ultimate result, however, is not much in favour of our neighbours' general surgical arrangements.

As long ago as the reign of Dupuytren, indeed, it has been the fashion of our medical brethren in Paris to differ. Dupuytren never liked Chopart's operation, yet it is one now very generally held in esteem. Roux, even in our own time, held out against all the men in Paris in that minor canon of surgery, the healing of stumps by the "first intention." Velpeau, at present, is against ice and cold irrigations, the reaction sometimes, he says, being much greater than the original inflammation. He is entirely against secondary amputations also, though such things are yet recommended. On the Continent, Jobert and Malgaigne and Velpeau differ as much as possible with respect to the feeding of patients, and a hundred other things. Under these circumstances it is quite clear we must fall back on our only other criterion—figures, and discover what the ultimate returns, as far as they have come to the light, will do in bringing us out of such thick darkness. Making allowance, then, for the very worst cases brought in from the field of battle to die, we find the rate of mortality nearly twice that twenty-five per cent. which we before found regulating such operations. This, itself, is a very staggering fact.

At La Charité, Velpeau treated 182 cases; there were 58 fractures, requiring amputation in 26 cases, 10 deaths.

At St. Louis 150 cases of the worst kind were under M. Jobert (leaving out about 100 wounds of soft parts); of these 12 were amputated, followed by 7 deaths, 33 deaths on the entire number of 150.

At St. Louis, under M. Malgaigne's care and that of M. Gosselin, 170 cases were under treatment; both these gentlemen are advocates, I need scarcely say, for the temporizing plan. Of 27 cases under the former, and 25 under the latter, quite analogous to those above mentioned under Velpeau and Jobert, 52 in all, there were 20 deaths.

At the Hôtel Dieu 451 were under treatment, 180 of which fell to the lot of Professor Roux; of these there were 25 deaths in the first twenty-four hours, and 35 at a later period: fully a third more, according to Roux himself, than in the previous revolution. After 11 primary amputations, 6 deaths; after 4 secondary, 3 deaths.

After 79 amputations in various other hospitals there were just 50 deaths.

ULTIMATE RESULTS.

Hospitals.	No. of cases.	Requiring amputation.	Deaths.	Per-centage of deaths after operation.
La Charité ..	182	26	10	38
St. Louis ..	150	12	7	58
	170	52	20	38
Hôtel Dieu ..	180	15	9	60
Various other hospitals ..	..	79	50	63
Total ..	..	184	96	52

The mean of all this gives a mortality (52 per cent.) exactly twice that already arrived at by comparing the result of similar operations in the hospitals in the Peninsula (page 319), and the various hospitals in America; in point of fact, one half of those requiring to be operated on after the late events—notwithstanding our advanced surgery, chloroform, collodium, &c.—falling a prey to the operating knife. I have tried already to explain this dreadful mortality in some way; it remains, however, almost unexplainable. It would be easy to speculate, perhaps, still further, to dwell more at length on the peculiarities of the different men's practice. It seems, however, something very like a foregone conclusion, that we have nothing in point of fact to add to our previous knowledge from such debatable materials. Now, however, that we are likely to have a recurrence of such things in the hospitals of Vienna, it may be well to have marked out, perhaps, the shoals and quicksands.

The facts established by the late events are the following:—

I. The appearance of gunshot wounds depends on the time of the occurrence of such accidents: at an early period, the wound of entry is larger than that of exit. Suppuration, however, once established, a difficulty exists in distinguishing the two. Further on in the process the characters becoming again well marked, that of entry, round, hard, large; that of exit, small, prominent, long granulations closing up the latter before the former.

II. In civil hospitals, contradistinguished from those attached to a moving army, more may be done in the way of saving limbs than has been generally thought possible.

III. With respect to the removal of foreign bodies, splinters, &c., the mass of evidence is in favour of such a mode of proceeding. Exceptional cases, no doubt, like those mentioned by Jobert are sometimes met with; where foreign bodies, however, can be removed they should, even at some little risk.

IV. In cases of hemorrhage of a primary nature, we must act as in ordinary wounds—tie the artery as near the wound as possible; in consecutive or secondary hemorrhage, on the contrary, we must put on the ligature on the main trunk of the vessel, as far from the original wound as may be indicated.

V. Hemorrhages which arise from wounds of soft parts rarely occur after the eighth day; while those, on the contrary, which complicate injuries of osseous tissues come on as often after that period.

VI. Secondary amputation should never be thought of as a thing to fall back on. Amputation should be primary or not at all: secondary amputation, even in cases of sphacelus or hemorrhage, being of more than questionable utility.

VII. *Débridemens*, as the word implies, should be strictly confined to freeing aponeurotic and analogous structures in a state of constriction. In a case at St. Cloud the tendon of the pectoralis major was cut across, and the man left without the use of his arm.

VIII. In matters of treatment, our old English way of doing things seems best: cold water dressings, as a general rule, being preferable to ice; where the skin is broken the latter seems particularly inadmissible, as masking the real danger, and only prolonging the inflammatory process.

IX. As a general rule, the part should be disturbed as little as possible, the pulse and tongue being sufficient indices of the state of health of the patient; foreign bodies of every kind, as regards the wound, should also be guarded against and removed.

X. Operations should never be performed while the patient is in a state of collapse, the state of the system under the effects of chloroform being an exception.

XI. In injuries of the head, the most formidable cases, apparently, are not the most fatal, or the most fatal those requiring most care.

XII. Age and mental exertion seemed to have much to do with the rate of mortality: the soldiers, for instance, according to M. Baudens, were cured with difficulty; the officers, with more on their mind, still more so; the generals were not cured at all.

XIII. Anæsthetic agents have, in almost every instance, proved highly safe and useful.

XIV. The rate of mortality has been much higher than the general experience of such accidents would seem to indicate. Amongst those operated on it has been twice the ordinary average.

This is not the place to enter into any curious disquisitions on the political aspect of matters on the Continent. It will be a matter of no little interest, however, after a little, to compare the results of treatment in the various hospitals on the banks of the Danube with those already arrived at next door to us, we may say, in Paris. If the former confirm the latter, opening up a subject of very novel inquiry as to the increased danger of gunshot wounds in street-firing, it is well for us in these countries, perhaps, that such fine things are going on at a distance. We have been reprobated by Michelet as a people without a single original idea; and my friend Sir Robert Kane, following in his wake, describes the country of his adoption as the asylum for all the "disabled ideas" of the Continent. I hope it will long remain so; though, by the way, I think this scarcely fair, when M. Cabet, the last great gun in Paris, candidly admits that all his political ideas are copied directly from the Utopia of Sir Thomas More; and M. Proudhon's savings banks "without capital" bear rather an ugly resemblance to something else at this side of the world. This, of course, has nothing to do with gunshot wounds, only inasmuch as the latter adding another anomaly to the many already in vigorous growth at the other side of the channel, we are not at all to be astonished.

The hundred days of 1815, and the memorable events of July, 1830, "afforded ample room and verge enough" for the quiet pen of Dupuytren to explain the main facts relative to gunshot wounds. Going over the same ground after him, I have been careful to avoid the points entertained at such length in his well-known treatise. My struggle has been chiefly to get at the facts of the late events; and if I have succeeded, even at the risk of some occasional circumbendibus, my visit has not been without its object.

CONTRIBUTIONS TO PRACTICAL MEDICINE.

By W. G. MAXWELL, M.D., CALCUTTA.

OPHTHALMIA: TREATED BY ANTIMON. POT. TART.

In almost every case of ophthalmia, I now immediately commence the treatment with the tartrate of antimony, in doses according to the age: for adults, one grain or more every two hours, keeping the system fully under its influence.

The full influence of the antimony and the subsidence of inflammation take place simultaneously.

Under the above treatment, in recent cases, the inflammation gives way on the first day.

In cases of longer standing it will subside on the second day. I have seldom found it necessary to

continue the antimony, to the full extent, on the third day.

The time was when I used to be constantly working and manipulating with inflamed eyes, with scarificatory leeches, caustics, brushes, salves, &c., to the distress and agony of the patient, and my own disappointment and failure.

In young people and children this disappointment and failure was much more distressing and annoying. I don't do this now; I don't touch the eyes except with water, giving a bottle to the patient, (or his friends if he has any,) telling them it has wonderful virtues, and to keep the eyes constantly moist and clean with it.

Whilst I am now writing, a case illustrative of the above has just come in for treatment.

VERASAH.—August 7th, 1848.—Recently from Nagpoor; aged thirty; ophthalmia for eight days; much suppuration; intolerance; (was led to my door and left there); is destitute; will not allow me to examine the eyes as I wish, from the pain.

I immediately gave him the antimony tartrate, and kept him full under its influence.

Next day he walked, without being led, from my stables. Can open the eyes without much intolerance. He now allowed me to inspect the eyes. I found a small ulcer near the centre of the left cornea, and the lower limb of the right cloudy. The pupils clear, and iris of each free. The swelling, redness, inflammation, and discharge all much reduced. This is one of those cases (neglected) and of some days' standing, where disorganisation of the organ has commenced, and where mercury must be immediately had recourse to, and which is adverted to in the following contribution.

OPHTHALMIA—INCIPIENT DISORGANISATION.

Induction of speedy Ptyalism with Calomel, combined with large doses of Opium.

I am no advocate for mercury; but cases do occur such as the above, (in No. 2,261,) where it should be given without delay. For this purpose I combine it with opium, increasing the opium, (but not the mercury,) each dose.

Yesterday morning, the patient, Verasah, had

Calomel, gr. v.; iodine, gr. v.; opium, gr. i.

Yesterday evening he had—

Calomel, gr. v.; iodine, gr. v.; opium, gr. ij.

This morning his gums are red, and inflamed, and much swollen, and ptyalism established, the saliva running in a stream; no pain or irritation of the eyes; pus little or none.

Had ptyalism not taken place to-day I would have given him three grains of opium this morning, and four this evening, along with the calomel and iodine; but now all these medicines are omitted, and he will have the following daily, as a tonic and laxative:—

Amorphous quin, gr. x.; acid citric, q s.; sodæ phosphate, ʒss; infus. gent. verticillatæ, c. aromat, ʒii.; saccharum, ʒij.

He has a mild lotion, acidulated with lime juice,* for the eyes.

The action of the mercury (and iodine,) now established, will be allowed to continue for a day or two, or three, as I find occasion; and then this brings me to another contribution, viz., the speedy removal of the ptyalism.

SPEEDY REMOVAL OF MERCURIAL PTYALISM BY ANTIMON. POTASSÆ TARTRAS.

By W. G. MAXWELL, M.D.

Although no advocate for mercury, yet, in many neglected cases, I find that nothing else will do.

Formerly, I was always in dread of salivation. Now, I have no such dread.

Whenever I find the disease has fairly given way to the action of the mercury, I then immediately attack the salivation, just in the same way as I did the ophthalmia at first, with repeated doses of tartrate of antimony, bringing the system fully under its influence.

I give it largely diluted, and as hot as possible, assisted by copious hot diluents, to assist its diffusive influence.

By the evening of the first day the ptyalism is lessened one-half. By next day it is almost gone.

The patient then rests for a day or two, and should any signs of mercurial action appear, a dose of the antimony is given morning and evening.

CASE OF POISONING BY ARSENIC, IN WHICH THE SYMPTOMS WERE DELAYED.

Communicated by THOMAS W. COWELL, Esq., Assistant-Apothecary, St. George's Hospital.

In your last Number, a very interesting case of poisoning by arsenic is reported by Walter Clegg, Esq. On referring to my note-book, I find a case which I think bears well on the question raised by Mr. Clegg at the conclusion of his remarks, viz., the power of opium to retard the symptoms of poisoning by arsenic. Perhaps you may not think the following unworthy of insertion in your next Number.

Peter Welsh, aged forty, a servant out of place, admitted into St. George's Hospital, under Dr. Seymour, at 11½ P.M., Sept. 24, 1844.

State on Admission.—Skin cold; countenance pale and inexpressive; pupils much contracted; pulse feeble; breathing slow, but calm. When roused and spoken to sharply, answers one or two words, but instantly dozes off again. Is supposed to have taken laudanum, most probably as early as twelve o'clock; was sick soon after that time; vomited something resembling coffee. Two empty one-ounce phials, smelling strongly of laudanum, and a quantity of arsenic, were found in his room, together with a paper bequeathing his body to a medical charity. Was seen, about an hour previous to his admission, by a medical man, who gave him zinci sulph., ʒii.: this has not yet operated. The stomach-pump was immediately used; the fluid pumped up was of a greenish colour and sour smell: no smell of laudanum could be detected. After the stomach had been well evacuated, a quantity of mustard-and-water was given. The patient, being very cold and much exhausted, was then put to bed, and mustard poultices applied to the soles of the feet and insides of the thighs.

25. 1 A.M. Has not been sick from the mustard: extremities quite cold; pulse scarcely perceptible; breathing slow, with occasional stertor: has been roused sufficiently to say that he had taken laudanum, and to tell where he lived. An enema, consisting of an ounce of oil of turpentine and fifteen ounces of barley-water, immediately. Small quantities of brandy-and-water occasionally.

2 A.M. Stupor more profound; breathing more stertorous; extremities not quite so cold. Cold water dashed over the face and chest, and immediately followed by friction with rough towels, produces very slight effect.

3 A.M. Incapable of being roused in the slightest degree; pulse very feeble; great difficulty in swallowing; pupils not quite so much contracted, but still not larger than a pin's head. Bowels have not acted. Repeat the injection immediately.

4 A.M. The injection has just brought away a large quantity of dark green fœces—pulse rather more distinct; breathing slower and more laboured.

5 A.M. Cannot swallow, is much lower.

Died at 5¾ A.M.

Examination of body 33 hours after death:—

Body rigid, dependent parts congested, lips and upper parts pale. On opening the cranium the veins and sinuses were found gorged with dark fluid blood: slight effusion of blood in the upper part of both hemispheres, with slight discoloration of the adjacent central matter. Scarcely any fluid in the ventricles. The veins of the cerebellum much congested. The lungs were slightly congested, anteriorly, very much so posteriorly. Left ventricle hypertrophied, much contracted and empty, right side of the heart and the large veins full of dark partially fluid blood. The stomach contained about a pint of green fluid and a quantity of black and white granules adhering to the mucous membrane. The mucous membrane presented only the slightest possible congestion in the parts beneath the granules. The duodenum was healthy and contained no granules. The contents of the stomach were analysed by my friend Dr. Spitta, and evidence of the presence of a large quantity of arsenic obtained both by the fluid and reduction tests.

There may be some doubt in this case, as to whether the effect of the arsenic was simply masked, or actually retarded, by the laudanum; I am inclined to the latter opinion, as not only were the symptoms throughout those of poisoning by opium, but the appearances on the mucous coat of the stomach were most unusually slight when the quantity of arsenic and the length of time (most probably near 18 hours), it must have remained in the stomach, are considered.

MARKWICK'S PATENT EPITHEMS;

Comprising the Substance of a Report on their Uses, Economy, and Superiority over ordinary Cataplasms, Fomentations, &c., made to Sir William Burnett, K.C.H., M.D., F.R.S., &c. &c. &c., Medical-Director-General of the Navy.

By WILLIAM THOMPSON KAY, Esq., Assistant-Surgeon of the Plymouth Division of Royal Marines:

Description of Material.—The *Spongio-piline* is a fabric composed of sponge and wool felted together in three layers, and coated on one of its surfaces with caoutchouc, which renders it impermeable.

Its Capabilities.—It is of the greatest service as a cataplasm, fomentation, vehicle for lotions, and other topical applications, as liniments, &c.; or it forms a substitute for a blister or sinapism.

The Mode of Application.—As it sometimes happens that the epithems procured from the Company do not fit *exactly*, or that the surgeon may be so situated that he is unable to obtain them, it is desirable to know how to form them. This I have usually done by cutting out the pattern in paper first, afterwards in piline, and then stitching or herring-boning the two parts where it is joined. A strip of the fabric, deprived of the piline, is then smeared over the rough surface with oil of turpentine or oil of cajeput, which partially dissolves the caoutchouc; and it is pressed firmly over the joining, to which it adheres, preventing evaporation. This is simple, effectual, neat, and very speedily performed.

As a Cataplasm.—The required form and size being given, the edges are pared or bevelled off with a pair of scissors, so that the caoutchouc may come in contact with the surrounding skin, in order to prevent evaporation of the fluid employed; for as it only forms the vehicle, we are enabled to employ the various cataplasms hitherto in use with much less expenditure of time and money, and increased cleanliness. Thus we may still use the

Cataplasma Aceti, by moistening the fabric with distilled vinegar.

Cataplasma Aluminis, by employing a strong or saturated solution of the salt.

Cataplasma Bynes, by moistening the spongiopiline with thin yeast, and sprinkling the ground malt on its surface, or a rag, previously moistened with the yeast.

Cataplasma Carbonis, by sprinkling the powered charcoal on the moistened surface of the material.

Cataplasma Cerevisiæ, by employing warmed porter-dregs or strong beer as the fluid.

Cataplasma Conii, by using a decoction of hemlock, (one drachm to two pints, boiled to one-half), as in the other cases.

Cataplasma Dacici, by employing the expressed and evaporated liquor of boiled carrots.

Cataplasma Digitatis, by moistening the material with a strong decoction of the fox glove.

Cataplasma Fermenti, by heating the yeast, and moistening the fabric with hot water, which is to be well squeezed out, previous to the absorption of the yeast.

Cataplasma Plumbi Acetatis, by using the lotion of acetate of lead, one drachm to the pint.

Cataplasma Zinci Chloridi, by moistening the material with the solution of chloride of zinc, diluted according to circumstances.

As a Fomentation, by preparing it as recom-

* A sliced lime, baked, and applied with a cloth to the eye, is a popular remedy in India.—W. G. M.

needed for a cataplasm: soaking it in hot water; then pressing out the superfluous fluid, and applying it as hot as possible to the affected part; taking care to replace the one in use, as soon as it becomes dry, by another hot one.

As a Vehicle for Lotions.—On account of the large quantity of fluid that it is capable of retaining without any fear of its escape, it is admirably adapted for the employment of lotions composed of sulphate, acetate, and chloride of zinc, alum and zinc, blackwash iodine, spirit lotions, liquor plumbi diacetatis, &c., the more especially as they do not injure the materials of which it is composed.

As a Vehicle for stimulating Liniments.—In every instance where I have tried this material, it has exceeded my most sanguine expectations, especially as a substitute for sinapisms, by employing the compound camphor liniment, hartshorn, or liquor of ammonia.

As a Blister.—Moistened with liquor of ammonia it will raise a blister in four minutes, being more efficacious than any preparation now in use, as its stimulating action is immediate, and it exerts no injurious effect on the urinary organs, nor is it likely to cover more surface than designed by the medical man.

Superiority over Poultices.—By comparing the two, it is easily seen, that the spongio piline is far superior to cataplasms; thus—

Spongio-piline	Poultices are
Is light,	Heavy,
,, Clean,	Dirty,
,, Sweet,	Sour and fœtid,
,, Compact,	Bulky,
,, Soft,	Hard and unyielding,
,, Economical,	More expensive,
,, Comfortable,	Comfortless,
Retains its moisture,	Soon become dry,
,, temperature	Cold,
Saves time and labour,	Troublesome, and cause loss of time in making.

Superiority over Fomentations.—

Spongio-piline	Fomentations
Is light,	Are heavy,
Retains its temperature,	Soon become cold,
Saves time,	Cause loss of time.

Economy compared with Oatmeal, Linseed-meal, and Bread.—An ordinary linseed or oatmeal poultice, applied three times daily, would consume 9 ozs. per diem; or, for 12 days, 6 lbs. 12 ozs., which would cost from 1s. 11d. for the oatmeal to 2s. 3d. for the linseed-meal, in addition to the linen, cotton, or tow, wear and tear of saucepans, &c.; and a bread poultice, continued for the same time, changed as frequently, would cost 1s. 2d., without lard, oil, or rag usually employed; and in times of scarcity it is certainly better to employ a substitute, if it answers as well, rather than waste "the staff of life." A piece of spongio-piline, 4½ inches square, would only cost 5d., capable of being applied more than 100 times without losing its properties as a cataplasm, would be more comfortable, and save time.

As regards the cost of the material, it will be found that it effects an immense saving in the substances hitherto employed; for instance, by substituting the spongio piline, cataplasms may be obtained of the following sizes and prices:—

			s.	d.
18 inches long,	9½ broad	. .	3	4½
9 ,,	9 ,,	. .	1	8½
9 ,,	6 ,,	. .	1	1½
9 ,,	4½ ,,	. .	1	10½
6 ,,	4½ ,,	. .	0	6¾
4½ ,,	4½ ,,	. .	0	5
4½ ,,	3 ,,	. .	0	3⅜
For the eye	. . . .		0	1

thereby, otherwise, they cost nearly six times as much. There is another reason why this fabric should be favoured on the score of economy—a very great desideratum in the present day—it is simply this: that it is capable of being used more than once, or may be applied to several persons, even if they have ulcers; for by taking the precaution to apply a piece of linen, lint, or cotton rag, between the fabric and the ulcer, absorption of the discharge is generally prevented; but should any purulent matter be imbibed, all fear of danger may be dispelled by immersing it for a short time in the solution of Chloride of Zinc, which does not in any way injure the materials. This is stated from facts, not theory; it has been tried, therefore there can be no question about it. Economy does not, however, extend so far as to cause its re-application so frequently; but it is useful to know that where circumstances render it necessary, it is practicable.

The economy of space in stowage on account of bulk must be great, and very important.

The saving of meal for public establishments, charitable institutions, &c., must be very considerable, for if it is so economical when obtained in small pieces and at a retail price, how much more so, must it be when taken in quantity and at a wholesale rate; for of course the company must make an allowance to charitable institutions when taken in quantity; besides, where it is usual to allow the meal—perhaps oatmeal—to be taken outside to make poultices, there is a chance of its being eaten by being made into gruel, &c., or else sold, which would not be possible if the spongio piline was adopted, and the institution would be thus saved the additional expense of dressings and medicines, caused by the neglect of the leg, breast, knee, &c., under treatment.

Comfort. No one, I imagine, can for a moment question the comfort of this material compared with poultices, after looking at the following table:—

Size of Poultice.		Weight.		Total Weight.	Weight of Epithem	Excess of weight in Cataplasm.
Inches long.	Inches wide.	Cloth.	Meal.			
		dr. gr.	oz.	oz. dr. gr.	dr. gr.	oz. dr. gr.
Eye		1 10	1	1 1 10	0 21	1 0 50
4½	3	4 0	3	3 4 0	1 55	3 2 5
3	3	3 0	2½	2 7 0	1 12	2 5 48
6	4	7 0	4	4 7 0	4 0	4 3 0
11	8	11 16	10	11 3 16	11 16	10 0 0

Compare, for instance, one eleven inches long and eight broad, with the same extent of spongio piline, and it will be seen that the cloth of the poultice *alone* is equal in weight to the piline, thereby leaving a surplus weight of ten ounces to be needlessly endured.

In comparing the two in the foregoing table, I have omitted to mention the weight of the fluid employed, as both the meal and the piline must be moistened; but if taken into calculation it will be seen that the piline has the advantage again, for the meal is rendered much more heavy in proportion than the spongio piline, and absorbs more fluid, though it is incapable of retaining it as long.

Durability of the Material.—Under ordinary circumstances a piece of this fabric may be applied from 50 to 60, or even more than 100 times as a poultice, without any diminution of its good qualities or deterioration of its material. I have frequently applied it more than 60, in many cases 80 or 90 times, and in two or three upwards of 100.

In order to test how far the material would be affected by various agents likely to be employed, as well as many others, I immersed pieces of the piline for 16 hours in the following solutions: tinctures, oils, spirits, and acids; the result was satisfactory.

Hydrochloric Acid.—Caused the backing to shrink slightly, but in other respects it remained unchanged.

Nitric Acid.—The spongio piline was destroyed, but the backing remained uninjured.

Sulphuric Acid.—Partially destroyed the piline and rendered the caoutchouc backing friable, wrinkled, and puce coloured.

Chloroform.—*By immersion*, the backing was dissolved, the piline uninjured.

Solution of Potash.—By sprinkling, the backing was uninjured, caoutchouc backing unchanged, but the cohesiveness of the material partially destroyed.

Naptha.—Dissolved the backing, but the piline was uninjured.

Oil of Turpentine.—Backing dissolved completely, the piline unchanged.

Oil of Cajeput.—Ditto, ditto.

Vinegar of Spanish-fly ....
Solution of Sulphate of copper (℈i ad. ℥j) .....
Tincture of muriate of iron..
,, ,, iodine.
} Discoloured, otherwise unaltered.

Distilled vinegar .....
Sulphuric Æther .....
Solution of acetate of zinc ..
,, sulphate of ,,
(℈i ad. ℥j) .....
Hartshorn .....
Liquor of Ammonia .....
Spirits of Wine (proof) ....
Compound Camphor liniment
} Unaltered.

Solution of chloride of zinc.. } Unaltered, the fluid retained, 39 days, (now wet, October 23rd.)

Its Capabilities of retaining Moisture.—To test its property of retaining moisture, I saturate several pieces, with the following fluids:—

	Days.	Hours.
Solution of chloride of zinc.....	39	0
Solution of acetate of zinc	0	14
Water, hot	0	5
,, cold	0	8
Tincture of iodine	0	4
Tincture of muriate of iron.....	0	10
Distilled vinegar	0	22
Solution of sulphate of copper (℈j. ad ℥j.)	0	14
Compound camphor liniment....	0	4
Spirits of wine (proof).....	0	6
Liquor of ammonia.....	0	4

Conclusion.—Having compared the advantages of the spongio piline with poultices, fomentations, &c., and detailed its numerous uses, I think that there cannot be a doubt of its superiority,—indeed, it is almost useless to speak further in its praise; let those that doubt try it; but try it *fairly*, and they will never again have recourse to the dirty, heavy, sour poultices and fomentations.

The economy of the material in time and money is a great recommendation; and the multiplicity of its uses renders it a most invaluable article to the surgeon.

To a traveller in the East, or any foreign country, far away from the conveniences for making poultices and fomentations, the trouble of carrying meal and rag, and where close stowage is an important object, it is invaluable.

As a means of introducing medicines into the system by absorption, especially as in the case of children who refuse to take such medicines as quinine, aloes, rhubarb, &c., it is especially useful. Having employed it for the last fourteen months, I am enabled to recommend it to the notice of the profession as a means of introducing such medicines as are likely to nauseate into the system, and propose, with the kind permission of the editor of the *Medical Times*, giving some cases treated in this manner.

It must, in time, when more known, supersede both poultices and fomentations, for possessing the advantages of lightness, cleanliness, compactness, flexibility rendering it capable of being fitted exactly to any part, without covering more than is absolutely necessary, freedom from fœtor, softness, economy in labour and money, comfort in not soiling the patient or clothes by oozing out of the cloth as poultices do, and forming a hard dry frame,—are no slight recommendations in its favour.

PROGRESS OF MEDICAL SCIENCE.

ACADEMY OF SCIENCES.

Meeting of October 16. M. Ponillet, in the Chair.

TREATMENT OF CHOLERA.

Dr. Desmyttere, physician of the Insane Asylum at Rouen, stated that towards the end of the epide-

mic of 1832, he had employed with success, for the treatment of cholera, inhalations of oxygen gas, either pure or mixed with a certain amount of air. This method employed during the cold stage had frequently restored animation.

HAEMATOLOGY.

M. Deschamps (of Avallon,) communicated the results of his researches on the presence of copper in human blood. According to that chemist, the existence of copper in the blood could no longer be doubted, and it originated in the vegetable and animal matter employed as articles of food.

ACADEMY OF MEDICINE.

Meeting of October 17. Mr. Royercollard in the Chair.

HOMŒOPATHY.

The Minister of Public Instruction requested to be informed of the opinion of the Academy with regard to a circumstance which had recently occurred in the Hospital St. André at Bordeaux, where a physician, Dr. Léon Marchaud, openly practised homœopathy. Messrs. Chomel,—Andral and Griéneau, De Mussey, were named by the Academy to inquire into and report upon the matter.

THE CHOLERA.—TREATMENT BY THE EXTRACT OF CANNABIS INDICA.

M. Willemin, sanitary physician at Cairo, read a paper on the Epidemic which he had observed in Egypt. In the city of Boulac, the disease raged principally in the northern, and to all appearance the most healthy part of the town. The same circumstance occurred at Cairo, where the north-west portion of the city was chiefly attacked. The Jewish quarter being spared; he accounted for the fact by the prevalence at that period of northerly winds, the influence of which was principally felt by the northern part of the town. The disease was preceded by no cholerine, nor by the manifestation of any peculiar morbid tendency in the population. Cramps were less frequent among the Arabs; and amongst the premonitory systems Dr. Willemin mentioned the frequent occurrence of conjunctivitis, congestion of the liver and kidneys, and constant hyperemia of the lungs were noticed on dissection. In the incipient stage Dr. Willemin had derived considerable benefit from venesection, and he called the attention of the Academy to a medicine, the exhibition of which had in his hands been productive of most satisfactory results. He referred to the extract of Cannabis Indica. The drug was exhibited in the form of a tincture or alchoholic solution, containing one grain to 10 drops; the doses varied from 12 to 30 drops. M. Willemin, himself, was attacked with cholera, and was in a state of complete cyanosis, when 30 drops of the mixture above-mentioned were exhibited to him, when re-action soon followed. M. Willemin was of opinion that the medicine stimulated the nervous centres at a period when their influence was all but suppressed, thus actually preventing the extinction of life.

Meeting adjourned at 5 o'clock.

A NEW DIAGNOSTIC SIGN OF INTERMITTENT FEVER.

(Annals de la Société Med. de la Flandre occ.)

This sign, pointed out by M. R. Vanoya, consists in a peculiar condition of the mucous lining of the lower lid. In a healthy subject this surface presents a more or less vivid red colour; but when intermittent fever has lasted some time in any subject, another appearance is observed, constituted by a pale crescentic line, the extremities of which correspond to the canthi of the eye, and its concave edge embracing the sclerotica: it is visible on lowering the lid and directing the subject to look upwards. This appearance is dispelled by the internal administration of febrifuge medicines, and persists so long as the patient is exposed to a relapse.

THE VIBRATION OF THE THORACIC WALLS,—A DIAGNOSTIC SIGN OF DISEASE. BY DR. MONNERET.

By the term, thoracic vibration, M. Monneret designates the oscillation of the parietes of the chest, perceptible by the application of the hand upon the thorax of a person who speaks or sings aloud. The vibrations are more distinct in the right side than in the left,—and in the interior, than in the posterior regions. The vibration is propagated from the larynx, by the walls of the air tubes, by the solid elements of the thoracic parietes, and by the air contained in the lungs. The larynx is the sonorous instrument, and the phenomena perceptible by the application of the hand, are caused by the propagation of the undulations of sound, through the agency of good conductors. By disease of the chest, the physical conditions of these conductors being modified, the pectoral vibrations undergo changes, which Dr. Monneret has studied for the purpose of discriminating from each other the various alterations of the respiratory organs.

The vibration is increased in pneumonia, and first stage of consumption; it is diminished in pluriay, emphysema, and pulmonary excavations.

In pneumonia thoracic vibration is invariably increased; and to that degree, that even when the signs furnished by anscultation and percussion are still of a doubtful nature, a positive diagnosis may be obtained,—a circumstance peculiarly advantageous in the diseases of infancy, when anscultation is difficult, and its results questionable. The phenomena of vibration are also increased in pulmonary œdema,—a fact testified in the last stages of disorders of the heart. In the first period of consumption when the lung is condensed by the presence of crude tubercular masses, it often happens, that anscultation furnishes only negative signs, or increased roughness of the respiratory murmur, so slight as to leave some hesitation in the mind of the observer. In such cases, says Dr. Monneret, the diagnosis is powerfully assisted by the application of the hand, whilst the patient speaks aloud —the vibration being invariably increased in the diseased regions. Again, in pleurisy, attended with the formation of plastic adhesions and false membranes, no fluid being exuded between the lung and the thoracic walls, the vibration caused by the voice is considerably augmented.

It is on the contrary diminished or abolished in pleurisy when liquid effusion has taken place. The increase or diminution of the morbid secretion are also marked by corresponding modifications in the transmission of sound to the hand. In pulmonary excavations of some extent, the vibration of voice is decreased or altogether abolished; but, on the margin of the cavities, it is on the contrary increased by the condensation of the lung around the ulceration. In pneumothorax, Dr. Monneret had four times occasion to study the vibrations of the walls of the chest, and in all the cases he found them abolished in the regions corresponding to those occupied by the effusion of air. In pulmonary emphysema, also, the undulations of sound perceptible to the hand are diminished,—a fact easily accounted for by the rarefaction of the tissue of the lungs.

Thus, the study of the vibration of the thoracic walls can be made available in the diagnosis of doubtful cases, and forms a valuable addition to the other physical signs of thoracic disease.—*Revue Med.-Chirurg.* D. M'CARTHY, M.D., Physician to the British Embassy.

Arsenic in Furunculus and Acne.—Dr. Schweich, quoted in the British and Foreign Medico Chirurgical Review, has prescribed arsenic with great success in various cases of furunculus, and has found the cure very durable; and the use of the medicine, during which the ordinary diet may be continued, attended with no inconvenience. 4 drops of Fowler's solution morning and afternoon, until a dram has been taken, are given at first; afterwards, the dose is increased to 5 drops per dose, till another dram has been taken; then 6 drops, till the third is attained, and so on. Acne simplex, in which the knotty pustular appearance of the eruption gives it the character of a minute furuncle; and which is often so obstinate, and, when attacking the face of young people, so annoying, yields as readily to the arsenic. The injurious effects of aperients in these affections, leads to the supposition, that the source of the dyscrasis is a specific irritation of the alimentary canal, which is only augmented by the stimulus of purgatives, especially the saline.

Quinine in Puerperal Fever.—M. Ludot, in the "L'Union Med." states, that in three different epidemics at Rouen, quinine given in doses of 5 grains three times a day, and commenced shortly after delivery, appeared to exert a protective power. On the third day, the dose was diminished, and discontinued on the sixth day. In epidemics, when the disease commences immediately after delivery, the medicine should be given without delay on the commencement of labour.

Case of Congenital Absence of the Globes of both Eyes.—Dr. A. B. Williman, in the *Charleston Medical Journal*, says:—The subject labouring under this singular deformity, was presented to his notice, a few months past, by her owner Dr. Mazyck, at his plantation on the Santee river. She is about nine years of age, the last child of a black woman, who has reared a remarkably fine and healthy family, and presents in this relation an exception to that law of hereditary transmission which establishes resemblance between parent and offspring, and most evidently observed in the features of the countenance. At birth, the infant was seen by Dr. Mazyck, and in a few days after by Dr. James Moultrie, and these gentlemen give the following information in relation to the case at that early period. Nothing unnatural was observed in the appearance of the face, except the firm adhesion of both eye-lids on their respective sides, when the attempt was made for the first time, to open them. As the child appeared to suffer slight pain, no violence was used, and at the end of a week or ten days, there occurred a spontaneous separation for a few lines distance along the tarsal margins; very gentle force exercised with the fingers soon completed the rupture of the remaining adherent portion, and the result disclosed the absence of the globes above-mentioned. Ever since the period here alluded to, (about two weeks after birth) the eye-lids have remained separated, and we may state from further recent examination, that these appendages, which are perfect in their formation, and furnished with puncta and eye-lashes are lined as usual with a healthy conjunctiva; this membrane extending throughout the entire inner surface of the orbit, was reflected rather firmly over a more resistant tissue deeply situated (perhaps the rudiments of a sclerotic coat) although beneath this, no protrusion was visible, and a probe passed over its surface could detect no openings. The existence of the orbicular muscles is evident, as their contraction rather inverts than elevates the lids, from the want of that point or fulcrum which is afforded by the globes in their normal state. It seemed also clear, after an examination of several days, that in both cavities there existed the secretion of a fluid resembling the tears, the lachrymal gland being in its normal position, and easily felt by slight pressure. The orbitar margins are well developed below, but at their superior external portion, appear somewhat deficient, giving to the superciliary ridges a slightly depressed form, and to the whole forehead a contracted character, often observed in persons deficient in intelligence. The girl, however, with the loss of the most important of the organs of sense, manifests a singular degree of intelligence in many others. Her disposition is cheerful; hearing is quite acute; and she possesses a remarkable power of distinguishing bodies by the touch, although not to that extent, as has been pretended, of forming ideas of colour in this manner.

Mode of cutting short the Hot Stage of Intermittent Fever.—Dr. Stephen Harris says, in the *Charlestown Medical Journal*:—Opiates alone, are sufficiently decided in their effects to be entitled to high consideration; but when their exhibition is immediately preceded by V.S., the stage of reaction may be cut short in twenty or, at most, thirty minutes. The sulphate of morphia is, perhaps, less objectionable than the crude drug or its tincture. The plan is, to allow the blood to flow until there is a decided decline in the pulse, and immediately upon closing the orifice to administer, if the subject is adult, from one-third to one-half grain of morphia. The effect is most prompt and decisive. The writer has seen an individual labouring under an intense paroxysm of fever, with the skin hot and dry, com-

manifesting a parched and fiery sensation to the touch, excruciating head-ache, and distressing irritation of the stomach, relieved as if by a charm, in ten minutes fall into a profound and tranquil sleep, break out in a full, copious perspiration, and in twenty minutes be free from even a vestige of febrile action. This is the strongest evidence of the theory of re-action, as well as a corroboration of the position, that the malarial influence is lost with the chill. The exhibition of morphia, with some fever subjects, is followed by considerable thirst; and when not premised by V.S., its emetic properties have, in some instances, preceded and impaired in some measure its anodyne qualities; but these are objections which may be readily obviated, and would hardly be placed in the scale with its beneficial effects.* It is scarcely necessary to add, that it is not a preventive of febrile recurrence, and that the quinine is required to complete the cure.

The Diseased Condition of the Tracheo-bronchial Mucous Membrane of the Artisans of Sheffield, and the Statistics of Mortality amongst them.—Dr. D. Craigie, in his elements of General and Pathological Anatomy, remarks: In the town and vicinity of Sheffield two sorts of grinding of edged tools are practised; one, dry grinding on a dry stone, the other, wet grinding on a stone moistened with water. Many articles, as scissors, razors, and penknives, are ground partly on dry stone and partly on the wet stone. Others, as forks and needles, are gound mostly on a dry stone. Table knives are ground principally on a wet stone. Saws, files, and scythes, are ground entirely on a wet stone. Dry grinding is most injurious, and tends most directly and effectually to induce bronchial and pulmonary disease, and thereby to abridge the duration of life amongst the grinders. The dry grinders, therefore, are most speedily destroyed. The life of the wet grinder is often prolonged to a considerable age.

Of 1,000 scissors-grinders above 20 years of age, only 20 attain the age of between 50 and 55 years; only 10 the age of between 61 and 65; and none live beyond the latter age; while of the inhabitants of Sheffield generally, 224 in 1,000 are found living at 65 and above, and in the midland counties 413 in 1,000. Of artisans in this branch 843 in 1,000 die under 45 years of age.

With the fork-grinders it is worse. Among 1,000 fork-grinders, aged above 20 years, not 1 attains the age of 59; while in Sheffield, among 1,000 persons, 155 are living at 59. Of these 1,000 persons, 472 die between 20 and 29 years, 410 between 30 and 39; and the residual 115 are all gone before the age of 50.

Among 1,000 razor-grinders above 20 years of age, 749 die under 41 years of age, the rest mostly between 41 and 60; between 61 and 65, only 5 are living; and after 65 all are gone.

Of the penknife-grinders, not 1 in 1,000 arrives at the age of 60; 731 die before the 40th year; and the rest are all destroyed before the 60th year.

Saw-grinders, file-grinders, and scythe-grinders, who work on the wet stone, are less liable to bronchial disease, and are longer lived. The numbers pursuing saw-grinding are not great. Yet among seventy-eight persons engaged in it in 1843, nine were between sixty and sixty-five, and one died between sixty-six and seventy, and one at seventy-nine.

The number of scythe-grinders is also not great. In 1843, there were thirty; of these, eight were between forty-one and sixty years of age. Both the saw-grinders and the scythe-grinders are exposed to accidents, sometimes fatal, from the breaking of the stone.

The lesions which produce this great mortality are of a complicated character. The most common lesions are chronic inflammation, with thickening of the bronchial membrane, enlargement or dilatation of the bronchial tubes, emphysema, and expansion of the pulmonary tissue.

The bronchial glands are enlarged, or converted into a black, hard, gritty substance, varying in size from half a marble to a large hazel-nut. In dividing these glands the sound emitted is the same as if the scalpel were dividing a soft stone, and the section is black and polished, and grates over the edge of the knife. Such masses are commonly detected in grinders who have belonged to the most destructive branches. Similar soft, sectile, gritty, or stony matter is found in almost every part of the lungs, in portions varying from the size of a currant to that of a bean; adhesions between the pulmonary and costal pleura are also frequent. In some instances the lungs present an appearance as if black currants had been distributed through their whole substance, and accompanied with similar bodies, larger in size, but hard and gritty like them. These currant-like bodies are also observed on the surface of the lungs. They are supposed to consist of the dilated extremities of veins containing some of the solid constituents of the blood.

Tubercles are also occasionally found, with their consequences, vomicæ.

Another state, frequently observed, is engorgement, or infiltration of the lungs with a dark-coloured fluid, which is ascribed to the inhalation of the fine black dust floating in the atmosphere during the operation of glazing.

On the mode of production of these lesions, or the order of their succession, observers are not agreed.

Arctation and Obliteration of the Bronchial Tubes.—Dr. Craigie says, this affection is liable to be confounded with phthisis, and is one of the effects of bronchial inflammation, recurring repeatedly, and becoming at length chronic. In cases of this kind, these walls forming the tubes are distinctly thickened by effusion, either of blood or lymph, or both, into the submucous tissue, and the capacity of the tube is proportionally diminished. In other instances, the presence of indurated or hæmorrhagic portions of lung round small bronchial tubes produces the same diminution in their normal dimensions.

This sort of obliteration, to which may be referred several lesions of the lungs, takes place both generally, or in a space of lung more or less extensive, and, locally, in one or more bronchial tubes. In the former case the substance of the organ, instead of being vesicular or spongy, becomes solid, compact, and impermeable to the air.

To the disposition now mentioned is conjoined another, referable to the surface of the lung, and which denotes the presence of the obliteration. This consists in more or less shrivelling of the pulmonic surface at the point corresponding to the seat of the obliteration. From this it is reasonable to infer that the shrivelling is in some manner connected with the bronchial obliteration. It is, indeed, not difficult to understand how the obliteration of a bronchus not remote from the surface of the lung, involving that of the branches issuing from it, must, by the consequent contraction, produce contraction or shrinking of the pulmonic substance, and shrivelling, more or less considerable, of the surface of the organ at the corresponding point. These shrivelled spots are easily recognised. The pleura is drawn to one or two two points in a series of wrinkles, imperfectly radiated; the surface is perceptibly depressed; and when the part is touched, it is found to be solid, adherent, firm, and inelastic. The most common seat of these obliterations is the upper lobe of the lung, and especially its apex, a fact of which it is necessary to be aware in distinguishing these obliterated spots from alleged healed tubercular cavities. They have been found, nevertheless, in the lower lobe. The blood-vessels are not obliterated, except in the minute branches distributed through the indurated portion. The solid filaments, the relics of the obliterated tubes, are generally of a deep black colour. The causes of obliteration of the bronchial tubes are not positively ascertained. All that is known is this, that obliteration takes place in persons who had laboured under severe, repeated, or long-continued attacks of bronchial inflammation, usually chronic, and those who had attacks of chronic pneumonia. Reynaud is inclined to ascribe the occurrence of the lesion to diphtheral or albumino-facient inflammation of the bronchi; and there is no doubt that the bronchial membrane is liable to this form of inflammation, and that this form of inflammation may produce or terminate in obliteration. He admits, also, that he has met cases of acute pneumonia, with hepatization of the lung, in which the lesion consisted in inflammation which had in all the small bronchi given rise to the formation of false membranes, which filled, more or less accurately, all their cavities.

* As a substitute for morphia, especially with young subjects, the elixir paregoric is recommended.

REVIEWS.

Anæsthetic Midwifery; Report on the Early History and Progress. By J. T. Simpson, M.D., Professor of Midwifery in the University of Edinburgh. Edinburgh: Sutherland and Knox. 1848. Pp. 51.

The discovery of anæsthetic agents was doubtless an important era in the history of medical science, and cannot fail to exert an important influence on future generations. The great object which the surgeon and physician have in view in the practice of their profession, is to alleviate human suffering; and in proportion as they accomplish this, will science become increasingly valuable. For ages the surgeon was unable to perform a single operation, without inflicting upon his patient some pain; while, in some important cases, this was so considerable, that patients chose rather to brave death than submit to the terrors of the knife. Even the fear of suffering has produced the most serious results, as it has caused a depression of the vital powers, which has terminated in dissolution. It must be admitted, therefore, that surgery has had conferred upon it no small boon by the discovery, that certain agents, which temporarily annul sensation, may be inhaled without injury to the patient. Some instances are recorded, it is true, in which death followed the administration of ether and chloroform; but the instances are not sufficient to warrant that these agents should be laid aside, when it is considered how many have inhaled them without serious consequences.

The most remarkable application of anæsthetic agents is in the practice of midwifery; and to Dr. Simpson we are indebted for the discovery that the pangs of child-birth may be assuaged, without impeding the process of parturition. The learned Edinburgh Professor appears to have early directed his attention to this important subject, for we find him, shortly after the "Ether Discovery," using this agent successfully in midwifery practice. The difficulties and disadvantages attending the inhalation of ether were soon discovered, and, by a course of well-directed experiments, Dr. Simpson found that chloroform could be inhaled more easily, while it annulled sensation with the same certainty as ether. His discovery was welcomed by the profession, and he yet labours to convince its members that it may be safely employed in all cases which come under the cognizance of the obstetric practitioner.

In the Pamphlet before us, he has adopted a right course to bring conviction home to the minds of those who are willing to be taught. Dr. Simpson appeals to facts; and we confess that the number which he has collected, from the most unobjectionable sources, is sufficient to prove that chloroform may be employed in midwifery without danger to mother or child. We quote the author's account of the first case in which an anæsthetic agent was employed in midwifery. "The first instance in which the practice was adopted occurred in my own practice in Edinburgh, on 19th of January, 1847. The case was one of deformed pelvis, in which I had pre-determined to extract the child by turning, and to try the inhalation of ether vapour upon the mother, with a view to facilitate that operation. During a week or two previously, I had anxiously waited for the supervention of labour in this patient; for, by the result, I expected that much would be decided in regard to the effect of ether inhalation in parturition. Would it merely avert and abrogate the sufferings of the mother, without interfering with the uterine contractions? Or, would it arrest simultaneously both the con-

tractions of the uterus, and the sufferings that arise from them? As far as the proposed mode of delivery by turning was concerned, it was a matter of no vital importance whether the etherization stopped the uterine contractions or not. And, on this circumstance, depended the eligibility of the case for a first trial of ether inhalation. The result was most satisfactory and most important; for it at once afforded me evidence of the one great fact, upon which the whole practice of anæsthesia in midwifery is founded—it proved, namely, that though the physical sufferings of the parturient patient could be annulled by the employment of ether inhalation, yet the muscular contractions of the uterus were not necessarily interfered with; or, in other words, that the labour might go on in its course, although the sensations of pain usually attendant upon it were, for the time being, altogether abrogated."

We would recommend every obstetric practitioner to read this pamphlet carefully.

Continental Travel; with an Appendix on the Influence of Climate, the Remedial Advantages of Travelling, &c. By EDWIN LEE, Esq., Member of the Principal European Medical Societies. London: W. J. Adams. 1848. Pp. 353.

The author is well known to the profession, as a writer on medical education and reform; but in the exercise of his pen he has not confined himself to subjects more especially pertaining to the healing art. The work before us professes to give information respecting those parts of the Continent which are frequently visited by valetudinarians, and to such persons it will prove useful. It is the fashion with many, whose means will allow them, to undertake "Continental travel" in the pursuit of health, without any suitable guide to direct their journeyings. Mr. Lee has undertaken the duty, and from his experience and observation, is qualified for his task. His book is not one of those "guides" which is as uninteresting as it is useless; but it gives an account of local peculiarities, leading objects of interest, and points having reference to health, in a manner calculated to please as well as to instruct. The remarks on the influence of climate and the advantages of travelling are good. The poetical quotations, however, with which they are embellished, add nothing to their excellence. The "pictures" are villanous works of art, and ought not to have been introduced into the book.

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THE MEDICAL TIMES.

SATURDAY, NOVEMBER 3, 1848.

LIFE ASSURANCE CORPORATIONS.

IT was a noble idea—partaking, no doubt, much of Socialism in its best features—to establish Societies, Unions, Corporations, based on principles so solid as to leave in the mind of the speculative Merchant, —the bold Manufacturing Innovator,—the plodding Mechanic,—the Priest, with an income secure, but limited,—the Lawyer, with briefs flowing in upon him, but in the distance—an uncertain future,—lastly, of the Surgeon or Physician, at times so overpaid, at times so underpaid, for labours most frequently of uncertain character;—it was, we repeat, a noble idea, belonging, however, in its essence, to no race of men or nation, especially, to found Establishments which should leave no doubt in the minds of those associated, that when the last dread summons shall have reached the assured, he may quit the scene of his labours and toils, with an *assurance* that those whom he most loved shall not be exposed to the vicissitudes of life which have marked and chequered his own career. This is one,—the leading idea, no doubt,—the main object of all assured; security for those to benefit for whom the assurance is made; that is, solvency of the social corporations under all circumstances; a Management, or Machinery, whose expenses should not counterbalance the advantages to be derived therefrom; good faith, on the part of those assured, that the corporation insuring was not deceived as to the value of the "life."

Out of these elements, apparently simple, arose a machinery of great complexity; with the struggle sure to arise in all monied and commercial transactions, between the individual and the Corporation, the former doing his best to deceive the latter; the latter, besides using their utmost endeavours to discover the designs of the first, by obtaining from his medical adviser *confidential* returns, so called, we presume, as betraying the confidence his employer has reposed in him; and a thousand other underhand and unhandsome steps, deliberately and advisedly laying numerous traps for the unhappy assurer—contrivances, purposely made to entrap the assured into a forfeiture of his policy, for the behoof of the Company—a war of Jews—men acting in their corporate capacity, in a way which would lead to their expulsion from all respectable society. It was laid down, for example, by some of these worldly-wise men—wiseacres, rather, we think—scraping, spatular-fingered men,—it "was laid down in the policy as a principle, that forfeiture of the policy was to be the penalty of crossing the sea in an undecked boat—of taking opium—of quaffing a dram or two before dinner—of concealing that, before he was 20, he had coughed a good deal, and had spit blood —of passing within the tropical seas—of crossing the Tropic; of fighting a duel, or of being hanged for taking part in a contest for the recovery of his right as a human being, against a corrupt and vicious despotism. Thus, at the moment when a bereaved widow and orphans most require assistance and comfort, the cold-blooded commercial official man points to the clause, and to the cause of forfeiture. "Your husband," says this automaton of figures and statutes, "died by his own hands;"—the policy is forfeited. In vain does the widow protest that he had been insane for some time; or that, in a fit of excitement caused by fear, he leaped a window, or desperately cut his throat, driven to it by the bloodhounds of the "Fisc," the "Exchequer," seeking 60 per cent. of his hard earnings to maintain the dignity of the Court, the administration of the law, and our glorious Constitution in Church and State. One unhappy gentleman we knew, who, in an insane state, though unhappily suffered to be at large as harmless, in attempting to escape from some fancied evil, fell from a window of great height, expiring soon after. A Life Insurance Office, in which he held assurances amounting, I have reason to believe, to many thousand pounds, coolly refused the widow and orphans their just claims, set them at defiance, and engaged to meet her at law. The unhappy lady—as strange as it is true—though well backed by friends, consented rather to accept a paltry gift, than risk a nonsuit with a powerful and wealthy corporation. But such cases are so common, as to require neither notice nor comment; they are, in fact, deliberate legal robberies—all the worse that they are legal.

And yet of the numerous cases of extreme hardship which have come under our notice, we cannot refrain from alluding to two, of recent occurrence, calculated to show alike the folly and the selfishness, not to use a worse term, of those wise and long heads to whom we owe the regulations and statutes of assurance corporations.

A gentleman largely assured, at least for many thousand pounds, wishes to emigrate; to remove his family and self to a healthy colony, the healthiest possible; nothing more natural, than that the father of a large family, not stinted for means, should be desirous of placing that family where the chances of an increased fortune and a greater security of life and health should coincide. But on consulting "the office" he was told that a voyage to the Cape of Good Hope pointed out to them by our friend as the healthiest country in the world, was contrary to *the letter* of his policy of insurance; that by taking such a step he would forfeit the benefit, or at least would require to meet the renewal of the policy by a large additional outlay in the shape of fine! He might proceed, if he liked, to Northern America, however, without any additional expense on the insurance! What was the result? Our friend embarks with his family for the worst managed, we believe, of all our colonies; a country in no way favoured by nature as to climate; with a severe and harassing winter of extraordinary duration; and a summer abounding with ague, typhus, and pulmonary consumption. Speedily the eldest dies of fever; the second is struck with pulmonary consumption; the prospect for the rest of the family may be guessed. And all this misery and hardship arises seemingly from the fact, that "the office" men are persons profoundly ignorant of modern science as regards climateology, but especially expert in devising traps for the simple-minded and the unwary.

Nor can we well omit mentioning the indignation of a most esteemed friend, also a physician, who, having a patient, a man of fortune, but who had suffered himself to become the victim of one of these Corporations, had recommended this gentleman to proceed to the Cape of Good Hope, pressing him to embark instantly, as the only means of arresting and curing the pulmonary consumption under which he laboured, his indignation on learning from his patient that the Directors, forsooth, would not consent to his crossing the Tropic, "under a heavy penalty!" Four hundred pounds fine for being permitted to escape from a country where pulmonary consumption decimates the inhabitants, to one where it is unknown! Four hundred pounds fine for permission to that unhappy gentleman to continue the payment of his annual premiums to the said office for ten years, at least, by escaping to the Cape; instead of by remaining in Britain, closing the policy by one year's payment to them, death to himself, and a loss to the office of some thousand pounds! These Directors would make

good Admiralty Lords. Model actuaries! despising common sense, but strict observers of the letter of the law.

It were a work of supererogation to say more; all business men, we think, must be aware of the anomalies we speak of. But, as in the matter of disease, the public must be more interested in the *remedy* than in the cause, or history, or effects of the disease itself, so here it will be asked, Have you a remedy to propose? For this, though unwilling to offer a hasty opinion on a matter of such moment,—for this state of things, we think, there is a remedy, and a simple one; and we have learned —what did not, indeed, surprise us—that a knowledge of the evils and mismanagement complained of had forced its way into "the Assurance Office" itself.

Statistics of a very different character than those hitherto laid before the public, will be required to prove that it is worth while in any office to establish for the assured more than two schedules, to be called schedule A, and schedule B. In the first may be arranged, in the order of age, all persons seemingly exempt from pulmonary consumption. In the second, namely schedule B, all those who show a tendency, more or less decided towards it, according to their age. Let there be but these two schedules, admitting, however, that as regards typhus fever, an abatement might be made in favour of those who had passed through that dread ordeal. No other disease merits any attention on the part of the Corporation; nor is it worth while to expose any other infirmity of nature for a petty profit on the life of the assured. And why should it not be permitted to any man, to embark without a fine how and when he likes, for any country, whether extra or intra-tropical, leaving to that deep instinct —self-preservation, the safety of the individual, and the probable number of annual premiums to be paid? These hints, beginning, we know, to be acted on secretly by some, we respectfully suggest to the common sense portion of Assurance Corporations; nay, further, we hold it to be detrimental to the interest of Assurance Companies, that they suffer any policy of assurance to become void by the non payment of the premium after a given time. Seafaring men; men of all professions and trades; landed proprietors, with increasing families and limited incomes, are subject to the vicissitudes of life. A policy of insurance, *once effected*, with payment of one, two, or three years' premium, as future experience may suggest, should never cease or determine but with the death of the assurer. How often does it occur to the merchant and the manufacturer that a tide of success rolls in upon him for a time. How easy for him, then, to pay four or five years' premium in advance upon an insurance for a policy which payments he never afterwards can sustain! Why, then, should these sums be forfeited to his family, for the very misfortune which he aimed at avoiding by joining the Corporation, namely, a want of means? Why should not the sum so subscribed remain to his credit, on the books of the Corporation, for the benefit of his lawful heirs, reserving to the Corporation the right, on the death of the assured, to meet the claim on them, by the family of the deceased, in one of two ways: either by restoring to them, with interest, the amount of the original payments, or offering to them the amount insured for, *minus* the annual payments, with interest, the insurer had neglected or been unable to discharge.

It was reserved for the present Government to revive an antiquated law *against the family* of any unhappy man who forfeited his life to "the laws." Such fiendish legislation is of a piece with the smaller doings of Assurance Directors. The man, for example, who, in 1833, assisted a faction to drive out another, under the grossest delusion that ever afflicted humanity, may be hanged, drawn, and quartered, for attempting to remedy the evils of his first delusion. To-day, the man of the *risquons tout* club is a hero; to-morrow, a desperate criminal, according to law. Let it be so. Reid attempted to introduce the "common sense" principle into philosophy, and he failed. The wittiest pen alive, perhaps, the author or authors of the London Charivari, hints at something of the kind, as regards the law. Vain attempt, we fear, recollecting who has occasionally sat on the woolsack, and presided in Doctors'-commons. But be this as it may, all good men are bound to resist the wicked folly of heaping misery on the head of the widow and the orphan, through the real misfortunes or the imputed crimes of the parent; nor does it seem unreasonable to place under the same category the corporate arrangement which punishes the widow and orphan because their only supporter died in an attempt to vindicate the honour of a beloved child; —and the Legislature which brings to the scaffold an unsuccessful political enemy, forfeites his estates, and casts on the world a widow and a ruined family.

IMPORTANT MOVEMENT IN THE UNIVERSITY OF CAMBRIDGE.

The ancient University of Cambridge has awoke from a long slumber. The bright light of the nineteenth century has penetrated the lattices of these venerable halls on the banks of the Cam, where the darkness of a long night had only been feebly illuminated by the dawn of the morning. The best friends of education had almost ceased to indulge a hope for Cambridge, because she looked coldly upon science, and grudgingly rewarded its disciples. The princely revenues of the University had become consecrated to other purposes, and the splendid hierarchy which holds possession of all posts of honour and emolument forgot, in its anxiety to provide for the wants of the Church, to do justice to the claims of the scientific world. Cambridge could not dispense altogether with the form of teaching certain branches of knowledge distinct from theology; but there was no life to give it effect. Hence, as regards medicine, a Doctor's degree from this place was of about as much value, as a test of knowledge, as a diploma from the far-famed Giessen.

While Medicine, however, was dignified with a name and a place in the University of Cambridge, the sciences which owe their greatness to modern discoveries found no official patrons there. This stain the learned men without endeavoured to obliterate. They memorialized the heads of houses; they appealed to the Government; they petitioned Parliament; but all in vain; and it is to their want of success we owe the foundation of the University of London. Even the example of this Institution seemed, for a time, to be lost upon Oxford and Cambridge; and it is only recently that symptoms have been manifested of a concern to promote the interest of the sciences.

Cambridge has always been in advance of Oxford, and it seems from a recent movement that she is determined to keep the lead. On Tuesday last a congregation was held for the purpose of presenting for acceptance of the senate graces confirmatory of the adoption of the report of the Syndicate appointed to consider the best means of affording encouragement to those studies for the pursuit of which professorships have been founded. These, we are led to infer from the report, have been little better than mere sinecures, for the University, by her own confession, has not given that encouragement which she ought to sciences which she now seeks to patronize. The pressure from without has forced the University to do justice to herself, and we now learn that her slumbers in former days were not so deep as to prevent her hearing the public voice, though, for a season, it was apparently disregarded. We are led to understand that henceforth, whatever sciences acquire a high estimation in the world, Cambridge will take under her fostering care. We shall not stop to inquire what motives have prompted the University to this estimable line of conduct,—whether a regard for her own stability, or a growing love for the welfare of sciences; but we would urge that the stumbling-block, which yet lies at the threshold of this venerable institution, should be at once removed. Subscription to the articles "ought not to be enforced on those who seek to study branches of learning, which are daily acquiring more importance in the world." Religious tests are the blunders of a dark age—affording no real security to Christianity, while they may prove injurious to science; and the abolishing of them would neither affect the stability of the Church nor the best interests of the University. This truth is not yet sufficiently understood by the "heads of houses," and therefore we fear that the entrance to this seat of learning will be too straight to admit many who, with best intentions, seek to enter.

The symptoms of improvement which have been already displayed leave us not without hope that the relic of a dark age will eventually be removed. The University, once fairly roused, will not stop short in the work of reformation; and that she is beginning to wake up is evident from the following proposition made by the Syndicate to the Senate, and adopted by a considerable majority in the Black Hooded and Red Hooded houses.

"That a new Honour Tripos be established to be called 'The Natural Sciences Tripos,' the places in which shall be determined by an examination on the following subjects:—Anatomy, Comparative Anatomy, Physiology, Chemistry, Botany.—That the examiners for the Natural Sciences Tripos be the Regius Professor of Physic, the Professor of Chemistry, the Professor of Anatomy, the Professor of Botany, the Woodwardian Professor of Geology; together with an additional examiner, to be nominated by the Vice-Chancellor, and appointed by the grace of the Senate; and, in case any of the abovementioned professors be prevented from examining in any year, deputies to examine instead of them shall be nominated by the Vice-Chancellor, and appointed by grace of the Senate.—That all students who shall have passed the examinations, and kept the exercises required for the degree of Bachelor of Civil Law, or Bachelor of Physic, or who shall have passed the examinations entitling to admission

ad respondendum quæstioni, may be candidates for honours in the Natural Sciences Tripos next succeeding such examinations."

The first examination is to take place in the year 1851.

It may appear, at a cursory glance, that these symptoms of improvement in Cambridge will prove of little benefit to the medical profession. We believe, however, that the University has resources, of which the public are but little acquainted, which, when rightly developed, will prove of great service in promoting medical education. There are ample funds for the support of professors of all the sciences and for the maintenance of a large number of students, who, with minds apt to acquire truth, are without the pecuniary means of prosecuting their studies. There are bursaries and exhibitions open to the diligent youth which will with prudence defray his expenses at College. This fact being but little known, the competitors for these prizes are generally the sons of the clergy, or youths who have received their early education in public schools. As the University adapts itself to the state of the times, the "exhibitions" will become of more extensive benefit, and we hope that Cambridge, instead of following science at a distance, will henceforth embrace her with affection, and strenously endeavour to promote her interests.

THE BOARD OF HEALTH AND POOR-LAW MEDICAL OFFICERS.

The *London Gazette* of Tuesday last contains an official notification from the Board of Health, addressed to certain persons, commanding them to execute certain duties which are calculated to prevent the spread of epidemic, endemic, and contagious diseases. This notification consists of twenty clauses, in which directions are given for the removal of nuisances and the treatment of the sick.

It is evident, from this document, that the duties of the Union surgeons are to be greatly increased; while there is no intimation, from any quarter, that their salaries—already pronounced by the Government to be unremunerative—are to be augmented. This is another of those unjust acts of which the whole profession will justly complain. The Poor-law surgeons ought not to be called upon to perform additional service for the same pay; but either their salaries should be increased, or they should have associated with them, to carry out sanitary regulations, other members of the medical profession.

It appears, from the various clauses of the notification, that the surgeon who is to act as officer of health, will have placed upon him no small amount of responsibility and care. He will have to watch over the surveyors of highways, trustees, county surveyors, and others by law entrusted with the management of public thoroughfares, and to see that these thoroughfares are kept in a state not dangerous to the health of the community. He will have to enter cottages and tenements to see that they are not in an unwholesome condition; and, if such should be the case, he will have to superintend the cleansing and purifying of them. He will have to visit localities where epidemic, endemic, and contagious diseases may have been recently prevalent. He will have to report cases of cholera or other severe maladies to the Board of Guardians; and, should he consider that a disease occurring to a person in a room occupied by one family or more is especially dangerous to those inhabiting the place, *he* must *remove*, or cause to be removed, the patient, or so many of the occupants of such room as he should consider would, unless removed, tend to prevent the recovery of the patient, or promote the spread of the disease. He will have to give directions for the removal of the dead, and to appoint the time of interment of the body. Such are some of the duties which Union surgeons are expected to perform, without any prospect of remuneration for their trouble. Probably the Government thought that the generosity of the guardians would be so great as to leave the medical officer no cause for complaint. But what says experience on this score? Why, that guardians would rather oppress and grind down their medical officers than reward them for their services. They must implicitly obey the commands of their masters, or they will not only be deprived of their appointments, but have an opponent introduced into the heart of their practice. Such has been the conduct of the Upton Poor-law Guardians, who are not singular in what they have done.

But the duties here set forth for the sanitary officer to perform are such as will engross a large amount of time and labour. There ought, therefore, to be a special person appointed, with a stipulated salary, as in the case of the city of London. It is true the notification says guardians *may* so appoint, but they are not compelled to do so; and there is little doubt that they will proceed in their usual economical manner. Medical men must closely watch the way in which this notification of the Board of Health is carried out, and they should be ready to act with unity and promptness, if attempts should be made to get the duties of officer of health performed without paying for them.

THE APOTHECARIES' PHYSIC-GARDEN AT CHELSEA.

[To the Editor of the Medical Times.]

Sir,—Your Correspondent, "A Provincial Surgeon," in a recent number of the *Medical Times*, Saturday, October 14, has chosen rather an unfortunate moment for his reprehension of the Society of Apothecaries, on account of their physic-garden at Chelsea, seeing that they had actually voted, some months ago, seven hundred and odd pounds for the repairs and improvement of that "plot of ground:" and that these repairs were in progress, while "A Provincial Surgeon" was making his inspection, seems to be proved, by his finding "some greenhouses in an unfinished state."

About three or four years ago, an intimation had been given to the Society, that the whole or a part of the physic-garden would be required, on account of great and extensive alterations and improvements, which the Commissioners of Lands and Forests projected on the banks of the Thames; and till something like a definite arrangement could be come to, it was clearly inexpedient to lay out more money upon the garden than was absolutely necessary. When at length it was ascertained that only a small part of the garden, close to the river, would be wanted by the Lands and Forests, the Society immediately had communication with Professor Lindley, respecting the most eligible plan of putting the garden into a more *healthy* condition. About this time, Mr. William Anderson, the principal gardener, who had served the Society for more than 30 years, died, at the advanced age of 80, and the Court of Assistants came to a resolution, that, instead of a gardener, a Curator of the garden should be appointed, in the person of Mr. Fortune, the distinguished botanist and traveller in China, from whose zeal, activity, and intelligence the best expectations were formed.

But the high qualifications of Mr. Fortune pointed him out as the person of all others who could be most properly entrusted by the East India Company with the charge of introducing the tea-plant into the Himalaya Mountains, from the Chinese Empire; and thus the Society was soon deprived of his invaluable services. All his plans and arrangements, however, sanctioned by the very judicious and able advice of Professor Lindley, are now being carried out by Mr. Moore, the present Curator of the Garden at Chelsea, from whose skill and exertions the Society hope to derive the fullest satisfaction.

I really very much commiserate "the sad disappointment" to which your Correspondent "was doomed," in his exploration of "this once celebrated place." Had he been a metropolitan, instead of a provincial surgeon, his "exuberant imagination" would not have painted the possibility of a "little Eden, abounding with choice exotics," in Paradise-row, Chelsea, unless surrounded by a "high dead wall." Nothing short of a "high wall" could possibly afford security to exotics, or other plants, in such a locality.

Your Correspondent justly supposes that this garden "yields very small profit." On the contrary, it is always a great annual expense; but his recommendation, that it should be "immediately let out on building leases," is not quite so easily effected as he appears to think. Had he been acquainted with the tenure by which the ground is held, he would have known that this letting upon building leases could only be effected by an Act of Parliament, which, if obtained, neither would nor could give authority and power "to institute prosecutions against *all the quacks in the Kingdom*."

I remain, Sir,

October 30, 1848. T. D. P.

[We perfectly agree with our Correspondent in his opinion of the Apothecaries' Society. It has done much for the profession, and has greatly improved medical education. Had the Colleges followed the example of the Apothecaries' Society, the question of medical reform would not have been so difficult of adjustment.—[Ed. *Medical Times.*]

TERCHLORIDE OF CARBON IN CHOLERA.

[To the Editor of the Medical Times.]

Sir,—The communications which have lately appeared in your columns on the use of chloroform in cholera, induces me to lay before the profession the results of my experience with the above agent, firmly believing that they will find it far superior to chloroform in its exhibition, and one of the most powerful remedial agents against the approaching enemy. The first time it was employed by me was in August, 1846, in one of those casual cases of cholera which, were it epidemic, would be classed as Asiatic, but which occur, as isolated cases, in the practice of most medical men. The man was attacked with vomiting and purging on the 12th August, 1846. Calomel and opium, with pulv. cretæ comp., was administered every half hour, with the effervescing saline. He continued to get worse,—cramps in extremities, coldness of the surface, rice-water dejections, loss of voice, and blueness of hands and feet. Starch enema had been administered with no benefit. Ammonia, brandy, and creosote had been given by the mouth without producing the least amendment; while considering the case as a hopeless one, it occurred to me to try the terchloride of corbon, which I had previously found useful in cases of hysteria, and if the symptoms arose from some derangement of the spinal and ganglionic nervous system, (an opinion which has been ably discussed, by your talented correspondent, F. A. Bulley, Esq., of Reading,) I almost feared to hope for benefit from its use. Three drops were administered in half an ounce of camphor julep every half-hour; it was retained on the stomach. One grain of solid opium was given with the next dose, and repeated for three doses. An evident amendment was produced in the symptoms; the pulse became more distinct, and he felt as if a glow of heat was extending from his stomach all over his body. I need not further dwell on the case, than to say, that he fully recovered, and that I entirely attribute it to the use of the terchloride. I had an opportunity of again testing its efficacy last week, in the case of Wm. F——, aged sixty-four, three days ill with bilious diarrhœa; symptoms, when first seen, constant vomiting and purging, pulse 95, but feeble; ordered the following:—

℞ Pulv. cretæ comp. ʒij.; aquæ cinnam. ʒiv.; spt. amm. arom. ʒij.; tinct. opii ʒij.; mist. camph. ʒiiiss.; M Ft mist. ft., ʒi. post sed liquid. ℞ Hydrarg. protochlorid gr. xij.; pulv. opii. gr. iij.; M Ft pil. xij. ft. i. omni hora arrow root and brandy.

Saw him again at eleven at night; much worse, vomiting incessant, complaint of cramps in the

stomach and bowels, legs cold and cramped, dejections watery, with flocculi; ordered mustard poultice to region of stomach, and the following mixture:—

℞ Terchlorid carbon 3ss.; tinct. opii 3j.; mist. camphor 3ij.; M Ft coch.; parv. omni quad. horæ.

After taking one dose the effect was, as his wife expressed it, "like magic;" the vomiting and purging ceased, he felt a glow of heat extend over his body, and fell into a quiet sleep of some hours, from which he awoke quite well. I have observed that every person to whom I have administered the terchloride have described the same glow of heat, extending from the region of the stomach over the entire body, from which I infer that its action is exerted principally on the solar plexus and ganglionic nervous centres. Fearing that this communication has extended beyond your limits, I am, Sir, your obedient servant,

JOHN E. BOYTON, Surgeon, &c.

Watlington, Oxon, Oct. 26, 1848.

THE SANITARY CONDITION OF SHEERNESS.

[To the Editor of the Medical Times.]

SIR,—In common with some of the daily newspapers, I find that you have given circulation to an article headed "SHEERNESS," which is a mixture of *some* truth with a *very great portion of misrepresentation*. I trust, Sir, to be able, by next week, to submit to your notice a minute analysis of this extraordinary article; but, for the present, I will content myself with the assurance—on my honour and veracity—the assertion, that Sheerness "is unequalled for filth, &c., in Her Majesty's dominions," is a *gross untruth;* and that the statement that "the offal of a population of 8,000 lies upon the surface of the streets and alleys in a most disgusting form" is equally *untrue*.

I have resided here for 25 years, and am now the senior medical practitioner; and I ask you to insert this letter as an act of justice to a calumniated community.

I remain, Sir, yours truly,

JOHN STAPLES KEDDELL, Surgeon,
M.R.C.S. and L.S.A.

Sheerness, Nov. 1, 1848.

HYDROCELE OF THE TUNICA VAGINALIS BURSTING INTO THE CAVITY OF THE ABDOMEN.

[To the Editor of the Medical Times.]

SIR,—You will oblige me, an old subscriber to your valuable periodical, by an early insertion of the following case.

Yours truly,

W. THOMAS, Surgeon.

Pembroke Dock, October 31, 1848.

"H. G., aged 57 years, a mechanic, has for some time laboured under the above disease, and for which I have repeatedly performed the palliative means of relief, viz., drawing off the fluid with the trocar and canula, he not being willing to undergo the attempt at a radical cure. On Thursday, the 31st August last, the accumulation of fluid had become so troublesome that I arranged for his attendance at my surgery, on the following Sunday morning, to be relieved. During the interim, however, on lifting a heavy weight, he found something suddenly 'give way,' as he described it, and the whole of the contents passed through the abdominal rings into the cavity of the abdomen. Alarmed at the circumstance, he naturally sent for me immediately. I found, as he had stated, the fluid had wholly disappeared. He seemed greatly agitated, but, on my quieting his mind, keeping him quiet, and giving him a little mild aperient medicine, he soon became more reconciled. Not a single untoward symptom arose, and up to the present period he has not suffered in any respect whatever. The fluid is again collecting in the sac."

INSTRUCTIONS OF THE CHOLERA COMMITTEE OF THE COLLEGE OF PHYSICIANS.

The Royal College of Physicians of London, feeling that on the re-appearance of Epidemic Cholera in England, the public may naturally look to them for advice and guidance, have deemed it proper to appoint a Cholera Committee, composed of Physicians who hold important offices in the Metropolitan Hospitals, or who had extensive experience of the disease at its last visitation, to consider what measures it is expedient to adopt with a view of preventing the spread of the disease, and of otherwise mitigating its evils.

The Committee thus formed, have, in compliance with the wish of the College, drawn up the following remarks and instructions, for the information of the public.

1st. Cholera appears to have been very rarely communicated by personal intercourse; and all attempts to stay its progress by cordons or quarantine have failed. From these circumstances, the Committee, without expressing any positive opinion with respect to its contagious or non-contagious nature, agree in drawing this practical conclusion: that, in a district where cholera prevails, no appreciable increase of danger is incurred by ministering to persons affected with it, and no safety afforded to the community by the isolation of the sick.

2nd. The disease has almost invariably been most destructive in the dampest and filthiest parts of the towns it has visited. The Committee would therefore urge on the public authorities the propriety of taking immediate steps to improve the state of sewers and drains; to cover those which are open; and to remove all collections of decaying vegetable and animal matter from the vicinity of dwellings. They would also impress on individuals, especially of the poorer classes, the great importance of well airing their rooms, and of cleanliness in both their dwellings and persons.

3rd. A state of debility or exhaustion, however produced, increases the liability to Cholera. The Committee therefore recommend all persons during its prevalence to live in the manner they have hitherto found most conducive to their health; avoiding intemperance of all kinds, and especially the intemperate use of ardent spirits and other intoxicating liquors. A sufficiency of nourishing food, warm clothing, and speedy change of damp garments; regular and sufficient sleep; and avoidance of excessive fatigue, of long fasting, and of exposure to wet and cold, more particularly at night, are important means of promoting or maintaining good health, and thereby afford protection against the Cholera.

The Committee do not recommend that the public should abstain from the moderate use of well-cooked green vegetables, and of ripe or preserved fruits. A certain proportion of these articles of diet, is, with most persons, necessary for the maintenance of health; and there is reason to fear that, if they be generally abstained from, now that the potato crop has in great measure failed, many persons, especially amongst the poor in large towns, will fall into that ill-condition which, in in its highest degree, is known as Scurvy, and that they will, in consequence, be the readier victims of Cholera. The Committee likewise think it not advisable to prohibit the use of pork or bacon; or of salted, dried, or smoked meat or fish, which have not been proved to exert any direct influence in causing this disease. Nothing promotes the spread of epidemic diseases so much as want of nourishment; and the poor will necessarily suffer this want, if they are led to abstain from those articles of food on which, from their comparative cheapness, they mainly depend for subsistence.

On the whole, the Committee advise persons living in districts in which cholera prevails, to adhere to that plan of diet which they have generally found to agree with them; avoiding merely such articles of food as experience may have taught them to be likely to disorder the stomach and bowels.

4th. The Committee are unable to recommend an uniform plan of treatment to be adoped by the public in all cases of looseness of the bowels, supposed to be premonitory of cholera. It is, doubtless, very important that such ailments should be promptly attended to; but since they may arise from various causes, of which a medical man can alone judge, the Committee deem it safer that persons affected with them should apply at once for medical assistance, than that they should indiscriminately use, of their own accord, or on the suggestion of unprofessional persons, powerful medicines, in large and frequently repeated doses. Should the looseness of the bowels be attended with feelings of great exhaustion and chilliness, the person should, of course, be placed in a warm bed, and the usual means of restoring warmth to the body be assiduously employed, until professional advice can be obtained.

5th. In order that the poor may have the means of obtaining such assistance promptly, the Committee recommend that the proper authorities should at once establish Dispensaries in those parts of the town which are remote from the existing medical institutions; and that they should also take steps to provide distinct Cholera Hospitals, which it will require some time to organize, and which they believe will be found to be absolutely necessary, should the epidemic prevail in this metropolis with a severity at all approaching that which it manifested on its first appearance in England. The Committee wish it to be clearly understood that they do not recommend the establishment of such cholera hospitals, on the ground of effecting the separation of the sick from the healthy, and of thus preventing the spread of the disease; but solely in order that, should the epidemic prove severe, proper attendance and prompt treatment may be insured for the sufferers from cholera among the poorest and most destitute class. The existing hospitals, even if the authorities should consent to the admission of persons ill of cholera, could not furnish the requisite accommodation, unless they were shut against persons labouring under other severe diseases; a measure which, at the approach of winter especially, would add much to the distress of the poor.

6th. In conclusion, the Committee would urge on the rich, who have comparative little fear for themselves, the great duty of generously and actively ministering to the relief of the poor, while the epidemic prevails; bearing in mind, that fuel, and warm clothing, and sufficient nourishment, are powerful safeguards against the disease.

They deem it most desirable, that the parish authorities should at once improve the diet, and increase the comforts of the poor under their charge; and that the wealthy should form Societies for the supply of food, clothing, and fuel, to those who, though not paupers, still need charitable assistance in the present emergency.

Such measures, which it is the duty of those possessed of power and wealth to adopt, would, the Committee believe, if liberally carried out, deprive the Cholera of half its victims.

JOHN AYRTON PARIS,
President.

FRANCIS HAWKINS,
Registrar.

College of Physicians,
October 28th, 1848.

SUGGESTIONS ON THE TREATMENT OF CHOLERA PATIENTS.

Addressed to the Parochial Boards jointly by a Committee of the Royal College of Physicians and the Royal College of Surgeons of Edinburgh, and Dr. Sutherland, the Commissioner of the Board of Health.

I. At the district dispensaries there should be kept, not only the medicines, but the other materials requisite for the treatment of the disease, in the houses of the poor. Such as straw mattresses, blankets, vessels for heating sand or salt, spirits of turpentine, and cloths for applying it, mustard for cataplasms, coals and wood for firing; but these are to be given out only on the orders of medical men who have seen the patients. There should also be the necessary messengers, materials for fumigation, and the means of conveyance to hospital.

II. On an application to one of these dispensaries from a patient reported to have diarrhœa, the attendant will proceed thus:—

1. He will issue directly twelve of the pills containing opium, hereinafter specified, with directions to give two immediately, and repeat them every three hours while the diarrhœa lasts; but if there be along with it vomiting or cramps,—every hour while these symptoms last, until the medical man arrives.

2. He will give directions for applying external warmth by all available means,—blankets, hot bricks, hot sand or salt, turpentine, or mustard poultices, on the abdomen and extremities, bottles of hot water laid alongside the patient, frictions with hot flannels, and as warm covering as possible.
3. He will direct that the patient drink nothing for a quarter of an hour after each dose of the pills, but that at that interval after each dose, he take a table-spoonful of spirits with hot water, or two table-spoonfuls of spiced wine; and if his skin is felt to be cold and damp, repeat this every half hour.

   N.B.—In the cases of children who are from 10 to 14 years of age, he will be careful to direct half the quantities both of opiates and spirits, and in younger children proportionally smaller doses.
4. He will give the address of the medical man attached to the district where the patient is, and direct that he be immediately informed of the case, and if necessary send a messenger to inform him.

The following pills may be kept constantly at each station, and the medical officers may leave general directions as to the selection of one or other of these in the first issues to the patients :—

℞ Acet. plumbi, ʒ ss.
Opii, gr. xii.
Conserv. ros., q. s. ft. pilulæ xvi.
Sign. Lead and opium pills.

℞ Tannini, ʒ ss.
Opii, gr. xij.
Pulv. capsici, gr. xvj.
Conserv. ros., q. s. ft. pilulæ xvi.
Sign. Astringent pills with opium.

℞ Calomelanos, ʒ ss.
Opii, gr. xij.
Pulv. capsici, gr. xvj.
Conserv. ros., q. s. ft. pilulæ xvi.
Sign. calomel and opium pills.

The doses of all these should be as above directed. Along with these, in the early stage of the disease, and when the skin is cold is cold and damp, such a stimulating mixture as the following, besides the wine and spirits, may be used :—

℞ Ætheris sulph.
Spirit. ammoniæ aromat. ana. ʒ ss.
Tincturæ cinnamom comp. ʒ i. (Misce.)

Sign. Two teaspoonfuls to be taken every half-hour or hour.

III. The medical officers should be reminded of the paramount importance in this disease of early and assiduous treatment and careful watching of the patients, by themselves or trustworthy assistants, in the early stage; the objects being, if possible, to prevent the patient falling into the state of collapse, or if he should, to bring on re-action as speedily as possible.

Concurrent testimony is in favour of opium, as the most powerful remedy, provided it to be given in full and repeated doses within the first twelve hours—at furthest within the first twenty-four hours from the attack—if possible before there is collapse, certainly before there is the tendency to stupor, which is to be expected after the collapse.

When re-action has taken place, and the tendency to stupor shown itself, the further use of the opium and astringents requires much caution, and the case must be treated as one of febrile disease, particular attention being paid to the quantity and quality of urine passed.

IV. When removal of the patient to hospital is thought necessary, it should be effected in the recumbent posture; and the litter employed should be so constructed and managed, as to secure, as far as possible, protection and warmth during the removal. Litters of this kind are kept at the Cholera Hospital, Surgeon-square, and at the Royal Infirmary.

V. When the first patient affected in a house, particularly if crowded, dirty, and inhabited by destitute people,) has been removed or has died, or in the case where some of the members of the family are of no use for the assistance of the patient, the Medical Officer will consider of the advantage of removing the remaining or less useful members of the family—and when the locality is damp or ill-aired, or the cases have occurred in rapid succession, some of the neighbours—without delay into one of the Houses of Refuge prepared for their reception; experience having shown that when this measure has been promptly adopted, successions of fatal cases in the same family, such as have already occurred in at least eight of the places where the disease has recently appeared in Edinburgh, have very generally been averted. If this measure is assented to by the family, he will give immediate notice to the Officers of Police in his return of the case, that the house may be taken charge of by the Police, and thoroughly cleansed. Some objection to this measure on the part of the affected families may always be expected at first; but a little explanation, and a little experience of its effects, will very generally surmount the difficulty.

BOOKS RECEIVED DURING THE LAST MONTH.

Clinical Lectures on the Practice of Medicine. By Robert J. Graves, M.D, M.R.I.A., &c. Second edition. Edited by J. Moore Neligan, M.D., M.R.I.A., &c. In two volumes. Dublin: Fannin and Co. London: Longman and Co. Edinburgh: Maclachlan, Stewart, and Co. 1848.

Chemistry no Mystery; or, a Lecturer's Bequest; being the Subject matter of a Course of Lectures. Edited by Dr. Scoffern. Second edition. London: Arthur Hall and Co.

Clinical Midwifery; comprising the Histories of Five hundred and forty-five Cases of Difficult, Preternatural, and Complicated Labour. With Commentaries. By Robert Lee, M.D., F.R.S., &c. Second edition. London: John Churchill. 1848.

Hints towards the Formation of a more Comprehensive Theory of Life. By S. T. Coleridge. Edited by Seth B. Watson, M.D., &c. London: John Churchill. 1848.

The Diagnosis and Treatment of Eruptive Diseases of the Scalp. By J. Moore Neligan, M.D., M.R.I.A. Dublin: Hodges and Smith, Grafton-street. 1848.

Etiological, Pathological, and Therapeutical Reflections on Asiatic Cholera, as observed in Europe, Asia Minor, and Egypt. By A. Henriques, M.D., F.R.C.S.L. London: Hippolyte Bailliere. 1848.

On the Employment of Chloroform in Dental Surgery, its Mode of Exhibition, &c. By Francis B. Imlach, Dentist, &c. Edinburgh: Sutherland and Knox. London: Simpkin, Marshall, and Co. 1848.

Plain Directions for the Prevention and Treatment of Cholera. By Thomas Allen, M.R.C.S.E. Oxford: J. Vincent. London: H. Renshaw. 1848.

On Functional Diseases of the Liver, associated with Uterine Derangement; embracing the Consideration of Special, Physiological, and Pathological Relations, hitherto unnoticed. By Butler Lane, M.D., M.R.C.S.E., &c. London: Henry Renshaw. 1848.

A Letter to Lord Morpeth and the Members of the Board of Health, on the Question, Is Cholera Contagious, or not? By William Reid, M.D., &c. London: Highley. Edinburgh: Maclachlan and Stewart.

Practical Observations on the Nature and Treatment of Cholera; with Advice on the Precautions to be adopted during the Prevalence of the Disease. By G. H. Bell, F.R.C.S.E., &c. Edinburgh: Oliver and Boyd. London: Simpkin, Marshall, and Co. 1848.

The Homœopathic Treatment, and Prevention of the Asiatic Cholera; with an Historical Survey of its Treatment by the Homœopathic Practitioners of the Continent, during its last appearance in Europe in 1831, and subsequent years. By R. E. Dudgeon, M.D., Ed., &c. London: G. Bowron.

Cholera: its Electrical Origin, Electro-Galvanic Phenomena, and Treatment by Isolation and Oxygen Gas. By H. Holmes, M.D., M.R.C.S. London: John Churchill. 1848.

Proceedings of the State Medical Convention, held in Lancaster (U.S.), April, 1848; and Constitution of the Medical Society of the State of Pennsylvania; then adopted.

The Microscopic Anatomy of the Human Body, in Health and Disease. Illustrated with numerous drawings in colour. By Arthur Hill Hassall, M.R.C.S.E., &c. London: S. Highley. 1848. Part 14.

On the Influenza; or, Epidemic Catarrhal Fever of 1847-8. By T. B. Peacock, M.D., &c. London: John Churchill. 1848.

On the Treatment of Ulcers in the Leg without Confinement; with an Inquiry into the best modes of effecting the permanent Cure of Varicose Veins. By H. T. Chapman, F.R.C.S., &c. London: John Churchill. 1848.

Wonders displayed by the Human Body in its Endurance of Injury. From the Portfolio of Delta. With etchings by the Author. London: H. Renshaw. 1848.

Register of Cases of Cholera, professional attended. London; John Smith, Government Stationer.

On Femoral Rupture; its Anatomy, Pathology, and Surgery: with a New Mode of Operating, applicable to Cases of Strangulated Hernia generally. With Plates. By John Gay, F.R.C.S.E., &c. London: S. Highley. 1848.

Social Distinctions; or, Hearts and Homes. By Mrs. Ellis. Nos. 10 and 11. London: J. and F. Tallis.

The Transactions of the Provincial Medical and Surgical Association. Vol. XVI. Part 1. London: J. Churchill; Sherwood and Co.: Worcester: Deighton and Co.

Ninth Annual Announcement of the Baltimore College of Dental Surgery.

The American Journal, and Library of Dental Science. Baltimore: Armstrong and Berry.

The American Medical Examiner, and Record of Medical Science. Nos. 42, 43, and 44. Philadelphia: Lindsay and Blakiston.

Reports on Asiatic Cholera in Regiments of the Madras Army, from 1828 to 1844. With Introductory Remarks on its Mode of Diffusion and Prevention, and Summary of the general Mode of Treatment in India. By Samuel Rogers, F.R.C.S., Surgeon of the Madras Army. London: Pelham, Richardson, and Samuel Highley. 1848.

The Pharmaceutical Journal.

Cuvier's Animal Kingdom. London: W. S. Orr and Co.

A Practical Treatise of Chemical Analysis, including tables for calculations in Analysis. By H. Rose. Translated from the French and from the fourth German edition, with notes and additions, by A. Normandy. In two volumes. Vol. II. Quantative. London: W. Tegg and Co. 1849.

Practical Introduction to H. Rose's Treatise on Chemical Analysis. Illustrated by synoptic tables and numerous formulas. By A. Normandy. London: W. Tegg and Co. 1849.

Provincial Medical and Surgical Journal.

Dr. Clay's Obstetric Record.

Some New Views respecting Asiatic Cholera. By Arthur Leared, A.B., M.B. London: H. Bailliere. 1848.

Observations on Malignant Cholera, intended to illustrate the natural course of the Disease, the natural processes by which a spontaneous recovery is effected, and the mode of Treatment best adapted to second the curative efforts of nature. By Andrew Buchanan, M.D., &c. London: J. Griffin and Co. Glasgow: R. Griffin and Co. 1848.

Remarks on Chloroform in Alleviating Human Suffering. Addressed particularly to the female sex, showing that there is no Scriptural authority to interdict its administration for the mitigation of physical pain under any circumstances. By W. H. Bainbrigge, Esq., M.R.C.S.L., &c. London: S. Highley. 1848.

Ethnological Journal for November.

An Introduction to Practical Chemistry, including Analysis. By J. E. Bowman, Demonstrator of

Chemistry in King's College. London: John Churchill. 1848.

Reflections on Organisation: or, Suggestions for the Construction of an Organic Atomic Theory. By H. Ireke, A.B., M.B., &c. Dublin: James M'Glashan. 1848.

JAMES BIRD, ESQ., ON MEDICAL REFORM.

Continued from page 344.

Does not the qualification for a fellowship include a certain amount of practice, although not for profit, but practice in the hospital?—Of course it does.

What is called educational practice?—Exactly.

You do not think that any great amount of practice is necessary to test the merits of a person aiming to be a Fellow of the College?—I am not competent to give an opinion upon that point. I think a protracted period of study, particularly if it is faithfully carried out, will necessarily indicate superior qualification.

At the conference which was held between the representatives of the different bodies, namely, the College of Surgeons, the Society of Apothecaries, and the National Institute, was it agreed and distinctly understood in terms that there was to be a perfect reciprocity of rights of practice between all the medical and surgical Colleges of the United Kingdom?—Perfectly so, on the conditions laid down in these principles, that equal attainments should entitle all parties to reciprocity of practice.

And that that equality of attainments was to be left to be tested by examination, subject to the supervision of the supreme council?—Subject to the supervision of the supreme council.

And at the conclusion of your conferences, you did not understand that any objection to such an arrangement existed?—I did not.

So far as the question of registration is concerned, might not the same advantages be secured to the public by the existing institutions, by establishing a register which should be filled up by persons who had received certificates from the Apothecaries' Society and the College of Surgeons?—I think there is a considerable difficulty; and there always will be a difficulty, so long as the Society of Apothecaries remains as a licensing body. Ever since the year of 1815, there has been a bone of contention between the Scotch and Irish graduates and the Society of Apothecaries; the Scotch and Irish graduates have always considered that it would be a loss of dignity to be obliged to conform to an examination before the Society of Apothecaries of this country.

You consider the difficulty to lie rather with the Apothecaries' Society than with the College of Surgeons?—I think that constituted one difficulty; as respecting the Scotch and Irish graduates receiving the license from Apothecaries' Hall, they felt that it was in some respects derogatory to them; and, in fact, they did not like to submit to an examination before the Society of Apothecaries, who had no power whatever of admitting them without examination under their Act of Parliament.

I understand from your previous evidence, that, in fact, the College of General Practitioners comes entirely into the place of the Society of Apothecaries upon an improved system?—It comes in the place of the Society of Apothecaries, by assuming to itself the functions that are now exercised by them.

But with improvements?—Of course, with the improvements which the general practitioners contemplate.

I observe that in the title of the National Institute, the word midwifery is introduced, and I also observed, from what you read from the proposed form of the charter, that special allusion was made to the practice of midwifery; I understand that that is a branch of the profession which is considered to have been rather neglected in the public institutions?—Precisely so.

In fact there has been no opportunity of proving the qualification in midwifery?—No; the Society of Apothecaries have instituted examinations on midwifery, but they have not been particularly searching examinations.

I believe that there is no course of lectures delivered upon clinical surgery in the College of Surgeons?—There is no clinical practice; there are lectures upon various subjects delivered at different times during the year at the College of Surgeons; but there is no hospital attached to that society, and therefore there cannot be any clinical practice.

Therefore there is no course of lectures on clinical surgery, as the subject of a separate course, as there is in the Universities of Edinburgh and Dublin?—No.

Is it proposed in the Society of General Practitioners to supply that deficiency?—We hope to do so in time.

By a course of lectures belonging specially to the College of Genefal Practitioners?—It is intended, in the event of our getting a charter of incorporation, to take all those subjects into consideration, and to afford every possible facility for improving the qualifications of medical men in that respect.

If the College of General Practitioners were to establish a course of clinical lectures, or any other courses of surgical lectures in which the College of Surgeons may now be deficient, that would in some sort, in fact, be superseding or usurping what ought to be the proper attribute of the College of Surgeons?—We should not be prevented from instituting any educational course that we might think necessary.

I think you stated, that, after a certain time, all members of the College of Surgeons would be required to enrol themselves in the College of General Practitioners?—It is contemplated that immediately after the passing of the Act of Parliament, every future member of the College of Surgeons must do so.

Would there not be great objections on the part of those gentlemen who intended to devote themselves to the practice of what is called pure surgery, to enrol themselves in such a college?—We apprehend that there would be no member of the College of Surgeons wishing to practise pure surgery. It is difficult to define what pure surgery is. The Fellows of the College of Surgeons, if they thought proper to practise as pure surgeons, might call themselves pure surgeons if they pleased; but I think very few of them practise it. We repudiate the idea that general practice depends upon the dispensing of medicines. General practice consists in practising in medical cases as well as in surgical cases, and in practising midwifery.

What advantage do you think there would be in compelling persons who did not intend to dispense medicine, but intended to confine themselves entirely to the surgical branch of the profession, to enrol themselves in a society which embraced a very different profession?—There would be this advantage, that it would be only in virtue of the qualification derived from being a member of the College of General Practitioners, that he could practise in medical cases; and as the surgical practice in this country is, nine-tenths of it, in medical cases, it would be necessary that he should belong to that college that gives him the qualification to practise in medical cases.

Is not pure surgery, according to the strict meaning of the word, confined merely to a manual art?—Not entirely; it has become a science, and it is cultivated as a science, as new discoveries are made, and in proportion as new modes of operating are discovered, the efforts of the pure surgeon should be directed more towards the cure of diseases than the mere performance of an operation.

So that it would not be safe to allow the practice of pure surgery, independently of medical qualification?—Undoubtedly, that is exactly the feeling that the parties who advocate the establishment of this college entertained,—that inasmuch as they had no power to make the College of Surgeons institute such an examination in all departments of the profession, as would render a person competent to undertake general practice; so did they deem it necessary to form a new institution that might remedy those defects in the constitution of the College of Surgeons.

But at the same time it is desirable that there should be every means of encouragement given to the perfect learning of the science of surgery?—Undoubtedly.

Is there any objection to having the charter, which you have read to us to-day, printed on the short-hand writer's notes of the proceedings?—Not the slightest; it must be taken as a proposed charter that has not been entirely assented to by the conference; there are one or two points that are still in abeyance, but the general principles have been all agreed upon.

We are to take it as the imbodied views of the National Institute?—Exactly so.

Will you allow me to call your attention to some part of your examination; one of the members of the Committee inquired what would be the course that an Irish or Scotch graduate would have to take to be admitted to practise here, supposing the charter passed, and an Act of Parliament passed, also constituting what you proposed; you explained that he would have to be admitted a member of either of those two colleges, and then to be admitted a member of the second, before he would be entitled to register, and to practise in this country, and also that he was to pay certain fees, which have not yet been ascertained?—Precisely.

The principles which have been agreed to by the four branches of the profession, as I may call them, in this country, only apply to England in the first instance?—Yes.

It is also provided, in those principles, that the questions of Irish and Scotch colleges and graduates shall be open for further consideration, and that those principles shall be modified accordingly?—Certainly.

Supposing that the members of the colleges of Ireland shall object to pay any fee whatever to you, considering that the fees they have already paid for their own degrees are not only equal in amount to what you charge for your degree here; but that their qualifications, in a professional point of view, are fully equal to the qualifications that either of the colleges here require; do you conceive, that if they shall stand on that ground, it is possible so to modify your principles that there can be a general amalgamation and reciprocity of practice between the two countries?—I conceive there may. I do not think the question of fees would ever operate as a barrier to a general amalgamation; every possible facility, I think, is contemplated on the part of the Conference, for the admission of Scotch and Irish graduates to equal privileges, on their adducing proof that they have got equal qualifications. I believe that it is most desirable that there should be an enrolment in the college of the country in which the practitioner intends to practise; there would be many advantages in that; he would be amenable to the bye-laws; he would conform to the regulations of that college; he would have access to the libraries and museums, and the lectures that may be given by that college; and he would be, in point of fact, a member of the same fraternity as those with whom he is practising.

You are quite aware that the question I have just put to you is one that has been weighed with great care and attention by the collegiates of both Scotland and Ireland?—I am.

If I understand your statement correctly, it is this; that the principles agreed to by the four heads of the profession in this country, and the proposed charter which you have read, and the Act of Parliament, which it is also proposed to have passed for enforcing and imbodying those principles, have, in the consideration they have received at the conference up to the present time, been relative solely to an arrangement as regards this country?—Relative solely to an arrangement as regards this country.

Then the door is quite open to whatever modifications or changes may be found necessary as it regards the medical gentlemen of both Scotland and Ireland, in order to have a perfect reciprocity of practice?—Certainly.

I understood you to say that it was necessary, in order to practise and be registered, that a man should become a member of the College of Surgeons not practising, and receiving his diploma as a fellow, without ever having practised at all; is not that the case?—There would be no object in his

applying for a diploma as a member, if he contemplated going up for a fellowship at the age of 25.

If it was necessary for him to register and practise as a member of the College of Surgeons, he would then, of course, become a member of the College of General Practitioners; but if he does neither, because he wishes to follow out rather his educational course of practice and study, he may become a fellow of the college without ever having becoming a member of the College of General Practitioners at all?—Yes, or even a member of the College of Surgeons at all.

Can he be a fellow of the College of Surgeons without being a member?—Yes, certainly.

Then, in order to be a member of the College of Surgeons, he must be also a member of the College of General Practitioners?—Certainly.

At the conference was the question entertained, whether, supposing the medical gentlemen of Scotland and Ireland should also propose to get a charter incorporating the general practitioners of those countries, and that a medical man from England wished to reside and practise in either Scotland or Ireland, he would have to submit to the same routine, to the same admission as is embraced in the principles adopted here, in the country where he wished to practise?—Certainly.

That was in contemplation?—Certainly.

Do you prefer the title of General Practitioner to that of Surgeon Apothecary?—Individually, I think the title of Surgeon Apothecary is more explanatory, more definite.

Do not you think there are many objections to the adoption of a charter under the title of General Practitioners?—The public do not, at the present moment, know so well as it is to be hoped they will hereafter know, the title of "General Practitioner;" I understand that it has been already introduced into an Act of Parliament as applied to medical men, namely, the Passengers' Act; it states there that every ship shall be required to carry either a physician, a surgeon, or a general practitioner. Now, the title General Practitioner is certainly very objectionable; but it is to be hoped that it will become quite as much an accepted term in reference to a particular class of the medical profession as the term "Solicitor" has become in reference to a certain branch of legal practitioners.

But why abandon the well-known, expressive, and correct term of "Surgeon Apothecary"?—The feeling throughout the country was strongly opposed to the title of apothecary; that was the principal reason.

Was there an objection to the term "surgeon apothecary?"—There was to the term "surgeon apothecary;" numerous discussions took place in our very large Committee upon the subject, and the term "general practitioner" was the one most accepted; I believe it was put to the vote on one or two occasions, but we certainly felt, I must confess, a vast deal of difficulty in reference to the title.

Was the term "apothecary" considered to denote an inferior grade in the profession?—It was intended to denote an inferior grade; but the term "apothecary" alone would never do as applying it to the general practitioners of this country, because they are not apothecaries alone; they are surgeons as well as apothecaries.

Is the term "surgeon" understood to include midwifery?—It is not understood to include midwifery.

But you understand that midwifery belongs to the surgical profession?—I do.

You were understood to say that there were some points in that charter which you read, that did not meet exactly with the full approbation of the apothecaries?—There were some points, as it now stands at present.

Perhaps you will advert to those points; are they of importance?—It was the point to which an honourable Member directed my attention when I was reading it, that we have abandoned the five years; that has arisen from the circumstances of the National Association merging into the Institute, and from the bye-laws of the Institute, and the constitution of the Institute; the bye-laws were framed upon the same principles as the bye-laws under the charter would have been framed, as nearly as possible; we endeavoured to make the Institute a preparatory step to obtaining the charter, and we made the bye-laws conform, as nearly as we could, to what we thought the bye-laws ought to be under the Charter of Incorporation; it being a voluntary Institution, it was found that we had no right to limit the franchise of any body in the election of members of the Council; that every member of the Institute, in virtue of his being a member, should have a voice in the election of the Council. It was a voluntary Association, and, therefore, we could not affix a period at which they should acquire the franchise; but when we canvassed the profession upon a former occasion, an opinion was most unequivocally expressed in favour of a five years' franchise; and it is upon that point that the Apothecaries' Society, as appearing at the Conference, think that we are wrong in proposing to give the franchise to every member of the college in the first instance.

GOSSIP OF THE WEEK.

THE CHOLERA.—In the metropolis eight cases (of which one was fatal) were reported yesterday. The following were the returns from Edinburgh:—

"Sanitary Department of Police,
Edinburgh, Oct. 29, 8 p.m.

"CASES OF SPASMODIC CHOLERA AUTHENTICALLY ASCERTAINED BY THE SURGEON OF POLICE.

PLACES.	Cases.		Deaths.		Recoveries.		Remaining.
	Since last report.	Since Oct. 4.	Since last report.	Since Oct. 4.	Since last report.	Since Oct. 4.	
Edinburgh..	5	136	5	86	—	15	35
Newhaven..	—	34	—	22	—	8	4
Leith.....	7	92	5	44	2	22	26
Total.....	12	262	10	152	2	45	65

"Additional localities in Edinburgh—None.

"GEORGE GLOVER, Surgeon of Police."

Eighteen cases were reported on Tuesday in the metropolis, of which seven were fatal.

The following is the last return from Edinburgh:—

"Sanitary Department of Police,
Edinburgh, Oct. 30, 8 p.m.

"CASES OF SPASMODIC CHOLERA.

PLACES.	Cases.		Deaths.		Recoveries.		Remaining.
	Since last report.	Since Oct. 4.	Since last report.	Since Oct. 4.	Since last report.	Since Oct. 4.	
Edinburgh..	10	146	10	96	1	16	34
Newhaven..	—	34	—	22	—	8	4
Leith ...	6	98	2	46	1	22	30
Total ...	16	278	12	164	2	46	68

"Additional localities in Edinburgh—St. Mary Wynd, Cross Causeway, Coltbridge.

"GEORGE GLOVER, Surgeon of Police."

WOOLWICH, Oct. 30.—Three new cases have been reported as having taken place on board the Unité hospital-ship, from 12 o'clock yesterday to 12 o'clock to-day, and two have been reported as discharged. There have been no deaths, and the new cases are now stated to have assumed a milder form than hitherto prevailed. Almost all the cases of deaths, and even attacks, amongst the convicts, have occurred amongst those who have been subjected to punishments or confinements in the black hole, or whose constitutions have been greatly injured by their previous course of life.

Nine cases of which seven were fatal, were reported in the metropolis yesterday.

The following is the last return from Edinburgh:—

"Ten cases had occurred at Portobello, of which five were fatal.

"Sanitary Department of Police,
Edinburgh, Oct. 31, 8 p.m.

"CASES OF SPASMODIC CHOLERA AUTHENTICALLY ASCERTAINED BY THE SURGEON OF POLICE.

PLACES.	Cases.		Deaths.		Recoveries.		Remaining.
	Since last report.	Since Oct. 4.	Since last report.	Since Oct. 4.	Since last report.	Since Oct. 4.	
Edinburgh..	11	137	4	100	—	16	41
Newhaven..	—	34	1	23	—	8	3
Leith.....	1	99	—	46	—	22	31
Total.....	12	290	5	169	—	46	75

"Additional localities in Edinburgh—Jamaica-street.

"GEORGE GLOVER, Surgeon of Police."

WOOLWICH, Nov. 1.—There was one new case reported up to 12 o'clock yesterday, and one death up to 12 o'clock to-day, making a total of 48 admitted, 15 deaths, 16 discharged as recovered, and 10 convalescent. The death which occurred to-day was of an infirm patient, paralytic in one leg, and was owing to a relapse. The fatal illness lasted 118½ hours. The deceased was about 60 years of age, if not more, as most of the prisoners at that time of life appear ignorant of their precise ages. There are still two severe cases under treatment; one of the sufferers is aged and infirm, and the other young, but feeble and sickly. Dr. Dabbs, surgeon of the Unité convict hospital ship, reports that the disease is certainly on the decline.

THE CHOLERA.—PLYMOUTH.—The Board of Customs have very prudently transmitted to this, and, we conclude, to all other ports, a set of "rules to be observed by the officers of Customs in the event of the appearance of cholera." These rules are prepared by Dr. J. O. M. Williams, M.D., F.R.S., Surgeon to the Honourable the Board of Customs, and are more especially addressed to tidewaiters, lockers, and weighers, who are recommended, when afflicted with any premonitory symptoms (however slight) at once to report themselves to the surgeon. Besides general advice as to the cleanliness of their dwellings and persons, their diet, clothing, and bedding, there are four or five useful medicinal prescriptions in both Latin and English.

PLEASANT WAY OF PREVENTING CHOLERA.—Dr. Downing prescribes a very pleasant dietary as a preventative of cholera. Egg, chop, chicken, at breakfast; mutton, beef, eggs, tripe, rabbit, minced veal, light puddings, at dinner; plain seedcake, at tea; if luncheon or supper be required, then a chop or a few oysters; and at intervals during the day, wine and grog at discretion. Very comfortable fare—if you can get it.

ENGLAND'S EPIDEMICS.—"Englishmen," says a foreign writer, "are always mad—about one thing or another." We are never without our epidemic "fear, favour, or affection." In King James's day we were worried by witches. Our grandmothers were bitten, in the time of Oliver Goldsmith, by mad dogs. Canals and Clairvoyance, Railways and Reform Bills, have periodically excited us; and "The French" have for centuries kept us in an intermittent fever. Even within the last twelve months, the prospect of a French invasion put us into a panic; from which we were only relieved by the arrival of King Louis Philippe in a cock-boat, under the *alias* of "Mr. Smith!" Our present epidemic is "The Cholera," the fear

of which (we are thankful to say) is frightening us out of our filth, and enabling the more sagacious of our druggists, from London to North Shields and Gateshead, to turn an honest penny by the sale of "cholera medicines," prescribed by the Board of Health for "premonitory symptoms." The most pleasant preventive, however, is that of Dr. Downing, beginning with coffee and cold fowl for breakfast, and ending with oysters and grog for supper!

WOOLWICH, Oct. 26.—There was not a single new case or alteration of any kind in the medical report of the Unite convict-ship, yesterday. There have, however, been two deaths this morning, one about 4 o'clock, and one about 8 o'clock, a.m. The town and parish still remain free, with the wind blowing from the south-west; and its being in that quarter since the removal of the convicts to opposite the dockyard has tended to allay the fears of many of the inhabitants that the cholera might prove of a contagious nature.

SHEERNESS.—A case of cholera occurred on the 22nd inst., which proved fatal at half-past 9 o'clock the same evening. The deceased was named George Budd, and was one of the crew of the Ganges who had been serving in the Myrmidon steam-vessel, at Woolwich, until her commander commissioned the Teazer steam-vessel.

EDINBURGH.—CHOLERA IN 1832 AND IN184g.—It is generally supposed that the present visitation of cholera is spreading much more slowly over this city than the former epidemic did. How far this is from being the case, the following statement will show:—The first return of the Board of Health in 1832 is dated the 22nd of February, up to which time five cases had occurred. On the 24th of March, more than a month after, the total number reported was only 42. On the present occasion, the first case occurred on the 4th of October. Since then there have been, in twenty days only, in Edinburgh alone, 80 cases. Nor does the severity of the disease appear to have diminished. Of the 80 cases, 55, or more than two-thirds, have already proved fatal; while of the 42 of the first month of the last epidemic, 22, or about one-half, died. In 1832, the reports terminated on the 16th of December, there having been no new cases for some days previously; so that the disease remained about 11 months. The largest number attacked on any one day was towards the close of the epidemic, viz., on the 4th of October, when 45 new cases occurred, there having been 44 on the previous day, after which the daily attacks fell to their usual average of 6 or 8. The whole number attacked, up to the 16th of December, was 1,886, of whom 1,065 died.

CHOLERA BELTS.—On Wednesday last, the troops in this garrison received orders to wear the "cholera belts" for the future. They are composed of flannel, and cost 2s.—*Athlone Independent.*

CHOLERA AT MALTA.—On the 18th of October no cases of sudden death had been reported for some days amongst the troops, and the medical gentlemen are of opinion that cholera has not yet appeared in the island. The tranquillity of the public is once more assured and their minds set at rest by the discovery of the cause of the late epidemic by Mr. Cohen, who, fully acquainted with the fort, imagined that stagnant water from the sea and drains might exist in or under a magazine formerly closed by the then town-major, General Balneavis, as the focus of a disease similar in its effects and consequences to that which recently raged. Mr. Cohen communicated his views to General Ellice, in command of the troops; the *locale* was immediately visited, and the stagnant water found. Means were immediately taken, by throwing in quicklime, &c., to disinfect it, and the result has been, that a remedy has been found to check the evil.

CHOLERA IN THE EAST.—*Turkey.*—The accounts received from Constantinople by the last mail, announce that the cholera is gaining ground, the daily mortality averaging nearly two hundred. The bazaars are nearly deserted; business is very dull, especially among the cotton merchants. It raged with great violence at Smyrna, where the mortality exceeded a hundred daily; at Magnesia, Trebizond, Bourssa or Broussa, and Konieh, where its ravages were frightful. The population is estimated at about 30,000, and the town is built almost entirely of wretched mud huts. Here, it is said, in five days, nearly 4,000 fell victims to its attacks. Sivas, the ancient Sebaste, was nearly exempt from it, but Rhodes and Cyprus appear to have been visited severely; for at Nicosia, the population of which is about 3,000, the deaths exceeded 80 per diem.

Greece.—Athens appears to have escaped a visitation of cholera, but ague and dysentery prevailed when we received intelligence by the last mail. Tripolozza, noted for its gloominess and bad climate, had a few cases of diarrhœa and sporadic cholera; but at the time of the departure of the mail from Athens, no intelligence of any fatal cases had been received. At Skiathos, out of 140 attacked, only 64 had died.

Syria and Palestine.—Aleppo, Antioch, Tripoli, Latakia, Homo, Hamah, Beyrout, Sidon, Damascus, and Scanderoon, have been visited with unusual violence by the epidemic. At Damascus, the deaths are reported as varying from 500 to 600 daily. Aleppo averages 150; Antioch about 50 daily. However, it appears to be on the decrease.

Malta.—There were only 2 cases at Malta when the mail left on the 18th inst. They were not severe.

CHOLERA AT SMYRNA has quite disappeared. The mortality has been to the extent of nearly two-thirds of those attacked, and is as under:—

	Attacked.	Died.
Ottomans	1,642 ..	1,212
Jews	716 ..	303
Greeks	546 ..	429
Catholics	182 ..	145
Armenians ..	126 ..	105
Grand total ..	3,212 ..	2,194

THE HAGUE.—In the cholera hospital at this place 44 patients have been received; of these 18 have died, three have recovered, and the remainder are still under treatment.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the science and practice of Medicine, and received certificates to practise, on Thursday, 26th October, 1848:—James Henry Lakin, Hattleid; Atherston Warwicks; Edward Gylles Crooke, Edinburgh; William James Williams, India; Henry Potter.

THE following gentlemen were appointed at the Michaelmas General Quarter Sessions for Gloucestershire Visiting Medical Officers for the various Lunatic Asylums in that county:—William Philpot Brookes, M.D., Cheltenham; Gilbert Lyon, M.D., Clifton; Charles Cornwall, Esq., Fairford.

WESTMINSTER HOSPITAL.—A meeting of the committee of management of this hospital has been recently held in the board room. The report stated that there had been admitted during the past year 1751, in-patients, and 10,172 out-patients, and there is a ward for the reception of seven incurable patients. For want of funds, four wards, capable of containing 64 beds, are closed. During the last year the following bequests had been made to the hospital. Miss Ann Colyer, 2,000*l.* three per cents.; a gentleman who did not wish his name to appear, 500*l.*; Mrs. Elizabeth M'Pherson, 500*l*; Sir Simon Howard, bart., 500*l.*; Miss Harriet Churchill, 200*l.*

METROPOLITAN CONVALESCENT INSTITUTION.—Last week a meeting of the board of directors of the above institution was held at their offices in Sackville-street, Piccadilly. The report stated that the asylum at Carshalton, Surrey, was founded for the temporary residence of the convalescent and debilitated poor. It was announced that Her Majesty and Prince Albert had become patrons of the institution, and had also sent a donation of 100*l.* During the past half-year 325 patients had been received. There were now 56 inmates. The building fund amounted to 1,500*l.* The total receipts of the past year had been 1,203*l.* 6s. 5d. The payments 993*l.* 2s. 6d.

MEDICAL LECTURES IN THE UNIVERSITY OF OXFORD.—Dr. Lee's Reader in Anatomy commenced his elementary course of lectures on General Physiology, the 27th ult., at 1 o'clock, in the Anatomy-school, Christ Church. The Clinical Professor of Medicine, commenced his lectures on Wednesday, Nov. 1, at the Ratcliff Infirmary, at 11 o'clock.

THE PUBLIC HEALTH.—We are glad to learn that the public health of the city still remains in a most satisfactory state; and that scarlatina, which prevailed amongst the younger members of the community, is abating. As to adults, we may select the case of the police force, a class of men who are subjected to exposure and hard work every hour of the night and day; and we learn that their general health has not been in a better state for twenty years. Including the lighting and other departments, there are about 600 men employed in this force, and one day last week there was not a single case of sickness amongst them. As yet, we have heard of no case of cholera in this town.—*Glasgow Chronicle.*

SANITARY CONDITION OF LAMBETH.—It is not possible (says the *Times*) to pitch upon any locality, in the vilest purlieus of London, where there is a more villanous and wanton accumulation of fever-breeding hoards than in Fore-street, Lambeth,—cow-houses, piggeries, dung-stores, teeming their nauseous contents partly into the river, but principally into the narrow, dark, confined, ever wet and muddy street, which is literally crammed with a wretched population; and perhaps the street is not quite the worst of the pestilential roost, for from the street there branch off numerous alleys, many not even paved, in which the miserable inhabitants look more like ghouls and maniacs than human beings. But the consummation of horrors is to be found in the numerous (and lately much-increased number of) bone-stores. To these plague-houses bones are brought by butchers and dustmen (and perhaps by sextons) in every imaginable state of putrefaction; and, to make the hellish charm "the fatter," there are huge vats and cauldrons in which these bones are made to undergo some stewing process, by which some profitable extract is obtained. Then there are grinding machines, by which the *residuum* of the stew is reduced to some comminuted form. Again, now and then a Yorkshire vessel (such is called a billy-boy) may be seen lying taking in her cargo from these places; and these vessels do not close their holds when thus loaded. They drop down the river reeking like floating dung-hills with the heated and fermenting masses contained in their holds, the steam rising in a dense volume; and not only is the stench suffocating in the immediate vicinity of the craft, but it is a well-known and easily-proved fact, that the freight of such a vessel is known at the distance of many miles by those whose course happens to be under the lee of any of these manure carriers.

MARCH OF INTELLECT—A woman who died last week in one of the London workhouses, bequeathed her corpse to a lecturer on anatomy, with a remark that dissection would render her body of far more service to her fellow-creatures than it had ever been during her life.

CURIOUS IMPORTATIONS.—Mrs. Somerville states that the honey-bee, now spread over the whole American continent, was only introduced, comparatively, a few years ago; and that the common fly was unknown in some of the South Sea Islands till it was carried thither by European ships; but it has now become a plague.

HORNET'S NEST, AN ANTISPASMODIC.—Dr. T. T. Lockwood, of this city, at a late meeting of the Buffalo Medical Association, stated, that, when practising in the country, he had frequently prescribed hornet's nest, as an antispasmodic, and that particularly in whooping cough, he had found it to exert more influence in controlling the paroxysms and shortening the duration of the affection, than any other remedy he hnd ever tried. We suggest the employment of this article, especially to our brethren in the country, where the article can be readily procured, in order that its therapeutical value may be more fully tested. Will some of our classical friends invent a classical name by which to distinguish it, in season for its

formal induction into the Materia Medica?—*Buffalo Medical Journal.*

A Learned American Doctor.—The municipal regulations of the city of New York require that the physician attending every case of disease, which proves fatal, shall deliver, in writing, a statement of the cause of death, for registration. The following has been handed us by a friend, who states that it is a literal transcript of the cause of the death of a patient, as registered, in the language of the medical attendant:—"This woman was died, because she did die, and she was die of vickness and could not live."—Dr. Vanderhiden.

Epidemic among the Troops in China.—During the month of August, increased sickness has prevailed amongst the troops, the 95th Regiment suffering severely. No positive or satisfactory cause has been assigned for the epidemic.

Medical Education in the United States.—At a convention of the physicians of South Carolina, held in February last, it was stated, that the term of lecturing in all the Medical Colleges of the United States was far too short to enable the different professors to do that justice to their subjects which their importance demands, and that it is too short to enable students to receive the amount of instruction which should be contained in a course of lectures. The admission into the American Colleges is much too easy. The examinations for the degree of M.D. are not generally conducted with sufficient care to insure the ends contemplated by their institution.

Blistering Agents in the United States.—There are several species of *meloe* that blister, found in America. The species most commonly employed, is the lytta vittata, or cantharides vittata of the U.S. pharmacopœia. It feeds principally on the potato vine, and at a proper season of the year may be collected in considerable quantities. The insect has a very near resemblance in its outward form to the Spanish fly, but is rather smaller and of a different colour. When applied to the human skin, the effects of the potato fly are analogous to those of the Spanish cantharides. They are collected in considerable numbers about the foot of the potato plant in July or August, are easily caught, and are prepared for medicinal purposes by shaking them from the plant into hot water, and afterwards drying them in the sun's rays. Cantharadin has been found in this fly. The odour of these animals becomes much more powerful at certain seasons; and persons sitting under the trees on which these insects then are, are apt to be attacked with ophthalmia and ardor urinæ.

Physicians and Patent Medicines in the United States.—At the State Medical Convention, held in Lancaster in April last, it was resolved that any physician who shall procure a patent for a remedy or instrument in surgery, or who deals in nostrums, or who prescribes a remedy without knowing its composition, or who hereafter shall give a certificate in favour of a patent medicine, shall be disqualified from becoming a member of a county society.

Execution Extraordinary.—Pursuant to his sentence, Thomas Brennan was hanged in front of the gaol yesterday forenoon. The hangman gave him less than the usual fall (about ten feet), but, strange to say, the jerk severed his head from his body, and both fell to the ground. We do not remember having heard or read of a similar occurrence. The rope used on this occasion was of the ordinary thickness, and the decapitation in all probability was in consequence of disease.—*Niagara Chronicle*, Oct. 5.

A Female Physician.—The "Marchioness of San Milan Teemen" is practising medicine at Cheltenham on mesmeric and clairvoyant principles. No better field for quackery and humbug than "a watering-place."

The Surgery Laws in Russia.—The regulations enforced upon chemists are severe, and extremely inconvenient to persons who, like myself, may require their little travelling medicine chest to be refurnished. In my own case I was peremptorily refused, unless I brought a regular prescription, signed by a local physician. No law can be more effective for the prevention of the sale of poisons, nor more beneficial to the faculty, by annihilating all quacks and empirics, and thus compelling the sick to have recourse to the legitimate practitioner. I found a similar regulation in force in Denmark also.—*Life in Russia.*

Lunatics.—The Alleged Lunatics' Friend Society, which has been in existence three years, has restored to liberty some scores of persons, who, but for its interference, would at this moment have been unjustly incarcerated in lunatic asylums.

The Cercle Médical of France, the meetings of which had been suspended during the late disturbances, has recommenced its sittings, which will be continued for the future every Wednesday evening.

Female Prostitution in Paris.—The prostitutes of Paris are subject to medical examination at certain times. Those registered used to be examined at their own houses; they are to go henceforth to the dispensaries. Unregistered females, who formerly were compelled to submit to examinations twice a month, must now do so three times in that period. There are also occasionally a clearing of the streets, so that females out after a certain hour are carried off to the hospital, where they are examined; and, if any marks of disease are found, the girls are detained. With all these precautions, the French metropolis abounds with venereal cases.

Consumption of Opium in England.—According to commercial statements it appears that the quantity of opium imported into this country is on the increase. Take the month of May, for instance. In 1847, during this month, 3083 pounds were admitted, whilst during the same month of the present year the quantity amounted to 7029 pounds. We trust that the progress made among the lower classes in habits of temperance, in a great measure owing to the valuable abstinence societies, is not counterbalanced by an increase in the number of persons addicted to that worst of vices, opium-eating. This matter deserves investigation.

MORTALITY TABLE.

For the Week ending Saturday, Oct. 28. 1848.

Causes of Death.	Total.	Average of Five Autumns.
All Causes	1,107	1,154
Specified Causes	1,106	1,149
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	455	270
Sporadic Diseases:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	36	52
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	114	127
Diseases of the Lungs, and of the other Organs of Respiration	120	222
Diseases of the Heart and Blood-vessels	26	38
Diseases of the Stomach, Liver, and other Organs of Digestion	61	67
Diseases of the Kidneys, &c.	10	12
Childbirth, Diseases of the Uterus, &c.	7	14
Rheumatism, Diseases of the Bones, Joints, &c.	12	8
Diseases of the Skin, Cellular Tissue, &c.	1	2
Old Age	34	64
Violence, Privation, Cold, and Intemperance	19	32

TO CORRESPONDENTS.

"A Member of the College."—It is a matter in which we cannot interfere.

"Medico Chirurgus."—The second part has been published.

"A Student."—The action is but slightly retarded by iodide of potassium and the arseniate of potash and soda.

"Mr. James."—We cannot comply with the request.

"A Subscriber."—There is no such work that we know of.

"Ajax Junior."—Our Correspondent can be admitted by paying the usual fee. The Secretary should be addressed.

"Mr. B."—We cannot say that the article will suit us till we see it.

"Statim."—It is a crystalline substance called smilacin.

"Esculapius" will see that the promise has been fulfilled.

"Sycorax."—The abuse shall be examined into, or noticed if persisted in.

"S. G. P."—Our foreign numbers are sent with the greatest regularity; the fault must be at the Post-office.

"Amicus" is right in his opinion; no such change has been introduced.

"Mr. M'Intosh's" letter contains valuable information, for which we are obliged.

"J. G., Glasgow."—We do not know.

"Agricola."—The answers must all be in the negative.

"A Subscriber, Sligo."—Existing rights will be maintained.

"Lucius" draws our attention to the many communications which appear in the "Daily Times," on the cholera; and wishes to know if the remedies proposed can be relied on.

"N. S. N."—At present not decided.

"A Sanitary Reformer."—(1) The defect has been noticed, and probably will be remedied in the next session of Parliament. (2) No fixed salary.

"A Medical Assistant."—We cannot suggest a remedy.

"M. D., Dublin."—Certainly; the fact is now established beyond a doubt.

"Mr. Lewis."—The ultimate distribution of vessels is the same in the glands without ducts, as in the true glands.

"Mr. Davies."—Yes.

"Inquisitor" is not a legally qualified practitioner.

"Fidelis."—The difficulty would not be overcome by adopting the suggestion of our correspondent.

"A Bristolian."—"Hoblyn's Dictionary of Medical Terms."

"Humanitas" sends us a long letter, reprobating the practice "of wantonly experimenting on animals." He suggests, that before a surgeon operates upon an animal for the sake of experiment, that chloroform should be given to it.

"A General Practitioner of Twelve years' Standing" should address a note to G. Ross, Esq., at the Hanover-square Rooms.

"A Member of the College."—We fear there is no prospect at present of "the Charter of the College being so altered as to meet the wants and wishes of two-thirds of the members."

"A Surgeon."—The appointment is not worth seeking after.

"Censor," condemns the practice which some medical men in London adopt, of placing their diplomas in their shop-windows. It is certainly an unprofessional mode of proceeding, and ought to be abandoned.

"A Correspondent."—The discovery is not new. It has been long known that some animals are not affected by poisons which prove speedily fatal to others.

"Noel."—About four or five grains daily.

"Q. E. D."—We should require our correspondent's name in confidence, before we could accede to the proposal.

"An Old Subscriber and Correspondent."—The communication is declined.

"An Irish Apothecary."—The certificates will be received by the English Apothecaries' Society.

"A Staunch Friend," is thanked for his communication.

"Physiologist."—Press of matter compels us to decline the offer.

"A Practical Surgeon."—The medicine has been frequently exhibited, without any beneficial results. Our correspondent must be able to cite many more cases before his statement will be relied on.

"Omicron" is thanked for his suggestions, which are valuable.

"Junior" writes us as follows:—"The cover of your Journal this week presents an Advertisement for a House Surgeon to the Portsmouth, Portsea, and Gosport Hospital, at a salary of £40 per year. The Committee in the discharge of their duty to the cause of charity and humanity require testimonials from the candidates. It will be satisfactory to every conscientious member of the profession to learn, through the medium of your periodical, that the Honorary Medical Officers of the Hospital, are not parties willingly consenting to offer to their younger brethren such paltry remuneration for their services."

"Mr. H. Perry, Stonehouse, Devon."—We will endeavour to make arrangements as suggested.

"A Country Reader, and a Reader of the 'Medical Times, Devonshire."—We are not surprised at the unjust act.

"Dr. Gore, Limerick," shall receive an answer next week.

Letters and communications have also been received from A Member of the College; Medico Chirurgus; A Student; Mr. James; A Subscriber; Ajax Junior; Mr. B.; Statum; Esculapius; Sycorax; S. G. P.; Amicus; Mr. M'Intosh; J. G., Glasgow; Agricola; A Subscriber, Sligo; Lucius; N. S. N.; A Sanitary Reformer; A Medical Assistant; M.D., Dublin; Mr. Lewis; Mr. Davies; Inquisitor; Fidelis; A Bristolian; Humanitas; A General Practitioner of Twelve Years' Standing; A Member of the College; A Surgeon; Censor; A Correspondent; Noel; Q. E. D.; An Old Subscriber and Correspondent; An Irish Apothecary; A Staunch Friend; Physiologist; A Practical Surgeon; Omicron; Junior; Mr. H. Perry, Stonehouse, Devon; A Constant Reader; A Country Reader, and a Reader of the "Medical Times," Devonshire; Dr. Gore, Limerick; Mr. W. Thomas, Pembroke Dock.

ORIGINAL LECTURES.

LECTURES
ON
THE RACES OF MEN.

By ROBERT KNOX, M.D., F.R.S.E.
Lecturer on Anatomy, and Corresponding Member of the French Academy of Medicine.

(Continued from p. 50.)

HISTORY OF THE CELTIC RACE CONTINUED.

THE CONTINENTAL CELT.

THE CELT IN FRANCE.

The present Republic of France may be said to be composed, nearly, of men of a pure Celtic origin. Politically, it is wholly so; for the fragments of other races—as the primitive Wendes; the Basques; the Pelasgic; the Mediterranean, or Corsican, and Sardinian; finally, the Frank, that is, German or Saxon—form but an inconsiderable portion of her warlike population. It seems to me better that the other races of men should know this—that, at present, France is the most formidable power on the earth; and that another struggle with her, entered on unadvisedly, might not again be withstood by England. The homogeneity of her population, their warlike character, their passion for national glory, but, above all, the accidental union of the principles of political unity as a race, and nationality as a territory, render her, at this moment, an overmatch for the world. It is a delusion of a dangerous character, to say to England that Russia and France are, like herself, composed of many races: this is not true. France is chiefly—considered politically, wholly—composed of *one race*; it is the same with the Muscovite. A section of the Slavonian, it is true, is nominally subject to the Muscovite (Sarmatian); but they are but nominally so, and not dangerous. The Mongol and Tartar races, which acknowledge the sway of the Muscovite, are feeble, dispersed, barbarous, and becoming extinct. It is better, I think, that the European nations — England included — should know this, and act upon it. Had the great element of race been admitted and acted on some years ago, it is questionable if Vienna would now have been in the hands of a half-German mob; Berlin without a Government, its Crown Prince hiding himself, for a season, somewhere about Buckingham Palace; and a great dynasty driven from its throne by a handful of students and workmen. Let us hope, then, that for the future, sounder and larger views may be taken of late events, called startling merely by those who will not or cannot read the story of man aright. The struggle now commenced in southern Europe, between the Slavonian and German races, had, it would seem, been long foretold on the Continent. I was not in the least aware of this, when I delivered my first lecture at Newcastle three years ago. I had myself foretold the approaching struggle many years ago, but none of my countrymen paid the smallest attention to the views I had adopted. The mere mention of the "Races of Men" seemed to send the minds of Englishmen away to the South Sea Islands and Kamschatka; nor could I persuade them, that a Slavonian differed from a true Anglo-Saxon, quite as much as a negro does. The political dismemberment of Austria, and the present condition of Ireland, may at last teach those who fancy human laws supreme—the daily Press omnipotent—the three estates the best of all possible governments—that there are other elements at work, working unseen, never ceasing, noiseless, to which may be ascribed the flight of the Emperor from Vienna, the whiskered dragoon from Potsdam, and the "Royal friends" of an insane Ex-Chancellor from Paris.

The Celtic race has never been free. They understand not the meaning of the word *Liberty*,—civil and religious liberty. Few men of any race, it is true, understand rational liberty but look at the Celt in France. In a day he crushes a powerful dynasty; chases it, and its cloud of courtiers and placemen from Gaul. Does he advance in the least towards civil and religious liberty? Not in the least; not a single step. During successive tyrannies, the Celt in France, and her industrial energies, have been crushed down by three infernal engines; the *Conscription Laws*; the Bureau of the *Internal Police and Post-office*; the *Law of Passports*. Any one of these is in itself sufficient to destroy the liberties of any nation. They are, in fact, utterly incompatible with liberty; yet, in France, I never heard from this extraordinary race of men a single voice raised against their continuance. The truth is, the Celt never was free; he has no moral courage; he cannot act without a leader; his whole history proves this fact: let me briefly survey it.

Long before Rome was built, the Continental Celt occupied all France and Northern Italy; they extended probably into Galatia. How beautifully has Thierry described the race, tracing the mighty deeds performed by the Celt, the most warlike of men. See him, before the period of well authenticated history, burst from the territory of Old Gaul, join his countrymen in Cisalpine Gaul,—that is, Northern Italy,—pour down on Rome and the Peninsula, ravaging Greece, and plundering the sacred temple of Delphi. Now he repeats his game century after century, from Brennus to Napoleon: 3,000 years neither alter his character nor his course,—it is ever the same. A warlike leader appears, and the war-cry is, "To the Rhine!" To the Rhine! March once more for Italy! Once more cross the Alps! See the Celt, under Hannibal, fight the battles of Thrasymene and Cannæ, the forefathers of those who conquered at Marengo and Austerlitz. The armies of Hannibal were Celtic men; he raised his levies mostly in France. When this source failed, the Carthaginian power was destroyed in a single action. In Spain, the admixture of races has utterly destroyed the kingdom. It has no unity: the mingled descendants of five or six different races contend for mastery. The nation seems insane. It is the same in Italy. The heterogeneity of race destroys all efforts towards political union. The Slavonian Count, now leading on the primitive Croats against Vienna, in hopes of restoring the *German* (!) rule in Austria, has been instructed to say—or at least the daily *Times* has said it for him—"Why cannot Magyars and Huns, Germans and Slavonians, live peaceably under one Government?" Nothing can be more reasonable, most worthy Count; but the hint or question comes too late.

Next to the maintaining the political union of the race, a question wholly overlooked by the Scandinavian Saxon (hence their debasement and political impotency for good or evil), occurs naturally the question of the *extension of the race*. The Saxon race seized Northern America: they will one day hold it from Lake Winipeg, and the icy shores of the Bay of Hudson to the Tierra del Fuego, or Land of Fire. It is impossible that the miserable mulish brood of all races, called Mexican and Peruvian, and Chilian and Argentinian, and Brazilian, can hold any part of the American Continent against the Saxon. But the Celt may divide the territory with him,—the Hiberno-Celt I mean; for the Celt of France must look to Africa as the Continent which he is entitled to seize, and (if he can) to inhabit. In a former lecture, I have alluded to this, when discussing the question of the viability of the Celtic race, as a race, in Algeria. Since that lecture was published, the existing Government of France has taken up the question of emigration to Algeria, offering, no doubt, encouragements of every form, inducements of every sort to persuade a portion of the crowded population of France to spread themselves over the territory of Algeria; every encouragement, excepting the one thing needful—*liberty—a just Government*—a Jefferson for a President of the Republican State of Algeria. But France never produced a Jefferson nor a Washington; chiefs and clansmen she has in abundance. Bugeauds and Cavaignacs are always at her service; and a something exceedingly resembling her present favourite Louis-Napoleon, she may find in any asylum; but not Jeffersons nor Cobdens;—Washington and Scott, Taylor and Adams, were men of Saxon growth, not Celtic. She must not look for grapes on pear-trees, nor pomegranates on poplars; every race has its great men and its great names, each after its own fashion. Were Cavanagh and Thiers, and Ledru-Rollin and Arago, to proclaim Algeria a Republican state; give to her the constitution of Kentucky or Ohio; withdraw the brutal soldiery from her territory, and leave the place to be defended by the energies of its own inhabitants; desire them frequently to send to the National Assembly, of all the Celtic states to be held in Paris, a number of representatives proportioned to the population, I, for one, would take it for granted that the end of the world approached; the Celt had at last acquired some idea of civil and religious liberty. He had become a man of common sense! Fanfaronade, and trees of liberty, red caps and sabres, had lost their charm! Lamartine and Arago might then become great men, and wiskered cut-throats be no longer the heroes of the age. But a transformation of this kind could happen only through a miracle; and the age of miracles, I have been assured, has ceased.

The question of the extension of the Celtic race into Africa, is one of great interest, not merely to France, but to mankind. Men boast of the progress made by mankind in literature, arts, science—in a word, of modern civilization, and of the unequalled power of France and England. But it would appear, that the meanest Greek or Roman colony exceeded far our best cities. Northern Africa was a highly-polished, wealthy, civilized country in the time of the Romans. Has civilization advanced here? Yet I believe that, peopled by the descendants of that race which built the Louvre and the Invalides,—which produced Arago and Laplace, Bichat and Lavoisier, Voltaire and Lamartine,—Northern Africa might regain, after a few centuries, the status she held some 1,500 years ago. What a singular circle man revolves in, and how consolatory! He moves towards perfection! Three thousand years ago the shores and islands of the Mediterranean were the seat of a high civilization; from some cause or another this is upset. Fifteen hundred years ago they regained something like, but not quite so good as their condition 3,000 years before; again this civilization disappears, and fierce barbarians, more resembling demons, as they are described to us by the ancient fathers of the church, who saw and conversed with these bodiless personages, once more seize most of the Mediterranean shores and islands. Again civilized France puts forth her hand to reclaim Northern Africa,—to extend her race and carry out her destinies; but will she succeed? Let me briefly consider this question.

The African continent may be divided generally into three distinct portions: the northern extra-tropical, the southern extra-tropical, and central or Africa within the tropics. Now, in order to civilize Africa ultimately, central Africa should perhaps be held, must perhaps be held by a European race, at least for a time. The river Senegal offers a road for the French Celt into Central Africa, to conquer it and hold it as we do India. But he cannot see this. He tries to imitate the Saxon *laissez faire* system, and sends a few hundreds, once or twice a week, to Algeria,—to die there—as they certainly will in no long time—of dysentery and fever. But let them form a Commercial Society of Africa; send troops of merchants and the materials of commerce—the manufactures of France—up the Senegal; construct a good military road from the point where it ceases to be navigable, to *the point* where the gifted Park first *saw the Niger rolling eastward*; embark its army and its merchants on that noble stream, and seize on Central Africa; set the negro free; gain him over, by kind treatment, as a labourer and a free man; create in his mind a desire for artificial wants;—then must the Slave-trade cease. But now reflect on the result of this step to France,—to the Celtic population of the world. Here is a Continent for you, for the extension of your race; or, as the lackneyed phrase goes,—employed by those who do not understand the import of the term "race,"—a Continent for the extension of your race, your language, your religion, your institutions; as if all these were not included under the one word, Race.

Think over it, you men of France. Would it not

be better to do this than to plant trees of liberty, give daily *fêtes*, raise barricades once a week, turn out half a million of armed men on the Boulevards, singing and roaring like madmen? Conquer Africa as we have done India, with a mere handful of troops. You will find in central Africa a great outlet for the manufactured goods of France; a vast territory for the production of raw material; an energetic, excellent race—the negro, willing to act as agricultural labourers. See that you make short work with the miscreants called African kings. Secure the country by a chain of posts from the mouth of the Senegal to the banks of the white Nile. No European nation will interfere with you; trade will revive; manufactures extend; you may even acquire something like a commercial navy; but give up the farce of a fighting navy, for the Celt never yet produced a good sailor. Your fighting navy never yet could fight; it is a costly bauble which ruins your finances. The Celtic race was not made for the sea; it is the Saxon who thrives there,—no matter by what name he goes, Dane, Swede, Englishman, Dutchman, Anglo-American.

But seize on Central Africa, and in this way acquire the key of that continent. All Northern Africa must ultimately become yours; Morocco, Tunis, Algiers, Egypt. You are a nation of soldiers, but I cannot be persuaded but there must be amongst you many peaceful men. Abolish your conscription laws, if you can, and try the question. Make the experiment, and ascertain how many you have who will spontaneously *enlist*, and of their own accord consent to live in those dreadful dungeons you call casernes or barracks? Europe is afraid of you. The inquietude you have caused in certain quarters, not far from London, is not to be described. You must be aware of this; therefore abolish the conscription under every form, and suffer the peacefully inclined to return to their dwellings. The effect of this on Europe I need not describe.

LECTURES ON THE ASIATIC CHOLERA.

By GEORGE ROSS, Esq., Surgeon to the Western City Dispensary, and Author of "Papers on Typhus Fever," and "Essays on the Processes of Digestion and Nutrition."

No. IV.

THE LAW OF DIFFUSION AND MORTALITY OF EPIDEMICS.

The proposition we have to prove is, that the rate of mortality is in an inverse ratio to the rate of diffusion. I call this the law of epidemics. Its determination is of the utmost importance; for before causes can be ascertained, the laws must be developed. We generally try to discover the causes before we have disclosed the laws of disease. This is an error, if not peculiar to medicine, at least more prevalent in it than in any other science. What is it that holds the celestial bodies in their several orbits? We cannot tell: nevertheless the certainty and uniformity of the movements of these bodies have been demonstrated, and are expressed by the law of gravitation.

I desire to give precision to our ideas upon the subject of epidemics, and to exhibit a law to which these capricious influences are obedient. I have not been able to collect facts in sufficient number, and recorded with sufficient exactness, to pursue the subject through all its ramifications; but I have endeavoured to analyze and arrange in the best manner the materials at my command. It is for others to judge of my success. For myself, I have not a shadow of doubt of the correctness of the law I have announced. There are numerous complications—numerous disturbing influences—which embarrass the question, by causing oscillations in the progress of epidemics, obscuring the facts, and depriving them of the character of invariableness. Herein lies the difficulty. Hence it is that the law of epidemics has not before been solved, or even conceived; but, though this difficulty may be grave and perplexing, I hope to show that it is not insurmountable.

Have I not already brought forward sufficient evidence to induce the probability, in a philosophic mind, of the existence of such a law? Look at the equal and steady progress of the epidemy on both visitations; its regularity as to time and route; and, in a general way, its uniform intensity! Let any man consider these things for a few moments, and ask himself whether it is not highly probable that there is some fixed essential law governing the epidemic, however that law may be disturbed by incidental and local causes? I do not see that it can be reasonably denied. In fact, the very inquiry for a specific cause implies the existence of a specific law.

My business, however, is not now to plead for the probability of such a law, but to demonstrate it; and, for this purpose, I beg your careful attention.

I have already shown you Tables on a limited scale, exhibiting this law, and will now merely refer you to those Tables in my last lecture. If, however, we take the whole metropolis of London, instead of a few parishes, we shall find the same law made evident.

If the proposition that the rate of mortality is in an inverse ratio to the rate of diffusion be true, it follows that there should be a *ratio of progression*, from the lowest to the highest point of mortality; and it will also appear that there is a specific or *fixed lowest rate* of mortality, bearing a direct relation to the ratio of progression in any given place.

It must not be understood that the rate of progresion is the same in all places, and at all times. The rate of progression is modified by innumerable disturbing causes; but whatever the amount may be, the principle is invariable, as we shall hereafter see. The fixed lowest rate of mortality also varies in different places, but not more than 1 or 2 per cent., showing, indeed, that local causes, however they may augment, do not much diminish the specific virulence of the epidemic.

Great inequalities in the mortality are found to occur in limited numbers and in small districts, results that are owing to peculiar local causes, and difference of treatment. Large numbers should, therefore, be employed, so that minor differences may be absorbed in the preponderance of numbers, and errors made to neutralize each other.

In order to ascertain the rate of progression, it will be necessary to take various means, both of the rates of mortality, and of the rates of diffusion, as they are ranged in due progressive natural order.

The following table is constructed, with the necessary alteration of arrangement, from one by M. Moreau de Jonnes, and shows the rate of diffusion and mortality in France during the year 1832. The Table is not a comparison of different places in relation to the epidemic, but of different months. When we treat of the epidemic in London, we shall demonstrate the law in reference to different localities. M. Moreau de Jonnes gave the aggregate numbers. I have reduced them to per centages:—

	Rate of cases to Population.		Rate of Deaths to Cases.
July	1 in	660	38·48
June	1 in	667	40·57
April	1 in	842	43·69
August	1 in	968	40·31
May	1 in	1,019	36·95
September ..	1 in	1,611	45·56
October	1 in	3,805	43·86
November ..	1 in	7,573	40·87
December ..	1 in	25,916	47·4

If we glance at the two extremes of this table we shall observe that when the diffusion was at its highest in July, the mortality was only 38.48 per cent; when the diffusion was at its lowest in December, the mortality was highest or 47.4 per cent. The intermediate numbers of course vary, owing to many causes; among others, perhaps to unduly charging one month with the deaths from cases occurring in the previous month, and to incorrectness of observation. I do not now intend to account for these discrepancies. Let us take the means of the various numbers, to ascertain the ratio of progression. The most correct mode of discovering the ratio of progression, would be to take every possible mean that the numbers will allow; but a quicker mode, though not so exact, would be to take four or five means, according to a definite plan, and ascertaining their differences.

The numbers that are the elements of calculation should be ranged according to the rate of diffusion, as in the preceding Table; then, for a summary calculation, the mean of the whole should be taken; and afterwards starting from the figure nearest approximating the mean rate of diffusion, ascertain the means above and below it; then difference from the mean rate will exhibit in a general way the rate of progression. This is not, however, very precise, and the following plan had better be adopted:—

Rule to find the Ratio of Progression.—Find for example the mean of the rate of mortality of the first and second numbers on the Table; find also the mean of the rate of mortality of all the remaining numbers, and ascertain by subtraction the difference of the means. Take the means of the rate on population in the same way. Go through the table in rotation: thus, the three highest and remaining numbers—the four highest and the five highest, &c. Then add all the differences of means of rates of diffusion together for a divisor, then all the differences of means of rates of mortality for a dividend: the result will be the ultimate ratio of progression. By this process the ratio of progression for France will be found to be .0003.

Rule to find the fixed rate of Mortality.—The mode of finding the fixed lowest rate of mortality is thus: ascertain the mean of the rates of diffusion for the whole Table, also the mean of the rates of mortality; then substract from the latter the sum of the ratio of diffusion multiplied by the mean of the rate of population;—thus for France:—

Mean of the rate of Mortality.		The Ratio of Progression.		Mean of rate of Diffusion.		Theoretical lowest rate of Mortality
41.96	— 1.4352 =	.0003	×	4784	=	40.5248

The result may be practically explained in this manner. The number 0003 is the rate of increase of mortality for each unit added to the aggregate of numbers of persons among whom one case occurs; thus:—

1 in 1	=	40.5248	+	0003	=	40.5251
1 in 2	=	40.5248	+	0006	=	40.5254
1 in 3	=	40.5248	+	0009	=	40.5257

Now let us compare together the theoretical and the actual means, as deduced from the Table by M. Moreau de Jonnes, to show the exactitude of this law.

The Rate of Diffusion.	Rate of Mortality by actual mean.	Rate of Mortality by theoretical mean.	
1 in 784	41·76	40·76	The means of four first numbers on the Table.
1 in 4,784	41·96	41·96	The means of the whole.
1 in 7,984	42·92	42·92	The means of five last numbers.
1 in 723	40·91	40·74	
1 in 1,315	41·25	40·91	
1 in 6,815	42·16	42·56	

Some of the numbers in the foregoing Table are accurate to a decimal point, and far more exact than would be required to prove the correctness of the theoretical law. None of the numbers vary, but as to certain small decimals. It is remarkable, that notwithstanding the discrepancies of particular months, the mean rate of increase and decrease should be expressed theoretically with so much exactness.

The practical advantage of the law is this, that having found for any district of sufficient magnitude the ratio of progression, we may be able to determine with confidence the influence of local causes, treatment, &c., in any given place, according as it may be above or below the theoretical

mean of mortality for the rate of diffusion in the said place.

The disadvantage in the Table, for the whole of France, during different months, is this:—that the epidemic may exist in various towns at the same time, and that while it is in the ascendant in one place, it may be in the descendant in another. These variations in the rate of diffusion and mortality, in different places at the same time, would tend to neutralize each other, and thus to equalize these means in the different months, and to diminish the ratio of progression; which is the fact. Nevertheless, so long as any difference in the rate of diffusion exists, the rate of mortality will show a corresponding variation.

It is a better plan to take a locality or union of localities, having from two hundred thousand to one million inhabitants, where the epidemic is rife, and to divide it into sections for comparison. The same locality would afford evidence as to variations in respect to difference of times as well. Let us now exemplify the law by an analysis of the facts recorded for this metropolis. I have already given a Table of the southern part of the metropolis, which developes the law nearly enough to excuse the necessity of a more exact calculation. I shall therefore confine myself now to the northern part of London, excluding only one or two parishes in which only four or five cases are reported. If these were admitted, the results might be unfairly prejudiced. The rates of mortality are reduced to percentages:—

Place.	Rate of Diffusion.		Rate, per Cent., of Deaths to Cases.
Kensington.....	1 in	1,161	83
Shoreditch	1 in	779	53·2
Islington	1 in	622	65
St. Pancras	1 in	556	59·67
St. George's, Hanover-square..	1 in	531	59·2
Clerkenwell....	1 in	387	45·45
City	1 in	248	58·1
St. Marylebone .	1 in	236	43·41
Whitechapel....	1 in	216	62·47
Holborn	1 in	214	27·87 (a)
Strand.....	1 in	213	44
Bethnal-green...	1 in	204	55·92
St. Luke's	1 in	193	45·73
St. George's-in-the-East.....	1 in	184	54·91
Chelsea.....	1 in	174	44
Paddington.....	1 in	171	34
Stepney	1 in	129	46·2
Poplar.....	1 in	94	56·42
St. Giles's	1 in	86	44·58
Limehouse	1 in	83	44

Now, if the means of mortality and diffusion, and their differences in the foregoing Table, be ascertained according to the rule I have already laid down, it will be found that the theoretical specific or lowest rate of mortality is 42·3817, and the ratio of progression ·0277. The comparison of actual means and theoretical means would therefore stand thus:—

	Rate of Diffusion.	Specific Lowest Rate of Mortality.	Theoretical mean.	Actual mean.
Mean rate	1 in 324	42·3817 + 0277 × 324 = 8·9748	= 51·3565	51·3565
Mean of highest numbers above the mean rate of diffusion	1 in 672	42·3817 + 0277 × 672 = 18·6144	= 60·9961	60·92
Mean of lowest numbers, &c....	1 in 160	42·3817 + 0277 × 160 = 4·4320	= 46·8137	47·22
The mean of the lowest six.....	1 in 123	42·3817 + 0277 × 123 = 3·4071	= 45·7888	44·87
Mean of the six, with the diffusion above 1 in 200	1 in 222	42·3817 + 0277 × 222 = 6·1494	= 48·5311	48·63
Mean of highest numbers, exclusive of Kensington.....	1 in 520	42·3817 + 0277 × 520 = 14·4040	= 56·7857	56·76
The mean, exclusive of Kensington	1 in 280	42·3817 + 0277 × 280 = 7·7560	= 50·1377	49·69
Mean of lowest numbers, exclusive of Kensington.....	1 in 188	42·3817 + 0277 × 188 = 5·2076	= 47·5893	47·25
Mean of the five, with the diffusion above 1 in 100	1 in 170	42·3817 + 0277 × 170 = 4·7090	= 47·0907	44·97
Mean of the three, with the diffusion below 1 in 100	1 in 88	42·3817 + 0277 × 88 = 2·4376	= 44·8193	48·3
Kensington.....	1 in 1,161	42·3817 + 0277 × 1161 = 32·1597	= 74·5414	83·

The latter three theoretical ratios, show a wider discrepancy from the actual ratios than the others preceding them, and it will be found on examination, that in the case of the first two, it is de dependent on the unusually high mortality of Poplar. In the case of Kensington, 18 cases only are reported; and as might be expected among so few cases, the deaths were unusually numerous. This parish ought perhaps to have been excluded from the list, as tending to unduly bias the results. These sources of variation are counteracted when taken into calculation with the whole table; but when the numbers are subdivided, they, of course, exercise an influence increasing with the extent of subdivision. With reference to the specific lowest rate of mortality, I may observe, that in my last lecture I suggested that perhaps 42·16 per cent. the rate of mortality on the river, where we may imagine the patients were least subject to the local causes that increase the intensity of the pestilence in towns, was probably the lowest actual rate of mortality in the metropolis, and represented the specific intensity of the epidemic. Now, according to the theoretical calculation, based upon the means of mortality throughout the whole metropolis, the specific ratio of mortality would be 42·38, a number in very close accordance with the ratio of mortality on the river, and confirmatory of my suggestion.

A careful analysis of the foregoing Table will prove, that however individual parishes may evince aberrations from the theoretical standard, yet, that there is a mean increase and diminution of mortality in an inverse ratio to the increase and diminution of the rate of diffusion. I do not think, after an examination of the several Tables I have given, that this position can be contested. I do not mean to assert, that there is a fixed ratio of progression in all countries;—on the contrary, I state that the ratio of progression is variable, and depends on a variety of local causes; and that the theoretical formula is only useful as proving the actual law. The theoretical calculation makes clear and definite what was before obscure and unsuspected.

There is an apparent anomaly which requires examination before we quit this branch of the subject. When the cholera first appears in any locality, its visitation is very fatal; nearly all that are attacked die: for example of 98 patients admitted into the *Hotel Dieu* during the first three days of the last epidemic, 93 perished. At Stettin, during the present epidemic, out of 21 persons taken ill during the first two days, 19 died. Similar mortality has been observed everywhere; and it continues for a few days or weeks. How does this accord with the law we have been laying down? All facts must be respected—I reject none; being facts they admit of explanation, and must be understood.

I have said, that there are two causes concurring in the production of cholera,—a special cause, and various predisposing causes arising out of local and personal circumstances and habitudes. Now, when the pestilence arrives in a neighbourhood, all those who are peculiarly predisposed to it, by debility from age, long standing disease, organic affections, or depraved lymphatic temperament, and are ready to die from any exciting cause, are smitten by the disease and succumb. An extremely cold winter or uncongenial spring, will often decimate a village of its aged and ailing inhabitants, who have been weathering the changes of climate for several previous years, and concerning whom the only wonder was that they continued to live. These dead, the predisposing and special causes harmonise in force, and their combined influence continues to prevail with the same intensity throughout several months. The actual intensity never seems to diminish below a certain limit, even to the last case that occurs.

The whole number of cases that occurred in France was 229,533, of which 94,666 died, being about 41·2 per cent. Of 6,995 cases reported as occurring in England up to March 28th, 1832, 2,258 terminated in death, being 32·28 per cent. At Toulon, in the south of France, 1,373 cases occurred, and 1,260 deaths, being in a ratio of 91·74 per cent. The latter instances present an immense contrast, and, without citing further, we see that although the disease in all countries may observe the same law of mortality and diffusion, yet that its absolute intensity differs in each.

I have already developed, theoretically, the rule of a specific lowest rate of mortality for each district; and the question occurs to what extent does this specific rate of mortality represent the intensity of the specific cause?

Is there any mode of determining the relative intensity of the predisposing and specific causes? Is the specific cause an invariable quantity, and does the intensity of the disease depend upon the variable operation of the predisposing causes? Or does the specific cause itself differ in intensity in different places? A strong argument in favour of the unvarying intensity of the specific cause is derived from the fact, that after the first week or so in any given place the ratio of mortality to cases never diminishes below a certain point. The aggregate mortality becomes, of course, more or less; the relative mortality varies only as the rate of diffusion. Then does the enormous difference in the ratio of mortality between England and the town of Toulon depend upon the variable influence of the local or predisposing causes? This is a subtle question that cannot now be fairly answered, but in my opinion would admit of a solution if extensive and accurate observations were made. It comprises an essential part of the law of intensity in relation to epidemics, and as science advances must be solved.

I may, however, be permitted to cast out a sug-

(a) Holborn parish shows a great inequality between the rates of mortality and diffusion as compared with other parishes. It is altogether anomalous; but the discrepancy receives an explanation from the eminently successful treatment pursued in this district, as it has been reported by the medical officers. We shall have occasion to refer to this subject on a subsequent occasion.

towns, where they are engaged by respectable people to teach the ladies of the hareem the voluptuous dances, so much patronized by the higher ranks. They are of the same race as our gipsies, driven from Egypt by Selim I. about 1512; they have wandered about practising juggling, fortune-telling, and dancing in various countries. Deuon has thus described them:—"Leur danse fut d'abord volupteuse; mais bientôt elle devint lascive; ce ne fut plus que l'expression grossière et indécente de l'emportement des sens."(g)

Games of Chance.—The natives wile away many hours at the coffee-houses, playing chess, draughts, backgammon and cards, the stake generally being a few cups of coffee. There is also the native game of *mankahdh*, played with a board having twelve hemispherical holes in two rows, and with seventy-two small shells or pebbles. *Tab* and *seega* are also interesting native ganes. There is another game, played by the Bedauwee with bullets or pebbles, which very closely resembles our English game of "Nine Holes," with marbles.

The *bath* is one of the greatest luxuries enjoyed by the Easterns. The rich have baths in their own houses, but they go to the public ones occasionally to chat or meet their friends; and the private baths, being necessarily small, are unable to contain more than half a dozen or eight, so that the women are obliged on occasions of ceremony, fasts, feasts, &c., to hire one of the public baths. Some towns have a bath for the men and another for the women; but it is usual to admit the men from morning till noon, and the women from noon till sunset.

The bath consists of several apartments, all of which are paved with marble and have flat roofs, except the inner ones, which have domes, with small round glazed apertures, generally blue, for the admission of light. The outer or entrance chamber is surrounded by a platform, carpeted and cushioned; in the centre is a fountain of cold water, sometimes surrounded with flowers. Here the bather undresses, and placing a napkin round his waist, and another over his shoulders, slips his feet into a pair of wooden clogs, called *cob-cobs*, and follows the *ldwinges* into the first chamber, which is about 90° Fahr.; it is surrounded with seats, for the bather to sit upon during the time he prepares for the greater heat of the inner chamber, which, together with the apartments connected with it, is in the form of a square, the four sides have two recesses, and the hot fountain is in the centre. On entering the *khararah* the bather perspires profusely, from the humid heat produced by the hot water of the tanks, fountain, and boiler, which ranges from 103° to 112° Fahr.; but soon after his entrance the *nukeyisdtes* approaches, removes the napkins, and commences by cracking the joints to render them supple, and knead the flesh. The manner of twisting the head hard each side, and finally sitting upon the bather's chest, is rather alarming to a European; but use is second nature; your fears speedily cease. After enduring with astonishing fortitude the twists and kneading, you are well rubbed with a rasp of baked clay on the soles of the feet, and polished off with a small coarse woollen bag all over the body; this finished, you are at perfect liberty to souse yourself at the *hanafeyeh* or tank with hot water, preparatory to a soaping. The attendant approaches, bowl in hand, creating a fine lather with a lump of palm fibre, or raw silk, and almond soap, and then in the politest manner possible dabs it in your eyes and mouth, finishing his amusement by upsetting the remainder on your head; he then souses you with hot water, brings you clean dry napkins for the shoulders, loins, and head, *à la Turque*, and conducts you to the first chamber, where you are supplied with fresh napkins, and, throwing yourself upon a divan, recline, sipping coffee or sherbet, as taste dictates, and smoking a nârgélèh. This concludes your bath, for which you pay from three to fourteen pence.

(g) Deuon "L'Egppte," vol. 1, p. 136.

PROGRESS OF MEDICAL SCIENCE.

ACADEMY OF SCIENCES.

Meeting of October 23. M. Ponillet, in the Chair.

TREATMENT OF CHOLERA.

M. Foy, Pharmacien of the Hop. St. Louis, stated, that, in 1831, he had tried, in Poland, the treatment recommended by Dr. Desmytere, at the last meeting of the Institute, viz., the inspiration of oxygen gas. M. Foy had not found this method advantageous,—at least in the cold stage of the disease.

M. Landerer, Professor of Chemistry, communicated the result of his observations on the same subject during his residence at Smyrna. The method adopted in that city consisted in the application of mustard poultices to the chest and stomach, embrocations upon the hands and feet, with brandy and salt, and pressure exercised upon the abdomen, by the weight of a servant, who knelt upon the patient. Internally the juice and essential oil of the citrus decumana were exhibited.

The poultice, consisting of mustard, pepper, and of a man servant, is only one of the many absurdities which Academies are condemned to register for the edification of the public. The following is another instance of the same kind:—

M. Pontus forwarded a second paper on the means of preservation to be employed against cholera. "Cholera," said M. P., "was epidemically propagated by animalculæ. In order to destroy them, it would be advisable to keep up constant fires on the summit of hills, and continual discharges of artillery in the streets and open squares. Sulphur should be burned without interruption in the open air," &c.

ACADEMY OF MEDICINE.

Meeting of October 24. M. Royer Collard in the Chair.

The meeting was taken up almost entirely by the enumeration of the titles of the various documents forwarded to the Minister of Agriculture and Commerce by the French sanitary physicians established in the Levant. These documents referred to the progress of cholera in the various stations, and did not contain any remarks of much pathological interest.

URETHROTOMY.—M. CIVIALE.

In conclusion of a paper on this subject, M. Civiale stated, that he was of opinion that the operation should be performed in three distinct circumstances:—

In the first place, when urethral stricture was accompanied by perineal fistula, a circumstance which, allowing the surgeon to choose his own time, gave him the facility of obtaining sufficient dilatation of the stricture to admit of the introduction of a grooved probe, upon which the urethra might be divided.

Secondly,—When, in consequence of a stricture, complete retention of urine took place, and endangered the life of the patient. In these cases, M. C. preferred even a laborious research of the urethra in the perinæum to puncture of the bladder.

And thirdly, in cases of false passage at the curve of the urethra.

Meeting adjourned—5 o'clock.

OF DIGITALINE; ITS PHYSIOLOGICAL AND THERAPEUTICAL ACTION. BY DR. HERVIEUX.

(Archives de Medicine, and Gazette Medical.)

Digitaline has enjoyed this uncommon advantage,—that the experiments which it has, in various countries, been submitted to, have led to similar results. M. H. relates twelve cases in which this medicine was exhibited by Mr. Royer, and the results observed confirm fully the data furnished by the remarks of other phisicians—employed in doses of 1-10th, 1-5th, and even 1-4th of a grain. This medicine caused neither nausea nor repugnance; neither did it occasion borborygmi, colics, or diarrhœa. In all cases the pulse fell in a very marked manner; the average of its diminution was from 22 to 36 pulsations in one minute. The action of the medicine upon the circulation began to be appreciable after two or three hours, but attained its maximum only after one, and sometimes two weeks. With regard to the action of digitaline upon the urinary organs, M. H. observed, that although the urinary secretion was not constantly increased in quantity, in all cases vesical tenesmus was present. The patient to whom the medicine was given experienced considerable benefit from its use. The dyspnœa,—congestion of the face and headache, so frequently met with in disease of the heart, were greatly alleviated; and, in two cases of pulmonary disease, considerable improvement was also obtained,—a fact attributable to the diminution of the frequency of the pulse.

INCISION OF THE URETHRA.

We mentioned above, in the report of the last meeting of the Academy, the conclusions of a paper on this subject, by M. Civiale. We have noticed another instance in which the division of the urethra is an operation of great utility: we refer to ancient fistula of the passage. In several cases of abnormal apertures existing in the canal,—the consequence of gangrenous inflammation,—M. Ségalas first proposed, and Dr. Ricord performed it. In one patient, the fistular opening, situated at the union of the penis with the scrotum, was nearly one inch in length, and had lasted twenty years. The object of opening the urethra in the perinæum, was to permit the escape of urine from the incision, through which a bougie was introduced into the bladder, thus allowing the surgeon to employ the autoplastic method for the closure of the ancient fistula, the cicatrisation of which would be rendered most difficult by the contact of the wound with urine. The fresh incision performed in the perinæum healed without difficulty, and the infirmity was completely removed. The invention of this method, crowned with success in several instances, was recompensed by a prize awarded by the Institute in the year 1842 to Drs. Ségalas and Ricord.

REDUCTION OF INCARCERATED HERNIA.

M. AMUSSAT. (Révue Med.)

The method adopted by M. A., which has often succeeded in causing reduction of incarcerated hernia, when other measures had failed, is the following:—A board being first placed under the pelvis, in order to give a solid fulcrum to the efforts of the surgeon, both hands are applied to the tumour, exercising a moderate degree of pressure upon it; this pressure is gradually increased, by the superposition of the hands of the assistants over those of the operator. Thus the efforts can be uninterruptedly continued for a considerable length of time without fatigue to the surgeon, and often with the most satisfactory results.

FUNGUS DURÆ MATRIS. DR. MALESPINE.

(Inaug. Thesis, Paris.)

When fungus of the dura mater has destroyed the bones of the skull, it becomes accessible to surgical investigation. At this period, even an inexperienced observer may recognise its existence; and it is not a little remarkable, that for many years its diagnosis remained enveloped in obscurity. It is only towards the middle of the last century that this disease was properly understood. At an earlier period, it is true, we find descriptions which may be understood to apply to this affection; but these descriptions testify complete ignorance of the nature, seat, signs, and importance of the malady. Louis was the first who really threw light upon the subject; but having observed only one instance of the disease, his view was of course incomplete. The frequency of adhesions of the surface of the morbid growth to the bones, also contributed to throw doubt upon its real origin; when, in 1811, the Brothers Wenzel found on a dead subject five tumors, evidently belonging to the fibrous envelope of the brain, and confirmed the accuracy of the description previously given by Louis.

The chief symptoms of the disease consist locally in the presence of a tumor, generally of a very solid consistency, without alteration of the integuments. The tumor is the seat of throbbing pulsations, synonymous with the arterial diastole, but unattended with the expansion of aneurismal dilatations. The tumour is reducible, and the attempts at reduction usually occasion symptoms referrable

to pressure of the encephalon. With regard to the condition of the bones, two distinct forms are observed. In the first, as in the case described by Louis, the tumor gradually destroys the osseous coverings of the skull, reducing them to a thin, flexible layer, analogous to parchment: this layer finally is absorbed, and the tumor continues to enlarge, protected only by the skin, the aponeurosis, and the pericranium. In this form of tumor no fragments of bone are noticed, either on the surface or around the morbid growth. In the second form of fungus, the tumor ulcerates the skull, and assimilates it partially to its own substance. In the depth of the morbid growth, or on its surface, are always found fragments of diseased bone, adherent to the production. This difference may perhaps be considered as a sign which may assist the surgeon in distinguishing from each other cancers originating in the dura mater, or from the bones of the skull. M. M.'s thesis is concluded by an interesting case, of which we will furnish an abstract, and in which the disease occupied a deeper seat:—

Case.—L., aged eight years, had or a long time shown signs of a very irritable temper. In the month of July, 1840, erysipelas of the scalp occurred, and was followed by the formation of a small abscess. The child was brought to hospital in the month of August, when a tumour, of the size of a hen's egg, was observed, on the right side of the forehead. The tumour was hard, and presented a peculiar sort of crepitus due to the presence of several fragments of bone upon its surface. Distinct pulsations were also felt, synchronous with the pulse, and appearing to have their seat beneath the tumor. Pressure diminished slightly the size of the swelling without reducing it entirely; the skin was ulcerated at the centre, and yielded passage to cerebriform matter; a puncture was performed and gave issue to a small amount of pultaceous matter. Eight days after this operation, cerebral symptoms having made their appearance, an incision was made which permitted a closer examination of the disease. A perforation of the os frontis was found to exist, and through this opening a pedicule supporting two cancerous growths. Pus escaped from the aperture of the bone, and hœmorrhage prevented the surgeon from proceeding with the operation. The wound was closed, and the next morning the tumor was found in a state of gangrene, its pedicule having swollen and prevented the escape of the purulent matter from the cavity of the cranium. Symptoms of inflammation of the brain showed themselves, and the patient died on the 6th day after operation. On dissection the tumour was found to arise from the bottom of an abscess filled with pus, and occupying the centrum ovale; the dura mater had been merely perforated, as well as the bones of the cranium; and purulent matter, the result of the recent encephalitis, was found spread over the arachnoid membrane.

ALIMENTATION OF THE INSANE. DR. B. BLANCHE.

The obstinate refusal of food is not unfrequently one of the most dangerous symptoms presented by maniacs, and, since twenty years, various methods have been proposed for the forcible introduction of nutriment into the stomach, when all means of persuasion have failed. The œsophagian tube, which Esquirol was the first to employ for the purpose, presents a diameter which renders its introduction through the nares a matter of difficulty; and catheters of a smaller diameter have occasionally caused serious symptoms, and even death, from their accidental passage into the larynx. M. Blanche proposes the use of a gum elastic catheter of a moderate size, armed with a peculiar flexible probe, of which we will endeavour to give some idea. It consists of an articulated series of rings which, from their connexion with a steel spring, can, at the will of the operator, assume a straight or curved form, or remain perfectly flexible, the latter property being necessary for the removal of the probe after the introduction of the catheter. With regard to the nature of the food to be thus injected into the stomach, M. Blanche has the following remarks:—

"Feculent nutriment is absorbed only under the influence of the salivary fluid, which, by the agency of a peculiar sort of ferment, *i. e.*, salivary diastasis, liquifies starch, and transforms it into glucosis. It is therefore evident that, when feculent matter is injected into the stomach, it is indigestible, not having been previously submitted to the action of the saliva. To supply the place of this fluid, it is proper to place, in contact with the feculent matter, fecula, flour, potatoes, or beans, &c., a certain amount of vegetable diastasis,—℥j, for instance, of germinated barley to a quart of fecula. As to albuminous food, for the digestion of which the gastric juice only is sufficient, its absorption will be facilitated by the addition of vinegar and salt."

In the cases related by M. B., this system of forced feeding was continued for a very long period (five months in one instance), and was never productive of any accidents, whilst it prolonged the life of the patient, and gave the physician time to oppose the resources of art to the perversion of the intellect.—D. M'CARTHY, M.D., Physician to the British Embassy.

Asclepias Tuberosa, Butterfly-Weed, Milk-Weed, Pleurisy-Root, White-Root.—Mr. T. T. Lockwood, of Buffalo, New York, says:—Pleurisy-root equalizes the circulation, produces copious expectoration and free diaphoresis, without inducing as much previous heat and excitement in the system as most other vegetable sodorifics. In the treatment of measles this root is often of essential service. When the rash is tardy in making its appearance, the cough harsh and dry, attended with pain in the eyes and fore part of the head, the warm decoction of this root may be given with marked good effect. It is decidedly the most valuable medicine ever administered to bring out the rash in all eruptive diseases, after the phlogistic state of the system has been properly attended to. Owing to the intimate relation existing between the mucous membranes and the cutaneous exhalants, the pleurisy-root is a most useful remedy in bronchitis, catarrh, and chronic diarrhœa of long standing. This root is especially serviceable in sub-acute and chronic rheumatic affections, when they are attended with a dry and harsh skin. In this complaint the warm decoction may be given alternately with the tincture of colchicum. Opium, in any form, has a tendency to produce congestion of the brain, and to lock up the secretions; therefore the asclepias is preferable to Dover's Powder in all those low forms of fever in which there is a tendency to cerebral congestion, and where we wish to promote expectoration. In acute inflammation of the parenchyma, or of the serous membrane of the lungs, it will not do to rely upon the pleurisy-root alone, but we should resort at once to active depletion. Asclepias tuberosa possesses important medicinal properties. The warm decoction acts with as much certainty as a diaphoretic, as jalap does as a cathartic. It is peculiarly applicable to the diseases of children, as it possesses no disagreeable taste or smell. It is useful in that continued and exhausting diarrhœa to which children are subject during the summer months, and generally with manifest advantage. In the latter complaint, the root should be boiled in fresh milk. Boil three drachms of this root, in a quart of fresh milk, down to one pint. Half an ounce of this is to be given every two or three hours. It generally excites a copious perspiration. The white-root is applicable in every disease where diaphoresis and expectoration are to be promoted. The best mode of exhibiting this remedy is in the form of decoction. One ounce of the root may be boiled in three pints of water down to a quart, and given in doses of half a gill every half-hour. Dose of the substance: ten to fifteen grains.

Treatment of Callous Ulcers of the Extremities.—Mr. Syme states that, in 1829, he advised the application of a large blister over the sore and neighbouring swelled parts of the limb, which had the effect of speedily dispersing the subcutaneous induration and thickening, so as to relax the integuments, and thus remove the obstacle to healing action. In the course of a short time, seldom exceeding a few days after the blister has been applied, the surface of the ulcer, however deep it may have been, is found to be on a level with that of the surrounding skin, merely from the removal of interstitial effusion, allowing the integuments to descend from the position to which they had been elevated, as may be readily ascertained by measuring the circumference of the limb, before and after it has undergone the effect of blistering. But, along with this change of form, the ulcer in other respects no less speedily acquires the characters of a healing sore, assuming a florid colour, affording a moderate discharge of purulent matter, and presenting a granulating surface with surrounding margin of cicatrizing pellicle. No subsequent treatment beyond the attention requisite for insuring quiet and cleanliness is needed, and recovery is completed, not only more quickly, but with much less tendency to relapse than when accomplished by other means. The facility, rapidity, economy, and lasting effect of this treatment, seem to give it a decided advantage over the other methods in use. In order to derive the full amount of benefit which the practice affords, it must be carried fairly into effect; and with this view, the principle upon which it is founded should be distinctly understood. The blisters act beneficially, by inducing a process of absorption. The enlargement of the limb being of secondary formation, and resulting from the continued irritation of a sore allowed to remain unhealed through neglect or improper treatment, when once established, prevents the contraction of granulating action, by which alone solutions of continuity, not within reach of union by simple adhesion, admit of reparation. Pressure, horizontal posture, and all other means that tend to remove the obstacle thus presented, will promote the patient's recovery. But of all the means that can be employed for this purpose, blisters appear to be the most efficient, and should, therefore, be employed for the remedy, not only of the purely indolent and callous ulcer, but of other kinds, which, in addition to their own peculiar characters, show evidence of complication with indurated enlargement of the limb. From this condition it is hardly necessary to mention that the œdematous swelling of weakness and impeded circulation must be distinguished.

Case of Twins, of Extraordinary Size.—Dr. P. G. Bertolet, of Oley, Pennsylvania, relates, in the *Philadelphia Medical Examiner*, the case of a woman in her sixth labour, who was seized with regular pains at 10 o'clock on the previous morning, and at 2 o'clock, after having been in labour four hours, was delivered of a fine, vigorous female child. The vertex presented to the left acetabulum, and the infant, after it was born, weighed 9¼ pounds. The labour-pains then ceased for a time, but soon recurred with increased violence. Upon examination, the right hand of another child was discovered, high up in the vagina; this was returned within the uterus, after which the vertex presented very nicely in the second position of the posterior strait. But, after waiting for a considerable time, the head still continued in exactly the same situation. There had been a constant flow of blood from the time the first child was born, and the patient's strength was becoming exhausted. The *long forceps* after some difficulty was applied, and a male child of unusual size was still-born, and weighed 11¼ pounds, making an aggregate weight of 20½ pounds contained in the uterus, besides the secundines. After the second delivery, the hemorrhage ceased, and no unpleasant symptom occurred to retard the quick recovery of the patient. Both mother and child are now perfectly well.

Post Mortem Appearance in Yellow Fever.—Dr. Hastings, of the United States Navy, says, in these cases, the brain and spinal marrow are softened; their membranes are thickened, and there is generally a very large amount of yellowish or bloody serum within the cranium and spinal canal. The heart and lungs are healthy. The stomach is in much the same condition as already described. But the mucous membrane of the duodenum, small and large intestines, is greatly injected, thickened, and softened; of very dark colour, and in some cases removed or destroyed in patches. The glands

of Peyer and Brunner are injected and enlarged. The whole tract of the mucous membrane resembling the change of structure met with in patients dying of typhus fever, but not to the same extent. The stomach is sometimes filled with black vomit, and the intestines contain dark matter resembling it. The mucous membrane of the bladder is injected with blood, and spotted with many scarlet puncta. The spleen, if altered at all, is rather softer than natural; but in cases where the subject had laboured under intermittent fever of long standing, it was invariably of large size and very soft. The liver is engorged with dark blood; about the natural size, of dark colour and softened. Thus showing at this advanced or protracted stage of the disease, a complete breaking down of the structure of the brain, spinal marrow, liver, and mucous coat of the stomach and intestines. The skin upon the thighs, arms, abdomen, and, breast, is often covered with petechiæ. The albuginea and the whole surface of the body is much darker in colour than those dying at an earlier period. This is observable even before death takes place. The lips, tongue, and gums, are covered with a dry brown crust, the tip and edges of tongue red, and almost or quite raw. There is little or no emaciation of body. And I have never seen in any case the least reason to suspect any change in the dimensions either of the stomach or intestines. The kidneys and other viscera are found to be in a normal condition. The blood remains in its liquid state in those who die; but there does not appear to be any peculiarity in that taken from yellow fever patients. It is observed to be cupped, has the buffy coat and same appearances as all blood taken from those suffering by inflammation, and a high state of fever. It contains, doubtless, a large amount of bile or its constituents, owing to the crippled or suspended functions of the liver.

Similarity between Arsenical Poisoning and Cholera.—Dr. Letheby remarks, in the Pharmaceutical Journal, that most toxicologists have noticed the great similarity which exists between the symptoms produced by an irritant poison, especially arsenic, and those which are attendant upon an attack of cholera; so close indeed is their resemblance, and so likely are the two classes of effects to be mistaken, the one for the other, that the difficulties connected therewith have been frequently made the ground of an advocate's defence, and the subject, therefore, upon which our medico-legal writers have been especially anxious to enlighten the profession. In cases of poisoning by arsenic, notwithstanding that many of the most prominent symptoms may be very similar to the preceding, yet there is a manifest difference in the order in which they present themselves. Thus, in arsenical poisoning, there is, from the first, a sensation of heat and pain in the throat, stomach, and bowels; then comes the vomiting, and after this the diarrhœa. Again, in these cases the ejected matters are neither yellow, nor gruel-like, but they are commonly dark-coloured, and they are often streaked with blood. This is a very important symptom, for it has never yet been seen in any case of cholera. In arsenical poisoning the pain in the stomach and bowels is generally very violent, and the stage of collapse, which for the most part occurs late in the attack, is neither so sudden nor so complete in its appearance as that which marks the severe forms of cholera, nor is there that coldness of the surface, or that blueness of the skin which is so characteristic of the latter disorder; but when, as is often the case, the vital powers are greatly depressed, then there may be a coldness and lividity of surface which is confined almost entirely to the hands and the feet; the breath is, however, never cold, and the tongue retains its warmth and redness even to the last. Again, the features are never so ghastly as they appear in cholera; but, on the contrary, the eyes are commonly prominent, glistening, and blood-shot, and the skin around them is often tumid, hot, and extremely sensitive. These peculiar and distinctive signs may often serve to arouse the attention of the medical attendant, and then the chemical examination of the vomited matters will always enable him to place the nature of the case beyond every doubt. The following table will exhibit at a glance the more prominent differences which have been observed between the symptoms of cholera and those of arsenical poisoning:—

Symptoms of Arsenical Poisoning.	*Symptoms of Cholera.*
1. A feeling of faintness; but no antecedent purging.	1. A feeling of discomfort not often amounting to pain in the bowels, and there is more or less purging.
2. Great pain in the stomach and bowels.	2. No particular pain in the stomach or bowels; but
3. Vomiting—the vomited matter being dark-coloured, and often streaked with blood.	3. Sudden attack of vomiting and severe purging — the ejected matters being bilious, or gruel-like; never bloody.
4. More intense pain, and a sense of burning in the stomach and bowels; great thirst and excessive purging; the stools being dark, and sometimes bloody.	4. Now comes the pain in the stomach and bowels, and the great thirst.
5. The skin is at first hot, and the circulation excited; the extremities may then become cold and livid, but the tongue retains its warmth and redness; the eyes are frequently bloodshot, and the aspect of the countenance is never so peculiarly death-like.	5. The skin has never been flushed or itching, but the whole surface of it has rapidly become cold and livid; the breath has lost its warmth, and the tongue and lips look blue and feel cold.—The countenance pinched, the eye glazed and bloodless, and the whole aspect ghastly.
6. An analysis of the urine or the vomited matters will furnish the evidence of poisoning.	6. An analysis of the urine or vomited matter will not yield any trace of a mineral poison.

Arsenite of Quinine.—Soubeiran, at a recent meeting of the Society of Pharmacy of Paris, stated that the process for preparing arsenite of quinine, by double decomposition from sulphate of quinine and arsenite of potash, was not a good one. He proposed the following process:—Take of sulphate of quinine, 100 parts, dissolve it in distilled water, with the addition of a few drops of diluted sulphuric acid; then precipitate the quinine with ammonia, wash it, press it, and dissolve it in rectified spirits, 600 parts; add arsenious acid, 14·4 parts; heat them together and filter. As the filtere liquor cools, the arsenite of quinine separates in acicular crystals.

The Pathology, Symptoms, and Treatment of Yellow Fever.—Symptoms.—Rigor, fever, injected eyes, pain in head, small of back, and lower extremities; tenderness of epigastrium, emesis and black vomit. *Treatment.* Bleeding, purgation, ptyalism, and counter-irritation. *Pathology.* Thickening of the membranes of brain and spinal marrow, and hardening of their substances; almost cartilaginous firmness of liver, with discoloration; thickening and sphacelus of mucous membrane of the stomach. These changes consequent upon meningitis, hepatitis, and gastritis.

Conference of the Friends of Peace.—On Thursday, the 31st ultimo, a numerous and highly respectable assemblage of the friends to the great and growing cause of universal peace, met at the Hall of Commerce on the above morning, to consider various practical points and future operations, necessarily arising out of the advancing character of their movement. The meeting had been called by circular, and, in obedience to the call, gentlemen assembled on the occasion from different and distant parts of the kingdom, and a collection of more earnest, business-like men is very rarely seen. They evidently had the great cause at heart, and their whole bearing evinced a sober determination of purpose that nothing short of confidence in ultimate success could produce.

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THE MEDICAL TIMES.

SATURDAY, NOVEMBER 11, 1848.

RE-APPEARANCE OF SCURVY IN BRITAIN AND IRELAND.

Dr. Curran, a learned and able physician, now, we regret to say, deceased, published in the *Dublin Quarterly Journal of Medical Science,* for August, 1847, an excellent memoir on the prevalence of Scurvy in Ireland, coinciding as he thought with the potato famine; and following, as effect and cause, the loss of the potato crops in both countries. He mentions in that memoir, in a foot note, a circumstance odd enough in its way, but not in the least surprising, namely, that "in the discussion that took place at the Medico-Chirurgical Society of Edinburgh, on this subject, (scurvy,) *all the members,* strangely enough, were ignorant not merely that scurvy did actually exist exclusively in Ireland at present, but that an account of its appearance there had been published more than a year ago." Now, these anomalies and strange doings must always exist so long as there exists no Faculty of Medicine and Surgery, supported by and under the control of the Physicians and Surgeons of Great Britain and Ireland. With this remark thrown out for the consideration of our medical subscribers, and worthy their most serious attention, we shall proceed with a brief examination of the medical and political history of scurvy as it has re-appeared in modern times. Many no doubt believed, that with ague and leprosy, and elephantiasis, scurvy had been erased from the list of modern diseases in Britain, or nearly so. In this we shall find they have been mistaken.

It is the fate of medicine, practical and theoretical, to be ever tossed upon a sea of conjecture. Each succeeding age has its nostrums and quacks, its theories, its practical and its theoretical men, leaders of the fashionable medicine of the day. At times, doctrinal, eclectic, empirical, metaphysical, mathematical, vital, microscopical; solidism, and humoralism, prevail alternately; but one thing is certain, namely, that all flit off and on the stage, fading, vanishing, and re-appearing, like dissolving-views.

"Whatever is, has been," said some one; and, again, "there is nothing new under the sun." These are old saws; in medicine we may find the modern instances. When young in life, as, gazing on the water-doctor of the inimitable Dutch artist, the "caster of the waters" of his day, we said to ourselves, "These were the Doctors of the quaint, good old-fashioned times of Teniers, and Ostade, and Gerard Douw; but such Doctors cannot re-appear on the stage of life." This error in thought was natural to the young and the inexperienced; we have lived once more to see the "Water-Doctor" re-appear. To Dr. Bright belongs the merit of having resuscitated the race.

We had some thought, also, after reading all, or nearly all, that had been written on scurvy at sea and scurvy on land—the voluminous,

ill-arranged essays of Trotter—voyages and travels out of number, from Anson and Cook, of immortal memory, to Parry and Ross,—that all the questions which possibly could be raised respecting the causes of, and remedies for, the disease of scurvy, if it be one, had been settled finally and satisfactorily,—that even its intimate nature was pretty well understood by the Physicians of a period which included the names of William Hunter and Matthew Bailie—of Lind and Pringle. But it seems not; the circle is again resumed, purposely, as it were, to convince the world that there never should be anything fixed or settled in medicine.

The merit of the immortal Cook was twofold: he circumnavigated the world, making many discoveries; this was his least merit. He conducted a ship of war round the globe in safety, bringing home with him his crew, in health and vigour, as they set sail,—unaffected by disease, untouched by scurvy. The *morale*, then, and the *physique*, in such a ship, must have been excellent. It was a great feat after the Anson affair, whose crew suffered so terribly; it taught a great practical lesson to Britain and to the world. By this great lesson all nations have, no doubt, profited somewhat, as well as Britain; but more than this, it enables reflecting men to place the blame on the right shoulders when crews have been broken down by scurvy, and have become disorganized in morals; it enables the nation to fix at once on the real cause of such scandalous disorders: namely, the *incapacity* of the leader, or niggardliness in the *supplies*.

Then came the discovery of the specific—lime-juice—citric acid, admitted on all hands to be generally, if not certainly, a remedy for a disease which had at times crippled the navies of England and Holland. But now it would seem that this is no such specific after all, else why should men suffer and die of scurvy during a short whaling voyage to Davis's Straits? This, we know, occurred lately. And why should scurvy appear at all, if lime-juice be a specific? It was La Perouse who gave it as his opinion, the result of practical knowledge, that fresh, sound, animal food, in sufficient quantity, was the true specific for scurvy in seamen. There can be no doubt of the correctness of his opinion. But when scurvy appears on shore amongst people living, at least in part, on fresh animal food, then some other explanation of the cause and some other remedy for the disease must assuredly be sought. But does real scurvy ever take place under such circumstances? We do not here allude to the cachexia metropolitana, so ably described by Sir James Clarke; but to scurvy, as it appears on ship-board, and in forms unmistakeable, recognizable by all.

Has a "real and tangible step" been made of late towards the discovery of the true pathology of scurvy? This has been affirmed; with what truth we shall endeavour to make clear in the sequel. In the meantime, let us examine the statements on which it has been assumed that scurvy has re-appeared, so as to assume importance once more amongst the afflictions of humanity.

One of the earliest opinions held in respect of the true cause of scurvy was, that it originated solely from a deficiency of vegetable food. Against this opinion stands the recorded experience of La Perouse, and of many others. The Dutch inhabitants of Southern Africa, whom we are accustomed to call Boers, live chiefly on animal food, milk, and flesh, with a little bread. The amount of vegetable food they consume bears to the flesh the ratio which Falstaff's bread did to his sack—two pennyworth of bread to a gallon of sack. Amongst these Saxon men, the strongest race in the world, scurvy is absolutely and entirely unknown. Again—

The natives, that is, the Hottentots and Kaffirs, use as little vegetable food as possible; the flesh-pot with them is never empty, except in cases of dire necessity; they live on *flesh*, and are not over choice sometimes as to the quality. Scurvy is perfectly unknown amongst them. It is the same with the Bushmen. And, as if in defiance of all modern theories, that very diet which in London, and other large towns, gives rise to the cachexia metropolitana—the want of cohesion in all the tissues, and a state of the lungs so dangerous, that to run a few hundred yards, at the top of his speed, would inevitably kill the civilized man so fed, these savages think nothing of a twenty-mile run at a pace which no European could sustain in that country. Moreover, the Esquimaux live exclusively on animal food; so do the wild-horse hunters of the Pampas. Scurvy is unknown amongst them. So much for our knowledge of the materia dietetica, which, upon the whole, seems not more profound than that of the materia medica.

An insufficient nourishment of the body, from a want of fresh animal food, or, as it is happily expressed by the chemical doctors of the day, from a deficiency in the azotized principle, no matter what the food may be, is a favourite theory with some. It is a chemical theory, based on what appears "likely to happen;" yet, though much resembling truth, it may not for all that be true.

Railway labourers highly fed, but hardly wrought—inmates of penitentiaries tolerably well fed, and who did no work at all—men, in short, placed under the most opposite circumstances, have become, within the last eighteen months or two years, afflicted with scurvy. Upon this the theorists and medical doctors, and microscopists commenced their lucubrations. We find, says one, or rather two, that the persons so afflicted have been fed on a diet deficient in azotised principles. They had plenty of victuals, but the supply of milk was scanty. This appears very learned; of course, it is not at all pedantic.

When the medical world had thought scurvy defunct, merely because they were ignorant of what was going on in whaling ships, both north and south, in emigration vessels, in convict ships, and occasionally in ships of war on all stations, the disease appeared most unexpectedly in a country of all others least likely to be affected with it. It occurred, in fact, in Southern Africa, in the so-called province of Adelaide, at that time the easternmost district of the colony of the Cape—a country admitted, we believe, to be the healthiest in the world, and one where, heretofore, fever, under any denomination, dysentery, liver disease, and pulmonary consumption, were absolutely unknown. Scurvy appeared amongst the troops; it came under the notice of practical surgeons of the highest ability. Mr. Ford, a distinguished army-surgeon of great experience, described the disease, its progress, and disappearance, with the greatest care. The medical officers differed as to the causes and method of cure. According to the old and received adage, that was sure to happen; it was the same in the time of Lind, and it is the same now, and perhaps ever will be. We shall not, at this time, re-consider the evidence; but a single remark we take the liberty to make. Southern extra-tropical Africa is a most healthy country; it is a land afflicted with droughts—a land "*sonder water*," as the Dutch call it. They who look for humidity as a cause of scurvy, must go elsewhere. But it ought to be remembered, that if the land of the Cape was healthy to the Dutch Boer or farmer, *who worked not*, it by no means follows that it will prove equally so to the fresh-imported European who *labours and toils*. We have some recollection, that, during the building of that ill-contrived barrack, Fort Wiltshire, now abandoned, the soldiers employed on fatigue duty began to suffer from fever—that is, from a disease hitherto unknown in the colony. The question of field and out-door labour, even in Southern Africa, has not yet been decided any more than it is in Algeria, and reasonable doubts may be entertained whether any European could long sustain field-labour in any part of Eastern Africa, between the Kei and the Bay da Lagoa. But, be this as it may, if the men were employed on fatigue duties in Adelaide, exposed to a heat which, perhaps, the European constitution cannot sustain (combined with field-labour), insufficiently fed, the meat itself unsound, then it is not surprising that diseases should make their appearance, which were heretofore unknown to Dutchman and Hottentot. But to return.

If there be one circumstance more curious than another in the history of scurvy in modern times, it is the appearance of this disease on board a squadron of tip-top war-ships—a portion of the military navy of "the sharpest nation in all creation." Under the best of all possible Republics, the Naval Administration could not maintain three effective ships, within a few weeks' sail from their own country, where beef is a penny a pound, and fresh pork may be had for next to nothing. We, in this country, are accustomed to say hard things of our Admiralty Lords; but, in future, the Board may point to the United States' fleet in the Gulf of Mexico, and with justice assert, that such an occurrence, after the medical experience of past centuries, could scarcely have been expected.

The facts of the case were simply these. In the United States' squadron, employed in the blockade of Mexico, *the crews were so disabled by scurvy that three of their best vessels were unable to act against the enemy*. These vessels were the frigates Raritan, Potomac, and the corvette Falmouth. But two other corvettes and a *steamer* (!) suffered severely, though less severely. Now, what the senate or the assembly did, and what inquiries they instituted when these ships returned to their own country we do not pretend to know; but to us it does appear that the nation ought to have demanded the dismissal of the staff connected with the active administration of the marine service, just by way of lesson to the then President and his successors in office, and as a hint that offices were not mere pensions for the benefit of the President and his friends, but were to be held for the benefit of the nation, and for the performance of certain duties, which in this particular instance had been most scandalously neglected. We strongly suspect that no medical men sit on that Navy Board. These are some of the details of the matter. In the Raritan and the Potomac the decks are low, and the holds small; the hatches small, and the ports very narrow. But none of these circumstances have anything to do with the outbreak of scurvy. The Raritan had been in commission three years, and was ordered to Mexico without being allowed time to refit! The exigency of the service no doubt would be pleaded; but either the American naval dockyards are miserably conducted, or the delay from the shipment of fresh provisions and stores could not be worth a moment's consideration as compared with the importance of sending the Raritan to sea in a condition fit to act against the enemy. Would the States Government have ventured to have done so against any

enemy but the Mexicans, whom they despised? Nor does this altogether explain the matter: the Potomac had recently been in dock, had been thoroughly cleaned and coppered; she is described as a vessel which, for "internal police and cleanliness was not to be surpassed by any ship in the service." The Falmouth, also, was in an equally good condition; and yet scurvy appeared and raged in both ships. To explain all this, a theory was readily got up,—"the want of vegetables was common to all." How this came about we pretend not to say. In tropical countries fruits of all sorts abound; pumpkins, melons, bananas, yams, rice, and a thousand other vegetable products; nevertheless, the American squadron, with steam-ships at command, lay before Vera Cruz and in the Gulf of Mexico, in the years 1846 and 1847, until their crews were unable to act against the enemy. Our Admiralty Lords are, perhaps, not so bad after all, for assuredly nothing worse could have happened under their management. But this theory about the want of vegetable food being the sole cause of the scurvy on board these vessels is not supported by facts. "During a period of three hundred days the ship's company of the Raritan had fresh meats served out to them but nineteen times;" we beg our readers to reflect on this astounding fact. A frigate is sent out of port to blockade an enemy's coast, with provisions for three hundred days, of which nineteen are fresh; and this is from a country where bridges are thrown across the falls of Niagara, and electric telegraphs transmit from New Orleans to New York commercial information with the speed of lightning! Could they not have telegraphed the cities of the Union that their fleet wanted fresh provisions? Is common sense rare in the Union? or does jobbing prevail?

Some of the facts mentioned above are highly suggestive of considerations in respect of the position of "the profession," as we are still pleased to call those who exercise the medical and surgical art. The United States ships of war so situated and so fitted out, either had competent surgeons and physicians on board, or they had not. Imagining that they had, what became of the remonstrance they were sure to make to the naval department—the Secretary, we presume? Or has "the profession" already sunk so low in the United States, that a Navy Secretary can venture to set it at defiance? These important questions we shall endeavour to overtake in a future article. In the meantime, let us return to the subject in hand.

Dr. Foltz, seemingly connected with the squadron, remarks, that the crews of whaling ships suffer much from scurvy. He considers the potato as the "universal anti-scorbutic," and ascribes the occurrence of scurvy on board these vessels to a want of this vegetable. He admits, also, that scurvy had appeared in the United States ship, Columbus, then at the Sandwich Islands! There can be no doubt, that the United States Navy Board requires an overhauling: there must be something rotten at head-quarters.

Our readers, of whom many, no doubt, are impressed with an idea of the specific powers of lime-juice, citric and tartaric acids, &c., will naturally enough inquire, why not provide these ships with a sufficiency of the specific? Now it appears, that, even in this respect, the United States victualling-yards had not done their duty. The three ships were supplied with "no fresh provisions of any kind, and with a very small quantity of lime-juice, citric and tartaric acids, which were almost immediately expended."

Dr. Curran, in the able memoir already referred to, ascribes the cause of scurvy in Ireland to the potato famine—the want of potatoes; but he admits that "humidity, sudden alterations of temperature, inactivity, and moral depression, and, lastly, the absence of fresh succulent vegetables," together with a certain "epidemic constitution" existing in the air, are all essentially requisite for the production of scurvy.

In respect of humidity being a cause of scurvy, we think that such an idea is wholly unsupported by facts. The scurvy appeared, as we have already mentioned, in the British army in South Africa, the driest inhabited region, perhaps, on the earth. Its appearance there has never been satisfactorily accounted for. This was in 1836. The Hottentots, who composed a portion of the army, were completely exempt from scurvy,—perhaps (observes Dr. Curran), on account of "their mirth and activity." This is most amusing, and shows how far a medical theorist will go in the warping of the plainest truths; for of all races of men, the Hottentots are the filthiest, laziest, most inactive, and the easiest depressed from moral causes.

But there cannot be a doubt that scurvy is still frequent enough at sea, notwithstanding the experience of the older physicians, and their very full explanations of the causes and symptoms of this disease. To us they seem to have all but exhausted the subject; nor have any recent inquirers added a single fact to the pathology or treatment of scurvy since the period of Trotter's investigations. The exact condition of the blood in scurvy is just as little known now as then; its cure seems rather less perfectly understood. Convict ships, emigrant vessels, South and North Sea whalers, still suffer severely from scurvy. But these small items afflicting humanity are not noticed until some general national disaster, as the disablement of a fleet, arouse the public mind, calling forth those inquiries, sure to lead, if rightly conducted, to one discovery: namely, the incompetence and ignorance of those in charge of great departments.

A word or two respecting the strictly medical view of scurvy. It is the hygiene which interests the public. The physician looks carefully, also, to its discrimination from other diseases, its probable causes, intimate nature and pathology. We quite agree with Dr. Curran, that, since Thibaut and Poupart's investigations, at the Hospital of St. Louis, Paris, in 1699, "not an idea has been gained on the anatomy of scurvy." Dr. Curran means, of course, the pathological anatomy. To this we have now to add the signal failure of the chemists and microscopists. A precision, however, was given to the morbid appearances in scurvy by the researches and models of the accomplished Thibert, whose premature death removed from the medical world one of its brightest ornaments. In his museum there existed most carefully coloured models of the appearances he met with in fatal and other cases of scorbutus, calculated, if not to enlighten us much as to the pathology of the disease, at least to render its presence easily and certainly recognisable. If scorbutus consists, as most think, in an alteration of the liquids, and especially of the blood, then it is clear that anatomy can do but little to represent such alterations, or to investigate their nature. Nevertheless, it is right to place such models before the eyes of the pathologist and the physician, knowing, as we do, that two surgeons of the highest eminence have mistaken scurvy, the one for malignant disease, the other for gout. The false diagnosis of the first was put right by the hospital attendant or servant, an old sailor, who recognised the disease at once, and put the practical Baronet quite out. It was a standing joke in the hospital for some time.

The slate-coloured degeneration of the mucous membrane, with hœmorrhage, the discoloration of the blood, the effusion of blood into the submucous cellular tissue, large slate-coloured patches in the stomach, digestive tube presenting the same alterations, have, with many others, been represented with the utmost fidelity by Dr. Thibert. How greatly is it to be regretted that records so valuable do not abound everywhere, that the physician may at least be equal to a clear diagnosis, though he cannot explain the intimate nature of the disease presented to him. Scurvy, affecting the mouth, palate, and gums, mistaken by two of the ablest surgeons in the kingdom, the one supposing it to be gout, the other taking it for some malignant and incurable disease, are suggestive facts in their way respecting the condition of our medical museums. When the surgeon-apothecaries of the kingdom declared that the existing Surgical and Medical Corporations (they might have included the Universities) no longer represented them, they were scarcely aware of the extent to which this remark was true.

We have thus endeavoured to perform our duty as Journalists, in bringing this matter before medical men, and the general public. It is a question of Hygiene, national and particular. On such points the public mind should, if possible, neither be misled nor misdirected. To those who think that scurvy is a disease of the blood merely—that it consists in a chemical alteration of its properties—that true scurvy is caused by a deficient supply of the organic vegetable acids or salts of fresh vegetables, to which some venture to add, a deficiency of potash and sulphur—we recommend great caution in the maintaining of such conclusions. Chemistry is a most valuable art, but it may be misapplied. Crews sadly crippled by scurvy have regained their strength so speedily on the appearance of the much-looked for enemy, or the signal of approaching relief, as to render the theory about "diseased blood" extremely problematical. Even healthy blood has never yet been correctly analysed: the influence of the mind over disease, not at all.

FACILITIES FOR POISONING. NECESSITY OF PROFESSIONAL WATCHFULNESS AT THE PRESENT TIME.

We have, on more than one occasion, strongly protested against the indiscriminate sale of poisons, and facts are continually published which show the necessity of Government speedily legislating on the subject. We admit that it is beset with many difficulties; yet something may be done to shield more effectually human life from destruction, by secret poisoning. We can scarcely open a daily paper without finding accounts of murders perpetrated by arsenic, laudanum, or some other deadly pharmaceutical substance. This is no matter of surprise, when we consider that, almost in every street of the metropolis, and in every town and village of the Kingdom, there are persons who, for the sake of "turning a few pence," will vend the most noxious poison to any who may choose to ask for it. The law has no power to prevent this, and hence we find, in almost every grocer's shop in the provinces, facilities for taking away life, of which any may easily avail themselves.

The mere knowledge of this circumstance is calculated to act injuriously on the morals of the people, by exciting in the minds of some a desire to inflict the most severe retribution upon obnoxious individuals. It has, doubtless, also increased the number of suicides to an alarming extent; for persons brooding over their

misfortunes are tempted, by the facilities afforded them of accomplishing self-destruction, to put a period to their earthly trials by this appalling method.

The individual who contemplates the taking away of human life finds in poison an agent as effective without the risks of detection, as open violence to the person. Hence children, groaning under the yoke of parental authority, have endeavoured to free themselves from it by that deadly mineral—arsenic, purchased for a few halfpence at some neighbouring grocer's or druggist's shop. Wives and husbands have dissolved in a similar way the conjugal bands; while parents, in order to obtain the fees to which they are entitled from burial societies, have not scrupled to send prematurely to the grave their unsuspecting children.

Instances like these have apparently been multiplied within the last few years, and hence it becomes a question of some importance, whether such is really the case. In the infancy of chemical science the detection of any poison in the human body after death was a matter of considerable difficulty, and there is no doubt that numbers who met with violent deaths, were consigned to the grave as if they had died from a Divine visitation. But at the present time it is hardly possible for any deadly pharmaceutical substance to be administered in sufficient quantity to produce fatal results, without the crime being brought to light. Hence many are now arraigned at the bar of justice, in consequence of the improved state of toxicological chemistry, who who would in times past have escaped without suspicion. Arsenic, *the* poison of the million, can be detected in human tissues in the most minute quantities, and even after the body has been buried many years. This is one reason, doubtless, why we hear more frequently than formerly of deaths caused by the administration of arsenic; and were we to judge merely from the number of cases now known to occur, and compare them with those of bygone days, we might arrive at erroneous conclusions.

But while, from the improved state of chemical science, by which the crime of poisoning is more easily detected, the number of deaths may be *apparently multiplied;* yet we are led to conclude that this is *really* the case, from the influence exerted over the minds of the public, by the public Press. We scarcely have any advantage, without its being connected with disadvantages—it is so in reference to the publicity given to crime. The Press is furnished with more eyes than the fabled Argus, so that the most trivial incident scarcely escapes its notice. The events which occur in the most remote villages and hamlets of the Kingdom are known and recorded, and the actions of individuals of every rank in society seem as if they were constantly watched. A deed of blood, therefore, is scarcely perpetrated before it is chronicled, and it becomes, especially to the vulgar, a subject of fearful interest. The minutest details of the transaction are indelibly impressed on the memory, and a fatal knowledge is obtained, which, under the influence of excited passions, may lead to the perpetration of the highest crimes. Hence, the publicity given to deeds of darkness, instead of deterring men from their commission, often incites them to go and do likewise.

We would not, from this circumstance, argue that newspaper reports should be suppressed, in order to diminish the crime of secret poisoning. This would be a proceeding which society would not tolerate, and which would be fraught with serious evils. The matter must be dealt with in another way, by direct interference of the Legislature, so that deadly substances may not be vended to the public, except under particular circumstances.

Under no pretence whatever should arsenic, or laudanum, or prussic acid, be sold in quantities sufficient to cause death, to persons who may casually ask for them. We are aware that in legislating on this matter it would be impracticable to forbid the sale of every deleterious substance. In all countries, however, there are popular poisons, and against these we should like to see the power of the law exerted to its fullest extent. If an attempt should be made to accomplish too much, the result would be the accomplishment of too little, and thus a too stringent legal provision would defeat its own object. Those drugs and chemicals which are generally used in the arts are rarely resorted to in cases of poisoning; and hence, while these ought to be placed under a certain degree of surveillance, it should not be so severe as that which ought to be exercised over poisons susceptible of administration in small quantities.

Our French neighbours have set us an example, which we might follow to some extent with great advantage. With them there is an *adytum* for poisons—a sacred place, only to be approached with reverence and caution. There a person with a knowledge of pharmacy is only permitted to vend poisons, and even in medicinal doses he is not allowed to do this without the written order of a medical practitioner.

We hope the Legislature will early direct its attention to this all-important subject. The evil is daily increasing, and requires an immediate check. The first effort should be to place impediments in the way of household poisoning, amongst the comparatively uneducated. Arsenic and laudanum should no longer be so easily obtained by them, and the vendors of these articles should be held responsible for the manner in which they dispose of them. With these precautions on the part of the Legislature, and a diligent cultivation of toxicological chemistry by the members of the medical profession, cases of poisoning will become comparatively rare, and they will scarcely fail of being detected when they do occur.

At the present time, when the cholera is producing so much excitement in the public mind, it behoves medical practitioners to be especially on their guard. Dr. Letheby has, in the Pharmaceutical Journal, directed attention to the fact, that there is a great resemblance between some of the symptoms of cholera and arsenical poisoning. This should not be forgotten, as it is possible for an individual to be poisoned and his death ascribed to the Asiatic pestilence.

STATE OF THE PUBLIC HEALTH DURING THE LAST QUARTER.

The Registrar-General's Quarterly Report is a document which will always be read with interest by the members of the Medical Profession. While it officially makes known to them the state of the public health, it must be viewed as a work, the most important materials for which are directly furnished by themselves. The intelligent gentleman to whom is confided the duty of arranging the facts, always executes his task in the best manner; and hence the Quarterly Reports are not only of immense value at the period they are issued, but they lose none of their importance by the lapse of time. Placed amongst the archives of our country, they will in subsequent ages be consulted with advantage by the statesman and physician, and they will prove valuable indices of the progress of civilisation and of medical science.

The official return which has just been issued will be read with considerable interest, in consequence of the occurrence of unquestionable cases of cholera in London and different parts of the country. We are glad to learn, however, that, notwithstanding the appearance of this formidable disease amongst us, the amount of mortality from all causes is below the average. Only 43,445 deaths were registered, which is less by 6,034, than the 49,479 deaths registered in the corresponding quarter of 1847, and 7,960 less than 51,405, the number registered in the September quarter of 1846. It must be borne in mind that the mortality of the country was low in 1843, '44, '45, and in the first quarter of 1846. In the summer of this year, a large number of deaths occurred, and continued through the autumn, as well as the whole of the year 1847, until, at its close, influenza raged epidemically, and was then, and in the winter of 1848, fatal to thousands. In the spring of this year, a striking improvement in the public health took place, which was still more marked in the summer quarter. The mortality has slightly increased in London during the last three months, though it has diminished in the country. This increase of deaths in the metropolis is principally owing to diseases of the zymotic class. Scarlatina, the Registrar informs us, has been more fatal during the last quarter than in any former summer quarter since the new tables commenced. It destroyed 1,560 lives in 13 weeks, or 1,079 more than the average. The epidemic presented this singularity: that the deaths in the summer quarters 1841-44 were 193, 392, 548, 1,020; and again 194, 208, 316, 1,560 in the summer quarters 1845-48; which justifies the hope that the mortality from this disease next year will not be considerable. The deaths from small-pox have been many, notwithstanding the efforts made to promote vaccination. From some cause the prejudices against vaccination amongst the uneducated are great, and hence the majority of cases registered are those of children who have been unprotected. Typhus fever still continues to commit its ravages, and we find, that, during the last three months, 882 lives have been destroyed by it in London. The epidemic has prevailed since 1846, and is but slowly declining. 128 persons died of erysipelas; 52 women of metria; and 57 of other accidents in childbearing. 156 persons died of fractures and contusions; 26 of gunshot and other wounds; 116 by drowning; 36 by hanging; 31 by burns and scalds; 15 by poison; 15 from intemperance; 33 from delirium tremens. Consumption has carried off 1,534 victims. The fatality of this and of other diseases of the tubercular class remains almost invariable, allowing for differences of nomenclature. Dysentery has been rather more fatal than in previous years. Every summer diarrhœa carries off many persons. In 1846-7-8, it was epidemic. Cases of cholera have been every year registered. In the last quarter, the deaths of 90 children under 15; 37 men and women of the age of 15—60, and 30 of the age of 60 and upwards were referred to cholera. The duration of the attack in adults varied from 16 hours to several days. Up to the end of September, there was no trace of epidemic cholera in England.

The meteorology of the quarter has been rather striking, the weather being wet, with but few exceptions, during the whole of this time. The *excess* of the fall of rain this year over the average for the seven preceding years is 7·5 inches.

The electrical condition of the atmosphere has been also remarkable, the magnetical instruments having been in general sluggish, and noting but a small amount of electricity in

the air. During the last fortnight this has been especially the case, the invariable report at Greenwich being,—"Nothing was shown throughout the day." This fact is worthy of special observation, coupled with the reports received from Russia and other parts, that, during the time and just preceding the cholera-visitation, the magnetical instruments were exceedingly inactive.

The science of meteorology has not yet received that attention from the members of the medical profession which its importance deserves. That certain conditions of the atmosphere are conducive of disease, there is no doubt; and a better acquaintance with this subject will afford us increased knowledge of the laws by which epidemics are produced and regulated.

REVIEWS.

The Diagnosis and Treatment of Eruptive Diseases of the Scalp. By J. Moore Neligan, M.D., M.R.I.A., &c. Dublin: Hodges and Smith. 1848. Pp. 55.

Eruptive diseases of the scalp have, in general, been difficult to diagnose and treat. This probably arises from the circumstance, that they have not received all that attention which their importance deserves, and hence they have been erroneously classified and empirically treated. While within the last few years considerable improvement has taken place in the diagnosis of these diseases, there has been but little in their mode of treatment. We are pleased, therefore, that a physician of such talent and experience as Dr. Neligan should give to the profession the results of his observations.

The view which he takes of eruptive diseases of the scalp, is, that, with but one exception, they are of an inflammatory character in their early stage. He, therefore, divides them into two groups—*inflammatory* and *non-inflammatory*; and upon them he bases the mode of treatment. Constituting the inflammatory class, are—herpes, eczema, impetigo, and pityriasis; non-inflammatory—porrigo.

The *herpes capitis* differs somewhat in its character from the species which appears in other parts of the body. It resembles *herpes circinnatus*, except in the vesicles which appear at the commencement of the eruption, which assume almost immediately the character of a scaly disease. It usually attacks children from three to twelve. The author never met with but one case after the age of puberty, which lasted for four years. This disease is rarely seen in the vesicular stage, when it has the appearance of a ring of minute vesicles, not more than the eighth of an inch in diameter, without any mark of inflammation beyond, except a slight tingling. There is scarcely any discharge; but the vesicles soon dry up and desquamate. The drying commences at the centre and extends to the circumference; and the diseased spots in a few days attain the size of a shilling. In the early stages each hair appears bent on itself, or turned against the grain, obstinately refusing to lie smooth. The roots are also somewhat matted together by scaly crusts. They then become of a whitish colour, and readily fall out. Bald patches then begin to appear, over which are scattered small bundles of the altered hair, resembling tow. The eruption does not, however, in all cases, assume the characters now given; but the circular form of the eruption, and the peculiar condition of the hair render diagnosis easy. Herpes capitis is the true ring-worm of the scalp. The author considers it decidedly contagious, and with him we perfectly agree.

Eczema capitis is a vesicular eruption which soon looses this character, and in its various stages presents so much diversity of appearance that diagnosis is sometimes difficult; in one form it resembles impetigo. The vesicles of eczema usually appear first behind the ear, close to the edge of the hairy scalp, from whence it spreads rapidly; and in some cases the whole scalp is covered in a week or ten days, but in others the disease spreads slowly. With the progress of the affection the appearances vary. Sometimes the surface is scarcely elevated, and the disease is only recognized by the watery exudation which keeps the hair in a constantly moist state. In other instances the scalp is raw or excoriated, and secretes a thin whitish pus, which dries into grayish brown scabs, presenting cracks, through which the inflamed surface is seen. In a third form of the disease the exudation quickly dries into the scales, which are removed by the slightest touch, and cause much itching. A fourth variety is characterized by repeated eruptions of minute patches of vesicles, rarely larger than a small bean, all over the scalp, disappearing in seven or eight days, to be quickly succeeded by a fresh outbreak. The hair remains unaltered. When there is much inflammation, and ulceration occurs, the hair falls off, but afterwards grows as the cure advances. In individuals past the age of puberty the new growth is often gray. It is not a contagious disease, and its cause cannot be satisfactorily accounted for. It appears on healthy and unhealthy children; on the rich and poor.

Impetigo capitis is a pustular disease, and the only one of the class which is met with on the scalp. Its occurrence in children is preceded, for a few days, by feverish symptoms, frequently attended with vomiting;—the part affected is hot, painful, and presents an erythematous blush. The pustules either appear distinct of a psydracious character, scattered over the head, or in groups thickly set on an inflamed base. In the former case each pustule is about the size of a small pea, both in circumference and elevation, with but little surrounding inflammation. In two days each pustule contains thick yellow matter at the summit; soon matured, and bursting, gives exit to the pus, which quickly dries into a greenish yellow scab. This is the impetigo sparsa of most writers, and rarely assumes a chronic character. When it has lasted any time its continuance is kept up by fresh pustules on other parts of the scalp; but it most generally passes into the second form. This is attended with more decided symptoms of inflammation, both general and local, and the heat and itching are in many cases so severe that children tear the scalp and prevent the disease offering the pustular character of the first stage. The eruption usually appears in the forehead; the inflamed patches vary in size and form in different cases; in some extending, in their largest measurement, not more than from half an inch to one or two inches, while in others the greater part of the scalp is involved from the very commencement, and it often appears at the same time on the ears or some part of the face. When the eruption has continued for any length of time, large quantities of bright yellow pus are secreted beneath the greenish crusts, which separate into cracks, to give exit to the matter, exhibiting beneath the inflamed raw surface of the scalp. The hair is unaltered, but matted together—but it does not fall off. It is not a contagious disease. It appears at all ages, but mostly in infants. In the chronic stage abscesses frequently form at the nape of the neck close to the roots of the hair, and some of the lymphatic glands of the neck become enlarged and tender.

Pityriasis capitis is a squamous disease, and the inflammation of the part is of a chronic character. Its appearance is not accompanied by any sign of constitutional or local disturbance; but soon after its eruption it gives rise to much itching, without heat or redness of surface. The disease consists in the secretion of numerous minute, papyraceous, dry scales, scattered generally over the whole head without elevation, or moisture. These scales produce much itching, and the scratching causes them to drop off in a fine powder or *dandriff*. Pityriasis is commonly met with in infants at the breast; at puberty it is rarely met with, but it again appears in old age. It thus seems to be most frequent when the head is least covered with hair, and it is most generally observed in individuals whose hair is naturally thin. It never causes the hair to fall off.

Of the few varieties now mentioned, the author has met with eczema most frequently; next to it, impetigo; then herpes; and, lastly, pityriasis.

The prognosis depends more on the length of time the disease may have lasted, than on the exact variety which it presents. When seen early and submitted to judicious treatment, it is generally cured in a fortnight or three weeks; but, in old cases, from two to three months. With reference to the peculiar form of eruption, the author has found the prognosis, as to curability, to be as follows:—1. The scattered form of impetigo; 2. Pityriasis; 3. The worst form of eczema; 4. Confluent impetigo; 5. Herpes; and, 6. The dry form of eczema.

As respects the first groupe of eruptive diseases of the scalp, two principles must be laid down to enable their treatment to be based on rational principles; first, that they are inflammatory; and, secondly, that they are constitutional affections. It is to the neglect of these two principles that the difficulty of treating scalp diseases must be ascribed.

Dr. Neligan recommends, as an invariable rule, *never to shave off the hair.* It should be cut *close* with a pair of scissors, and to be kept as short as possible while the least trace of any eruption remains. The mere operation of shaving the head produces much irritation, and the growth of the hair afterwards continues constantly to excite repeated attacks of inflammation, and thus interferes with the remedies employed. A comb or hard brush should not be used for loosening and removing the crusts, but the softest hair brush that can be procured. These directions we conceive to be most judicious and excellent, and, we hope, will have the effect of assisting in doing away with the barbarous custom at present in fashion, of scraping and brushing the head, till the patient is almost distracted.

The local remedies employed are the carbonates of soda and potash, either made into an ointment with prepared lard, or dissolved in distilled or rose water. The strength must vary according to the form of the eruption, and the degree of the attendant inflammation. Carbonate of potash should be employed where the inflammation is slight, as it is generally in pityriasis, in many cases of herpes, and in the more chronic forms of eczema; but the carbonate of soda is best suited for impetigo in all its stages, and for the acute and recent cases of the other eruptions. The quantity of either of the carbonate in the ointment, varies from 20 grains to ½ a drachm in an ounce of lard; and to this may be added 3 or 4 minims of oil of lemon or bergamot; when, however, the inflammation is active, even this small quantity of essential oil would render it too stimulant: in all cases the weaker preparation should be employed first. The ointment is applied 3 times daily, by slightly smearing over the eruption; it is washed off with the corresponding alkaline lotion every morning, previously to the first application of the day. In bad cases, when the head is covered with thick, hard scales, a light poultice of linseed meal should be first applied for 12 hours; the scalp is then to be covered with a piece of old linen, on which the ointment is spread, and an oil-silk cap laid over the linen. This is left on for 12 hours more, when the scales are readily removable by washing the head with the carbonate of soda lotion. A clean surface is thus procured, on which the ointment more readily acts. The alkaline lotions are prepared by dissolving half a drachm to a drachm of the carbonate of soda or potash in a pint of rose or distilled water. Soap and water should never be applied to the head. In some cases where greasy applications do not agree, (which can only be ascertained by trial,) either of the lotions must be used as the only external application, but it must be applied five or six times a day. In chronic forms of eruptions a mild stimulant to the scalp becomes necessary, and the best is an ointment formed of half a drachm to a drachm of officinal citrine ointment to an ounce of lard, to be applied at bed time, and washed off the next morning with the alkaline lotion, which is also used three or four times during the day.

The alterative medicine recommended by Dr. Neligan is the proto-iodide of mercury of the London Pharmacopœia, combined with hydrarg. cum creta and aromatic powder. To a child six years

old give half a grain of the proto-iodide, two grains of hyd. cum creta, and two grains of aromatic powder every morning, and, for a younger child, only every third or fourth morning. Should the child be not more than three years old, half the quantity to be administered twice a week; for infants at the breast omit the iodide of mercury, and give either the hyd. cum creta, or hyd. cum magnesia; the latter is preferable, as it is a more certain mild purgative. In all cases the child should be kept strictly on milk diet during the entire treatment.

The non-inflammatory eruption, *porrigo capitis*—the true *tinea*, or scald-head, is an eruption of a vegetable nature. It is rather an infrequent disease occurring at all ages, but generally in childhood, from the age of three to twelve: the author has seen one case in a child only eight weeks old. In its first stage it does not give rise to itching or heat of the scalp, and, consequently, is very rarely noticed till it is fully developed. It usually commences on the forehead, at the edge of the hairy scalp, but spreads rapidly over the head, soon involving nearly the entire surface, the healthy patches left between the diseased spots being very few, and small in extent. This eruption cannot possibly be mistaken. It appears in the form of small, yellow, dry spots, about the size of a pin's head, of a bright yellow colour, seated on the surface of the skin, which is depressed slightly by them; each spot is distinct, hemispherical, slightly concave on its free surface, and convex beneath, where it is adherent to the skin. On removing the small diseased mass, the scalp beneath is found somewhat depressed, smooth, and shining. A single crust of the disease—or *favus*, as it has been called, from its honeycomb appearance—is often traversed by one and sometimes two hairs, which appear to grow from the most depressed portion. The eruption spreads by additions to the outer edge of each crust. These favi, as they increase, unite with each other, and form irregular-shaped masses, in which the original circular form of the individual crust is lost. The eruption thus increasing, the whole of the scalp becomes encased in one large yellow crust, at the edges of which some favi, of the peculiar characteristic appearance, are invariably to be seen. When this affection continues for any time, bald patches are left after cure, on which the hair does not grow again. This disease is contagious, the vegetable being propagated by the *mycelia*. It is the most obstinate of the eruptive diseases of the scalp. The plan of treatment recommended by the author is both constitutional and local. The constitutional remedy is iodide of arsenic; to an adult, from one-tenth to one-fourth of a grain, very gradually increased; for a child six years old, one-fifteenth of a grain; and, for a younger, from one-eighteenth to one-twentieth of a grain. It is best given to adults in the form of a pill, with dry manna, and a little mucilage; to a child, in the form of a powder, with a little white sugar. In the local treatment, the hair is to be cut, not shaved; and a large linseed poultice applied, and kept on for twelve hours, so as to soften the crusts. When the poultice is removed, the head must be well washed with the stronger carbonate of potash lotion; the scalp must be then covered with the carbonate of potash ointment, spread on lint, and over it a closely fitting oil-cap is placed. The ointment is renewed twice daily. In two or three days the crusts are removed. The carbonate of potash ointment is then replaced by one containing the iodide of lead, in the proportion of half a drachm of the iodide to an ounce of lead,—the head to be still washed with the alkaline lotion every morning. When irritation is produced by this ointment, it must not be applied for a day or two, the lotion alone being used three or four times daily. The strength of the ointment should be increased after a fortnight.

After continuing this treatment for three or four weeks, all external applications should be stopped, and the hair allowed to grow, to ascertain if the fungus will be produced. Should it return, the local applications must be had recourse to, and the iodide of arsenic continued till the cure is complete.

We cordially recommend the work to the members of the profession, as it contains information which will prove of great value in the treatment of diseases of the scalp.

An Introduction to Practical Chemistry, including Analysis. By JOHN E. BOWMAN, Demonstrator of Chemistry in King's College, London. London: John Churchill, 1848. Pp. 208.

This manual will prove a useful addition to the Chemical Student's library, as it explains and renders simple to the beginner the various processes employed in analysis. We have read it with much pleasure, and can recommend it as a work containing much valuable information in a condensed form on chemical manipulation. The work is embellished with very excellent wood engravings.

The Student's Self-instructing Latin Grammar; Containing Twelve Progressive Lessons, wherein the parts of Speech are Explified in Conversational Phrases, &c. By D. M. AIRD. London: Simpkin, Marshall, and Co. 1848.

This grammar may prove useful to those whose education has been neglected, and who are anxious to obtain a knowledge of the Latin tongue without the aid of a master. The work contains fables and easy sentences, with literal translations, to aid the student in his acquisition of the language.

ON THE SPEEDY REMOVAL OF MERCURIAL PTYALISM BY ANT. POTASSÆ TART.

[To the Editor of the Medical Times.]

SIR,—In your Paper of this day, I observe a communication headed, "Speedy Removal of Mercurial Ptyalism by Antimon. Potassæ Tartras," by W. G. Maxwell, M.D.

There is no date given to show when Dr. Maxwell commenced the use of the antimonial antidote to mercurial ptyalism; but I conclude, from the date of his opthalmic case, viz., August 7, 1848, that it is only for a few years past that Dr. Maxwell has adopted the practice mentioned in his paper: and I presume, from the fact of Dr. Maxwell's quoting his authority, that he is not aware that the practice is one now of of considerable standing. In short, that Dr. Maxwell thinks himself the author and originator of it. If this is true, I cannot suppose that Dr. Maxwell will have any ground of offence when I state, that so long ago as June, or July, 1827, that is, twenty-one years ago, I perused a paper on the antimon. potass. tart., in an American medical periodical, (the *Western Medical Review*,) in which its effects in subduing mercurial ptyalism, when administered in small, diluted, and frequently repeated doses, were fully detailed. If my memory serves, the dose and manner of administering the antimonial was gr. i. vel gr. ij. in aq. op.; a teaspoonfull of this solution to be sipped every ten minutes. I was at the time in Virginia, and used the ant. pot. tart. to remove a threatened ptyalism arising from ℈i. of calomel, experimentally taken. It was fully effectual for this purpose in Virginia; but on my return to Great Britain I did not find that the success of the remedy was sufficient to encourage its repetition, although, in repeated trials, it appeared decidedly to modify the severity of mercurial ptyalism in this country. I have, therefore, for many years, laid it aside from such a purpose, and am of opinion, that the effect of the tartrate of antimony is as much modified by climate as is the effect of the mercury itself, in common with some other drugs, *e. g.*, quinine. I may mention also, in reference to another part of Dr. Maxwell's communication, that I have frequently been surprised by ptyalism, when using the weak mercurial ointment, combined with iodine and camphor, as a discutient, and particularly when inucted upon the scrotum in orchitis, after active symptoms were subdued, a decidedly good remedy. On this account, I am led to hesitate before ascribing the rapid action of mercury to the opium alone, or the peculiarity of its administration, believing, that to the iodine at the same time administered, much of the credit of the fact is due.

I am, Sir, your obedient servant,
JNO. BURTON, M.D. Edin.

Walsall, Nov. 4, 1848.

MR. ADAM'S CASE OF HYPERTROPHIED MAMMA.

[To the Editor of the Medical Times.]

SIR,—The case of diseased breast, noticed in the *Medical Times*, October 28th, under the head of "Mr. Adam's Case of Hypertrophied Mamma," on which I operated a month since, has terminated quite favourably. It is highly satisfactory to observe, that all the symptoms of irritation of the uterine system, supposed to arise from the diseased mamma, and which formed one great inducement to remove it, have entirely disappeared since the operation. It is remarkable that the breast which was so enormously enlarged as to weigh upwards of six pounds, was supplied with blood by only two arteries of sufficient size to require ligature, and these both very small.

I am, Sir, yours, &c.,
A. G. FIELD,
Surgeon to the Royal Sea-bathing Infirmary, Westbrook, near Margate.

THE NON-AMALGAMATION OF RACES.—THE IRISH CELT.

[To the Editor of the Medical Times.]

SIR,—When perusing the very interesting and original "Lectures on the Races of Men," by Dr. Knox, accident threw in my way the *North British Mail* of September 30, a paper of some talent, published in Glasgow and Edinburgh. The striking corroboration of some of the most interesting opinions and facts detailed in the lectures, struck me very forcibly, as I dare say they will most readers; and being founded on the observation of a population that cannot be under 300,000, and on public documents of easy access to all, entitle them to corresponding respect. I send the extract, leaving to each reader to judge for himself as to the theory of *non-amalgamation*, which this extract seems remarkably to confirm.

The picture here drawn of the Irish Celt, in a large and populous city, however unpromising, seems to bear out fully what Dr. Knox has said, that "civilization alters nothing of his nature; it merely touches the surface."

Your constant reader,
Kinross, Nov. 4, 1848. R. A.

"The remark has been often made, that the Irish do not mingle with the inhabitants generally of our large towns. The title 'Irish' here, is strictly confined to the natives of the south and west. Many natives of Ulster are engaged in Glasgow business. They are unknown. There is no distinctive feature in their character; and they are lost in the 'common herd.' The Irish, on the other hand, never amalgamate. They can be detected in a moment. They inhabit the filthiest parts of the city. They indulge in the most degrading habits. They confine themselves, with few exceptions, to the coarsest class of employment, and the lowest range of dealings. Even after they have attained wealth—and many of them are rich—they pursue the same line of life, and scarcely ever are lost in general society. They occupy, in this country, and in the nineteenth century, by voluntary choice, a position resembling that thrust upon the Jews by Norman and Saxon five centuries ago. The cause is not easily discovered, but the fact is undeniable. We have before us the 'Report of the Barony Parish Fever Hospital' for this year, and the subjoined extract is from its Appendix:—

"'An interesting point in connexion with the administration of the Poor-laws in Scotland, is the fact that not so many as half of the whole number treated were natives of Scotland, and the number of the Scotch exceeds that of the Irish by only eight. The countries are the following:—

"'Scotch	1,301
Irish	1,293
English	36
Foreigners	5
Unascertained	4
Total	2,639

Thus, only 49·29 per cent. were natives of Scotland, while so many as 48·99 per cent. were natives of Ireland; keeping altogether out of consideration a very large proportion of children born in Scotland, but of Irish parentage, and who have been enumerated in the list of Scotch.'

"The Irish population in this city (of 300,000 inhabitants) may form one-sixth of the inhabitants, and cannot be a larger proportion, while, in this hospital, one-half of the patients, irrespective, as the Report states, of the children born in this country, were Irish. The fact shows that we have an Irish quarter. All large towns have an Irish quarter. It is always the darkest blot. And it is this characteristic in that people—a characteristic confirmed by observation, that renders their case most hopeless. No change of Government can suffice to reform them. They have equal rights here. They enjoy the same privileges that other classes possess; but

without a change in the character of the people themselves—a change of faith,—an expansion and an uplifting of intellect,—British towns will always have Irish quarters, and the peace of Tipperary will only be kept by bayonets."

SANITARY CONDITION OF SHEERNESS.

[To the Editor of the Medical Times.]

SIR,—I feel greatly obliged by your readiness to comply with my request of last week.

I now proceed to give you an account of Sheerness and its vicinity, and of the state of the public health here. From the marshy character of the island, we are subject to ague, which prevails more or less according to the nature of the seasons. If we have a wet spring, our marshes become supersaturated with water, which remains for some time on the land, and when the fine weather comes on in May or June, there is, of course, a considerable diffusion of miasma, and ague is very rife. Should the spring be dry, as it sometimes is, an easterly or north-easterly wind prevailing for six or eight weeks at a time, the warm weather is not followed by so much ague as under the preceding circumstances.

When I came to reside here in 1822, the Dockyard was not completed; immense quantities of excavated matter were brought from that place, and spread about the vicinity of Sheerness. This excavated matter was offensive in its nature, and its exposure to the sun and air was a prolific source of ague and remittent fever; but as soon as it became dry and covered with vegetation, ague gradually disappeared.

With regard to the interior of the island and the marshes, improved methods of drainage have contributed to the health of the residents very materially.

For the last two years, or rather more, we have had ague very severely; and I have—from observing the result of the exposure of the excavated matter from the Dockyard in former years—attributed such increase to the restoring and extending the fortifications around that part of Sheerness called Blue Town, the materials for which was the mud dug from the old moat, which was exposed to the atmosphere, in forming the ramparts of the old and new parts of the fortifications. This mud emitted a most disagreeable odour; and I told several of my friends here that they might prepare for ague as soon as this business of excavation began. My prediction has, I am sorry to say, been verified, for we have had ague in almost every house; but I have no doubt, that, when the sun has dried this mud well, and it becomes covered with vegetation, ague will be proportionately diminished.

The first four months of this year were exceedingly wet: and then the hot sun in May and June filled our atmosphere with miasma from the marshes; and this year we have had more ague than in any preceding one I can remember.

So much for our local liabilities. As to the public health at the present moment, I have nothing particular to state; there is no disease of any universal character. Last year we suffered severely from scarlatina and influenza; scarlatina first appeared in Harty, an island opposite Feversham, about eleven miles from Sheerness; it then reached Leysdown, eight miles from Sheerness; then Eastchurch, six miles off; then Minster, four miles from Sheerness; and, last of all, it reached Sheerness: thus traversing the island from one extremity to the other. It proved very fatal in every district. Now, I mentioned the locality in which it first appeared, and have traced its progress to Sheerness, to remove any idea that might have been formed, (if I had not done so,) from the "Statement" in your Number of the 28th, it might be inferred, from the very bad and "abominable" state of Sheerness, that the fever could not have originated anywhere else.

I have also forwarded you the number of deaths in '46, '47, and '48, in the various parishes in the island:—

Minster, 1846	244	Eastchurch	15
" 1847	383	"	36
" 1848 Two first qrs.	92	"	27
Leysdown, 1846	6	Warden	2
" 1847	11	"	1
" 1848 Two first qrs.	7	"	2
Harty, 1846	4	Elmly	3
" 1847	3	"	2
" 1848 Two first quarters	1	"	3
Queenborough, 1846	34		
" 1847	20		
" 1848 Two first quarters	11		

The above I have just extracted from the Registry of Deaths. I have mentioned all the parishes in the Sheppy Union, that you may see how little truth there is in the statement that Sheerness is a "hot-bed of disease."

With my letter in the *Kent Herald* and the above account I think you have ample materials for any article that would tend to counteract the bad impression made on the public mind against Sheerness, by a perusal of that manifestly incorrect "Statement," May I solicit your kind offices in aid of so desirable a matter. By complying with this request, you will confer a great favour on Sheerness, and on many more than

Yours, obediently,
J. S. KEDDELL.

POOR-LAW MEDICAL OFFICERS, AND THE BOARD OF HEALTH.

[To the Editor of the Medical Times.]

SIR,—I beg to tender you my thanks for your Editorial remarks on the 4th instant, on the official notifications issued by the Board of Health, Gwydyr House; and I trust I shall not stand alone, for all Union Medical Officers must see how carefully you watch over our interests. I quite agree with you, that it is very evident our duties are going to be shamefully and most unjustly taxed. I fearlessly beg to state, that I think neither the Board of Health, nor the Poor-law Board, have the smallest right to exact any such duties from us, let alone their *commanding* us to execute them, without at the same time stating how we are to be remunerated. Is not the labourer worthy of his hire? They might, with as much justice, issue their commands to non-Union surgeons, and see what they would say. We never contracted for such duties, and therefore I maintain they can have no claim. Our contracts are, to find medicines, and attend the *paupers* in our several districts. There are no provisions for extra duties, such as cholera, or sanitary investigations and reports. Let them therefore *order* the Guardians to pay us a fixed sum, according to the extra duties performed, and the time we are occupied. Is not our time our bread? They kindly leave us to the tender mercies of the Guardians. I know how I and my brother-officers will fare in the Union we belong to, if it is to be so. We serve a Body of Guardians without feeling or equity, whose motto is, "Grind, grind, grind the doctors. Exact the pound of flesh." Spare us, then, oh spare us! from the Guardians. The only decided step I think we ought, without delay, to take, is, for the whole of the Union surgeons to join heart and hand, and *protest* against these official orders. Surely such a course would show the iniquity of the demand; and then, if Lord Morpeth and the Board won't take it into their serious consideration, and give us a *quid pro quo*, let us boldly, like them, refuse to act, and not be servile slaves; and then the public, the discerning public, will see how we medical men are trampled upon, ground down, and literally robbed of our time and labour. I am one of the medical officers of a very large and extensive district, densely populated, and one that requires great sanitary improvement. I am very badly paid, as well as my brother officers; and it is totally impossible to give our time for nothing.

I beg, therefore, to call upon all Union surgeons to act with unity and promptness; and I trust that the Committee of the London Medical Convention will take the earliest opportunity of holding a meeting to discuss this important matter, and that you, Mr. Editor, will continue to assist us in the kind manner you have always done, through the medium of your highly valuable Paper, of which I am an old subscriber. I beg to suggest, for the consideration of the Committee, the propriety of drawing up a protest, which might be sent to any one of the surgeons belonging to a Union, for him to obtain the signatures; or, every surgeon might send his protest by post, to be attached to the general one. I shall be able to obtain all the signatures of this northern district. Hoping you will give publicity to this in your next publication, I am, Sir,

Yours truly obliged,
Lancashire, Nov. 6. ALPHA.

JAMES BIRD, ESQ., ON MEDICAL REFORM.

Continued from page 66.

Now you have extended that as liberally as it can go?—As liberally as it can go.

The qualification for Councillors is a membership of 15 years' standing?—The qualification for Councillors is a membership of 15 years' standing.

Was that point discussed?—Yes, it was discussed, and our own schedules returned a very large majority in favour of 15 years.

Is not the making preferment depend so much upon age rather calculated to retard the progress of science than to advance it?—There may be two opinions on that point. I confess, that in the medical profession, in my opinion, one of the wisest and best things that could possibly be adopted would be not to make the junior members of the profession politicians, or to take them away from the proper performance of their professional duties.

But could anything be more advantageous than to make them scientific men?—Certainly not.

And to induce them to distinguish themselves by scientific labours and researches?—Certainly.

Would you not be in a great measure shackling their labours, and retarding them in their scientific progress, by making preferment dependent upon age?—If the period at which they would arrive at that preferment was a very late period in life, I should say it would have the effect you describe; but when it is considered that they come into practice at the age of 22, and that in 15 years—that is, at 37—they are eligible to a seat upon the Council, I confess I do not think it is too late a period.

Then another restriction you have, is with respect to your examiners. It appears that they are not eligible to be elected on the court until they have been members for a period of ten years?—Yes.

Was that discussed at the Conference?—It was, and it was thought that, as this was a College of General Practitioners, where many points, beyond the mere knowledge of the schools, would be desirable in the examiners, they should be persons of a certain standing, to be appointed upon that Court of Examiners.

Do not you consider that young men who had just left the Universities and schools would conduct the elementary part of the examinations much more efficiently than those who had left such institutions for a period of 10 years?—It is possible.

Have you proposed in your arrangements to register the surgeons of the army and navy?—There is no provision for that; but it is hoped, on the part of the Conference, that the army and navy may be induced to come to a resolution to take none but registered practitioners. It is to be hoped so, and when the College of General Practitioners gets into efficient working, and when its capabilities are fully and fairly developed, I entertain little or no doubt that the army and navy will conform to that suggestion.

During your conferences did you hold any communication with the heads of the medical department of the army and navy?—We did not.

Nor with the senate of the University of London?—We did not; there were members of the Senate of the University of London sitting upon that conference.

But not there in that capacity?—Not there in that capacity.

Is that the plan of registration which was laid before the conference—[*showing a Paper to the Witness*]?—That is the plan of registration which was laid before the conference.

Were the distinctions in the third column approved; for example, as to the public appointments which persons hold?—Particular attention was not drawn to that point, but it was thought desirable that it should stand as it is.

Are you not aware that many public appointments are obtained by improper means, and that inserting appointments in that way, under the provisions of an Act of Parliament, might give a person an advantage which ought not to be bestowed upon him, because he had not obtained it by merit?—That is a consideration for the Council to determine upon; my own impression is, that it is rather gratifying to the ambition of men to have their public appointments notified in a register; and I think it holds out a great temptation to men to obtain public appointments if they can.

But where are you to stop; if you are to put down the title which a man has acquired, because he

is holding an office in some institution called public, why should you withhold from him the title which he has acquired from being an author?—I do not know; it never struck me that there would be any disadvantage in having the public appointments named; the great object of the register is, to give as much information as possible as to the position of the various members of the profession.

Would you not feel that the insertion of any such distinctions in a register, printed under the authority of an Act of Parliament, would be creating an unpleasant feeling in the minds of practitioners, more especially when it is known that many appointments are not well obtained?—I should think it more desirable and advantageous in that case; because, if any appointment was not properly obtained, it would be holding it up to the public gaze more completely, and it would tend very much to correct the abuses you speak of.

Do not you think it would be better if the address of the individual were inserted along with such distinctions?—The address is in the second alphabetical list.

But to insert it in the first, so that the address might be seen at once without referring to the second register?—The address might be given in the same column; I do not see any disadvantage in that arrangement.

Do you consider that the situations that individuals acquire in the exercise of their professional duties, ought to be noticed simply in a system of registration?—The object of registration, according to my idea, should be to show, as well as it can be shown, the position of the individual registered; the position that he holds in his profession, and likewise his rank in his profession.

Do you consider that it is necessary to go beyond showing what are really his legal qualifications for practising his profession?—It may not be necessary to go further than what you state, but I think it is very desirable that parties in the country, who applied to this register, and who had no other opportunity of knowing who was an hospital-surgeon, should find that information there. A person coming to London, and upon whom it was necessary to operate, in the present system of practice, would probably seek a hospital surgeon, and a register that did not furnish that information would, in my opinion, be incomplete. I dare say there may be some objections to the public appointments being entered, and there may be some heart-burnings, but I think that the advantages counterbalance the disadvantages.

I may again repeat the question, where would you stop?—you know how many offices are held by medical men, and to how low a point in many respects they descend? I think the term "public" defines that in a very great degree.

Do you include clubs?—I do not consider that to be in the true sense of the word a public appointment.

Gaols?—Certainly.

Workhouses?—Doubtless, and the police.

It might be possible to define such public appointments as were fit to be admitted upon the register?—I think so.

You are aware, I presume, that there is a school conferring degrees in midwifery in Dublin; namely, the Lying-in Hospital?—Yes.

And that there is a certain course of attendance required for a man to get a degree or diploma there. Was that matter under consideration at your conferences, with regard to admitting them to your diplomas here as general practitioners?—No special diploma in midwifery, without the possesion of another diploma as well, certifying their competency in medicine and surgery, would be sufficient; that could not be accepted alone.

It is only an additional point of study, for the purpose of their general surgical degree?—Exactly.

There being a school in Ireland wherein degrees or diplomas in midwifery are granted, that being, I believe, the only school in the United Kingdom of the same character, what advantage will a gentleman possessing that Irish diploma have, when he comes to be admitted as a general practitioner of your college, over the gentlemen of the other colleges, the Scotch or the English colleges, who have not had that additional branch of study imposed upon them?—He will possess no additional advantages.

Not even an exemption from examination?—We propose to admit them without examination, if they shall have passed an examination previously in the sister countries. It is not contemplated at all to institute examinations here, provided the party applying for the registration is enrolled in either of the colleges, and he has passed an examination in the sister country equivalent to the one which would be instituted here.

You strictly intend to admit them, as it is called in the Universities, *ad eundem?—Ad eundem.*

STATE OF THE PUBLIC HEALTH IN THE THIRD QUARTER OF THE YEAR 1848.

"The Quarterly Returns are obtained from 117 districts, sub-divided into 583 Sub-Districts. Thirty-six districts are in the metropolis, and the remaining 81 comprise, with some agricultural districts, the principal towns and cities of England. The population was 6,612,958 in 1841."

The mortality in the quarter is below the average. Only 43,445 deaths were registered; which is less by 6,034 than the 49,479 deaths registered in the corresponding quarter of 1847, and 7,960 less than 51,405, the numbered registered in the September quarter of 1846. The mortality of the country, it should be recollected, was low in the three years 1843, 1844, 1845, and in the first quarter of 1846; a slight increase took place in the spring quarter of 1846; in the summer a great mortality broke out, and continued through the autumn, as well as the whole of the year 1847, until influenza raged epidemically at the close of the year 1847, and was then and in the winter of 1848 fatal to thousands. A remarkable improvement was apparent in the spring of the year 1848, and was still more obvious in the summer quarter. While the deaths in the summers of 1846—1847, were 8,660 and 5,986 above—the deaths in the summer of 1848 were 809 below—the corrected average. The facts are shown more clearly in the Tables than they can be described.

DEATHS REGISTERED in each of the FOUR QUARTERS of the NINE YEARS 1839—1847, and in THREE QUARTERS of the YEAR 1848, in 117 of the DISTRICTS of ENGLAND and WALES.

Quarters ending	1839.	1840.	1841.	1842.	1843.	1844.	1845.	1846.	1847.	1848.
March	42,410	46,376	48,967	44,903	43,748	46,135	49,996	43,850	56,105	57,710
June	41,244	42,074	39,133	38,569	40,343	38,977	40,847	43,734	51,585	46,552
September	37,317	39,498	36,058	39,409	36,953	38,933	36,139	51,405	49,479	43,445
December	41,740	44,186	39,292	39,662	42,608	44,080	39,291	53,093	57,925	...
Total	162,711	172,134	161,450	162,543	163,652	168,126	166,273	192,082	215,094	...

	1839.	1840.	1841.	1842.	1843.	1844.	1845.	1846.	1847.	1848.
Deaths registered in the June Quarters of Ten Years	37,317	39,498	36,058	39,409	36,953	38,933	36,139	51,405	49,479	43,445
Deaths which would have been registered if the mortality had been uniform, and the Numbers had increased from 1839 at the rate of 1·75 per cent annually. Deduced from the average of 1839—47.	37,857	38,519	39,193	39,879	40,577	41,287	42,010	42,745	43,493	44,254
Unhealthy Seasons. Difference above the calculated number	...	979	...	...	...	...	...	8,660	5,986	...
Healthy Seasons. Difference below the calculated number	540	...	3,135	470	3,624	2,354	5,871	...	...	809

The improvement in the public health is considerable in all the divisions except London.

GOSSIP OF THE WEEK.

THE CHOLERA.—WOOLWICH, Nov. 6.—The cases amongst the convicts up to yesterday at 12 o'clock were—51 admitted, 17 deaths, 18 discharged as recovered, and 8 convalescent. There has been no change of any kind in the report up to 12 o'clock to-day. When the number of deaths, recoveries, and convalescent does not amount to the number admitted, the others, of which there is a difference of eight to-day, are labouring under the disease, and appear only amongst the admitted. It is necessary to give this explanation, as many parties have misunderstood the returns, and imagined there were some numbers unaccounted for.

LIVERPOOL DISPENSARY.—The election of 6 honorary medical-officers for the Dispensaries took place on Tuesday, when the choice fell upon the following gentlemen:—Messrs. G. T. Alanson, J. Hey, G. F. Easton, R. Hutchinson, R. T. Lodge, and J. Fenton.

PATENTED ELECTRIC LIGHT.—On Monday evening, a public exhibition of this invention was given in London. The light is produced by a voltaic battery, carbon being supplied in proper quantity. The result of the apparatus is, that a light may be obtained at the most trifling cost, at not more than the cost of 1d. per hour for a degree of illumination equal to 100 candles. The cost is estimated at one-twelfth the price of gas. The light may be caused or extinguished instantaneously. There is no fear of combustion, and the heat is vastly disproportioned to the light emitted. A light was exhibited of beautiful brilliancy and steadiness, scarcely distinguishable from the light of the sun; it was thrown upon some paintings of Mr. Palton, and the effect was most successful. Fabrics, such as green and purple, not easily distinguishable in artifical light, were clearly visible. So also were the prismatic rays shown on the wall. The light is a pure white, much whiter than camphine, and the one exhibited cast the wax candles in the chandeliers completely into the shade. The light seems peculiarly suited to all the purposes to which gas and oil are now applied. In small lights for rooms, &c., the inventor states that they should dispense with the use of carbon altogether, using another material not yet specified, which will enable them to dispense with the electro-magnetic regulation altogether, by means of which a light of from 1 candle up to 30 or 40 can be placed upon a drawing-room table.

HORSE-CHESTNUTS AS HUMAN FOOD.—M. Payne declares, that a horse-chestnut is worth as much as a potato, and that two trees, bearing this fruit, at the door of every cottage in the country, are equivalent to several acres of potato-fields; the more so, as the horse-chestnut almost always yields a good crop, and requires hardly any care.

POISONING BY STRYCHNINE.—Mrs. Smyth, of Ramsey, wife of Captain Smyth, an amiable and accomplished lady, mother of five children, has

been poisoned by the mistake of a druggist, who put nine grains of strychnine into a tonic mixture instead of a like quantity of sicline. The coroner's jury have returned a verdict of manslaughter against the druggist.

UNIVERSITY OF CAMBRIDGE.—The Professor of Anatomy has given notice, that he will commence his Course of Lectures on the Anatomy and Physiology of the Human Body, on Tuesday, Nov. 14, at 1 o'clock, in the Anatomical School. The Inspectors of the Anatomical Museum for the present year have reported to the Senate, that they have examined the Museum, and have found the collection in good order, and the specimens in an excellent state of preservation. About 50 specimens have been added to the collection since the last report.

GERANIUM MACULATUM A CURE FOR MERCURIAL SALIVATION.—Dr. George M. Maclean has used in one case of mercurial salivation, an infusion of the geranium maculatum as a lotion with speedy and entire relief.—*American Journal of Med. Sciences.*

BALTIMORE COLLEGE OF DENTAL SURGERY.—The new *college edifice* is especially constructed for teaching the several departments of dental surgery. It contains a *general lecture room* and *museum*, in which are seen some thousands of teeth, showing every pathological condition, and also many *anatomical specimens* of the most choice kinds, recently imported from Paris, all of which are continually before the eye of the student, and always at hand in illustrating the different branches of each of the Professors. There is also an anatomical theatre, dissecting room, and two dental workshops, containing all the permanent tools and appliances for the most complete practical schooling, which latter is under the especial direction of the Professor of the practical department, aided by the constant attendance of the demonstrator of mechanical dentistry; likewise a dental infirmary, under the same Professor, and in full operation, where patients come from day to day to have their teeth attended to, thus furnishing the most ample opportunity for each student to become a thorough practical dentist before leaving the college, so that the dental student cannot fail to perceive,—and the faculty desire to impress the fact on the dental and medical profession at large,—that the most ample provision is now furnished for making the dental student both thoroughly and practically skilful as well as accomplished in his profession. The dissecting and mechanical rooms will be opened during the month of October, when it is earnestly advised that students should come early to take advantage of the preparatory instruction which is without any additional charge.

ON THE MINUTE ATTENTION TO THE COMFORTS OF THE INSANE.—If it be necessary for the treatment of pauper patients that such especial attention should be paid to these points, *à fortiori*, how absolutely indispensable is it that patients of a higher class, confined in private asylums, should have around them all the comforts and little elegancies of life to which they have been accustomed when well, and whilst at home! It is impossible to be too careful in directing that all the service of the table should be in accordance with the habits of the patients. The sense of banishment from home, and of confinement, and the consciousness of mental infirmity and dependence, are mitigated in the mind of many a silent, uncomplaining patient, by these means. Among the depressing recollections of the insane of the higher classes, when recovering from insanity, none are more frequent, or felt to be more degrading, than those connected with any want of respect shown to them, or any disregard of decent customs as to their meals. Yet, without great attention, they will sometimes be found, when quite well enough to appreciate what is done, sitting down to a dinner of meat, vegetables, and pudding, all sent to them on one plate. Negligences of this kind produce fretfulness and discontent, and tend to retard convalescence. If attendants are allowed to practise this kind of negligence, they soon fall into habits of rudeness, and even of inhumanity, fancying that the patients do not observe their conduct, and that their feelings are of no consequence.—*Journal of Psychological Medicine.*

MORTALITY TABLE.

For the Week ending Saturday, Nov. 4, 1848.

CAUSES OF DEATH.	Total.	Average of Five Autumns.
ALL CAUSES	1,115	1,154
SPECIFIED CAUSES	1,112	1,149
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	423	270
SPORADIC DISEASES :		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	44	52
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	108	127
Diseases of the Lungs, and of the other Organs of Respiration	125	222
Diseases of the Heart and Blood-vessels	42	38
Diseases of the Stomach, Liver, and other Organs of Digestion	59	67
Diseases of the Kidneys, &c.	6	12
Childbirth, Diseases of the Uterus, &c.	12	14
Rheumatism, Diseases of the Bones, Joints, &c.	11	8
Diseases of the Skin, Cellular Tissue, &c.	2	2
Old Age	33	64
Violence, Privation, Cold, and Intemperance	19	32

TO CORRESPONDENTS.

"J. A."—The communication being somewhat long, we are compelled to postpone it till next week.

"J. B. S., Birmingham."—The best plan would be to examine the Library of the College of Surgeons. It is probable that a copy may be found there.

"Fair Play."—We cannot spare the room to answer such questions at length.

"Ulysses."—We do not agree with the sentiments of our correspondent, and therefore must decline his offer.

"Dr. Deacon."—The matter shall be noticed.

"Civitas."—If our correspondent wishes, the communication shall be inserted next week.

"Censorius."—The remarks are too severe, and, if published, would expose us to an action at law.

"A Member."—We are not aware of the existence of such a regulation. It would be proper to apply to the Secretary.

"Homo."—(1) Yes. (2) The *privileges* are not worth possessing.

"An English Physician."—A private letter shall be sent.

"Beta" is in error.

"A Borough Student."—Nicholas de Fernehsm was a priest and physician to Henry III., in 1241.

"James."—From a Scotch contemporary.

"M.D."—It was used extensively in Germany; but from its uncertainty of operation is now laid aside.

"Socius."—A correct account is given in Paris's Pharmacologia.

"Amicus Patriæ."—(1) The institution is in a flourishing condition. (2) We cannot furnish the particulars.

"Mr. S. George."—The subject has been already noticed.

"N. B."—The paper "On Atmospherical Phenomena" is under consideration.

"Dr. Roberts."—The second part has not yet been received. The letter of Dr. Graham is an advertisement.

"M. J. H."—The indentures may be cancelled.

"Mr. S. Smith."—No expense will attend the insertion of the communication.

"Veritas."—The communication is in the hands of the printer.

"Inquirer, Bath."—Any kind of galvanic apparatus will do.

"Britannicus."—A person having only a foreign diploma is not a legally qualified practitioner,—neither can he recover for medicine and attendance.

"Vindex" must favour us with his name in confidence before we can accede to his request.

"A Member and Licentiate."—The appointment rests with the Board. It is by no means lucrative.

"Mr. R. Jones."—We do not believe that Hydrocyanic Acid exists in the substance mentioned.

"Medicus, Dublin"—The numbers shall be immediately sent.

"Chirurgus."—The sum named for the reduction of the dislocation is moderate, and may be recovered at law.

"A Licentiate of the Apothecaries' Company, 1836."—The same privileges.

"Patsr."—We will look into the matter.

"A Subscriber, Cork."—We can offer no opinion without seeing the specimens sent.

"Justitia."—The suggestions are sensible and practical.

"Beta, Colchester."—The information is contained in the Student's number.

"North."—We know nothing of the "facts" to which our Correspondent refers.

"Half-pay" shall receive an early insertion.

"Esculapius."—Not more than five years.

"J. G."—We must decline recommending.

"Questo."—Upwards of 3,000.

"A Pathologist."—The communication would be acceptable.

"Sandford."—The dose of the hydrated peroxide of iron must be large, or will be of no benefit.

"Mr. Robert Annan, Kinross," "On Respiration in Animals that Hybernate," received.

"Mr. W. Horbett, Chancery-lane."—Communication received.

"Mr. J. Jackson, Long Clawson."—Received.

"Censor, Norwich," is thanked for his communication. The letter of a Medical Officer shall appear next week.

"Dr. Toogood Downing, Harley-street."—Letter received.

"Dr. Ledwick, Dublin," is thanked for his communication, which shall appear next week.

"Mr. Allison, Bridlington."—"On the Medicinal Properties of Mercury and the Chlorate of Potash," received.

"A Correspondent," sends us the following announcement, relating to the Norwich Homœopathic Dispensary:—"Norwich Homœopathic Dispensary, supported by Voluntary Contributions, Rigby's-court, Bethel-street. Patron:—The Lord Bishop of Norwich. Lady Patronesses:—The Dowager Emily Lady Suffield, Lady Bencham Proctor, Mrs. Stanley. Committee:—The Rev. C. Heath, the Rev. H. Gwyn, the Rev. H. Wilson, Lieut. Matthews, R.N.; Mr. Cozens, Mr. Harvard. Hon. Secretary:—Robert Kerr, Esq. Medical Officer:—Robert Douglas Hale, Esq., M.R.C.S.L. The Committee have the pleasure to announce to the Subscribers and Public, that this Institution, established for the gratuitous treatment of the Poor upon the Homœopathic System of Medicine, is now open. Days of attendance—Tuesdays, Thursdays, and Saturdays, from 9 to 10 a.m. Subscribers are requested to restrict their recommendations to the really poor and necessitous." Upon which he makes the inquiry—"What can money be required for in an institution where medicine is so cheap, when five grains of blue pill would act on 500 patients,—opium of course in proportion?"

"Dr. William Gore, Limerick."—At any of the Medical Booksellers.

"Mr. Hooper, Pall-mall East," on "Terchloride of Carbon," shall appear next week.

"H. R. C., Bourton-on-the-Water," writes as follows:—"I took up a volume of the 'Medical Times,' and carefully turned the paper over, and, by degrees, my attention was drawn to the many telling leaders and articles breathing the wrongs of the profession, and containing many propositions for its relief. National associations, provincial ditto, Parliamentary Committees, and individual efforts, all—all ineffectual and abortive; and from this fact, that one-half of the profession are ready at any moment to cut the throats of the other. Can you expect Union reform when the present system of Club Associations are not only encouraged, but absolutely formed by members of our profession. Can you expect that any attempt to raise the position of our profession can be effectual, while what are called 'Self-supporting Dispensaries' are created and attended by what are called respectable medical men. In a large manufacturing town like Birmingham, the scale of remuneration being 3s. 6d. for three weeks' attendance at the patients' houses, medicines, bottles,—in fact, everything included. Charity is the cloak under which this system is carried on; but the majority of the patients attended, if let alone, would fairly remunerate the man they might employ. There are clubs, also, who are attended for 2s. each case a-year, and I can name a case of attendance on a woman in labour, near three miles out of town for 5s.! The noble effort made by the Upton-on-Severn men, cannot be too highly eulogized. For years the cry has been "Resign, resign! and throw yourself on the honour of the profession: this is the only way to bring the Guardians to." Look at the disgusting result. We must heighten the standard of education; we must thus purify our profession. Profession! aye, how noble in theory; how degraded and trampled upon in practice. Every grade and rank of society, individually, and,—as at the present time of fear,—collectively, look up to us for advice and help: how freely given! how ill requited! But it is ourselves, not Government; it is ourselves, not Boards of Guardians; it is ourselves, not Insurance Officers, that we have to thank for our position and circumstances. Again, I must say, raise the standard of education and examination, and the civilization,—if I may term it,—which must result, will prevent such disgusting facts as the above being in existence.

"R. S. F."—"Hoblyn's Dictionary" is a useful work. The price is 10s. 6d.

Letters and Communications have also been received from J. N.; J. B. S., Birmingham; Fair Play; Ulysses; Dr. Deacon; Curitas; Censorius; A Member; Homo; An English Physician; Beta A Borough Student; James; M.D.; Socius; Amicus Patriæ; Mr. S. George; N. B.; Dr. Roberts; M. J., B.; Mr. S. Smith; Veritas; Inquirer, Bath; Britannicus; Vindex; A Member and Licentiate; Mr. R. Jones; Medicus, Dublin; Chirurgus; A Licentiate of the Apothecaries' Company, 1836; A Constant Reader; Pater; A Subscriber, Cork; Justitia; Beta, Colchester; North; Half-pay; Esculapius; J. G.; Med. Chir.; G.; Questo; A Pathologist; Sandford; Mr. Robert Annan; Mr. W. Horbett, Chancery-lane; Mr. J. Jackson, Long Clawson; Censor, Norwich; A Medical Officer; Dr. Toogood Downing, Harley-street; Dr. Ledwick, Dublin; Mr. Allison, Bridlington; A Correspondent; Dr. William Gore, Limerick; Mr. Hooper, Pall-mall East; H.R.C.; R.F.S.

ORIGINAL LECTURES.

A COURSE OF LECTURES ON SOME OF THE MORE IMPORTANT POINTS IN SURGERY.

By G. J. GUTHRIE, Esq., F.R.S.,
LATE PRESIDENT OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

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LECTURE I.

Remarks on the practice of "debridement" in gun-shot wounds. Immediate and secondary amputations. Tabular returns of capital operations in the British Army during the Peninsular War; and of operations in the hospitals of Antwerp and Brussels, between June and December, 1815.

The learned lecturer, after adverting to the discussions which have taken place in the Academy of Medicine, remarks,—Amongst the Parisian surgeons who have alluded to the treatment of gun-shot wounds by the British, M. Jobert, the author of the following passage, stands one of the most prominent for his knowledge and ability:—"Surgeons who agree on the necessity of enlarging wounds (the *debridement* of the French) have differed as to the *modus faciendi*. Some have been satisfied with scarifying the skin, others with deeper incisions; and La Martiniere believed that all the parts implicated should be divided, whether skin, aponeuroses, or muscles. In England, this practice was taught in the schools. Benjamin Bell objected to scarifications, and wished to substitute an incision throughout the length of the wound. The great John Hunter illustrated this point in science by his researches. He denied the principle on which this was done, which he was far from considering as infallible. Unfortunately, his opinion was not adopted, and the surgeons of England continued, and *continue yet to enlarge these wounds*." *Gazette Médicale de Paris*, page 778, for Sept. 30th, 1848. M. Vidal, *Gazette des Hopitaux*, or *Lancette Française*, of August 22nd, 1848.

I presume M. Jobert had made himself acquainted with the practice taught by, at least, some of the learned professors of the schools of surgery in London, before he hazarded the remark I have quoted. It is therefore possible that such practice may be taught in London, for I am aware that many things have been, and perhaps may be still done, which the surgery in the army in the Peninsular condemned as inefficient, or bad, some five-and-thirty, or forty years ago. It is, I believe, exactly so long since the enlargement of wounds, simply because they were gun-shot wounds, was abandoned as injurious by the surgeons of the British army. I never saw but one case of it, and it was the last as well as the first. The unlucky man was a subaltern of the 9th Regiment, shot in the upper part of the thigh, by a musket-ball at Vimiera, on the 21st of August, 1808. The staff-surgeon, who then knew nothing about soldiers or gun-shot wounds, but who afterwards greatly distinguished himself, enlarged the wound to the extent of some three inches. The lieutenant was an Irishman, and therefore could not flinch, but stood as firm as a rock, whilst the knife, which was not too sharp, grated harshly as it went through the tendinous expansion of his great gluteus muscle. I must admit, however, that he grinned horribly, although he would not cry out. That grin is still in my recollection, although forty years have elapsed, and if I were to meet him to-morrow, in the street, with the grin on, I should call out—"Yon are Sankey." Surgeons may learn from him the consequences of such *debridements*, and may also see the scar of the first and last incision made into the skin of a British soldier of the army of the Peninsular, on the principle, which was from that hour exploded, "that it was necessary a man should be cut, because he had been shot." M. Jobert is stated to forbid a *debridement*, even for the removal of a splinter of bone, until at a secondary period of time, when its extraction shall be obviously necessary; in which, also, he is only following the practice of many of the best surgeons of the British army, (but to which I do not assent,) who, with him, equally avoided such incisions and removal of splinters, even when they were doing mischief. Of the many French officers and soldiers who passed through my hands during the Peninsular war, some must be yet living, several of whom I saved from starvation, as well as other misery; and their most honourable scars will show whether such *debridements* were unnecessarily made by me in that war.

Under these circumstances, if the surgeons in the hospitals of Paris should notice English surgeons at all, it is not to the opinions and practice of Mr. Hunter, who died in 1793, or of Mr. B. Bell, (who had no practical knowledge of the subject on which he wrote, however well or ill he might write), that they should refer; but to those records of the surgery of the Peninsular war, which I have had the good fortune to bring under the notice of the profession, and which, I have been informed, have been translated into other languages for the use of the armies of the countries to which they belong. If they make such reference, they will then find that there are few points they have been and are so closely and so accurately investigating, with so much credit to themselves, that have not been as closely inquired into, judged, and pronounced upon during that eventful period which began at Roliça, in Portugal, in 1808, and terminated at Waterloo in 1815.

M. Malgaigne, in his observations addressed to the Academy of Medicine, published in the *Gazette Medicale de Paris*, for the 12th of August, 1848, enters also upon the subject of immediate and secondary amputations, which he considered a disputed one. In England it is a settled point, that "when a limb cannot be saved, it is to be amputated without delay." It is a fact, however, which has been established through the labours and exertions of the surgeons of the army in the Peninsula, and with which M. Malgaigne is evidently unacquainted.

The editor of the *Gazette des Hopitaux* for the 3rd of August, 1848, seems to think, in his remarks on the statistics of amputation adduced by MM. Roux and Malgaigne, that further statements on a large scale are necessary, to enable the Parisian surgeons to arrive at sound conclusions on this point. But as these statements on a large scale are not, I hope, likely to be furnished for some time to come, I venture to offer some, on which the opinions of the surgeons of the British army were founded, and which, with others that preceded them, let to the conclusion I have stated. They are on a scale sufficiently large to deserve attention, and have not hitherto been published.

No. I.

RETURN of CAPITAL OPERATIONS performed at the Hospital Stations of the Army in Spain, between the 21st of June and 24th of December, 1813, including the Battles of VITTORIA, the PYRENEES, and SAN SEBASTIAN, to the Entrance into FRANCE.

STATIONS.	OPERATIONS.	No. operated upon.	Died.	Discharged Cured.	Under treatment.	REMARKS.
VITTORIA ...	Shoulder joint	13	10	2	1	
	Upper extremities ...	108	58	40	10	
	Lower ditto	148	95	38	15	
	Trepan	3	3	...	...	
SANTANDER	Upper extremities ...	22	5	8	9	
	Lower ditto	23	2	6	8	
BILBAO	Shoulder joint	5	5	...	...	
	Upper extremities ...	146	48	46	52	The great number of amputations at this station was in part occasioned by hospital gangrene.
	Lower ditto	68	36	16	16	
	Aneurism	1	1	...	...	
PASSAGES ...	Shoulder joint	1	...	...	1	
	Upper extremities —	11	1	3	7	
	Lower ditto	14	6	3	5	
	Trepan	3	2	1	...	
	Aneurism	1	1	...	...	
VERA	Upper extremities ...	12	4	8	...	
	Lower ditto	5	3	2	...	
	Total	584	287	173	124	

RECAPITULATION.

Shoulder joint	19	15	2	2
Upper extremities ...	299	116	105	78
Lower ditto	258	149	65	44
Trepan	6	5	1	
Aneurism	2	2		

If one-sixth of the number remaining under treatment be considered to have died, which is a low calculation, the deaths will stand to the recoveries as 300 dead to 276 recovered, or a loss of more than one-half of the secondary operations.

No. II.

CAPITAL OPERATIONS performed in the Field with Divisions of the Army during the same Period.

DIVISIONS	OPERATIONS.	No. Operated upon.	Died.	Discharged Cured.	Under Cure.	Tetanus occurred.	REMARKS.
Cavalry	Upper extremities ...	3	1	2			
	Lowerditto	3	2	1			
First	Shoulder joint	3	...	2	...		1 Sent to General Hospital.
	Upper extremities ...	14	1	3	5	...	5
	Lower ditto	10	2	...	1	1	7
	Trepan	2	2				
Second	Shoulder joint	1	...	1			
	Upper extremities ...	16	...	5	6	...	5 Sent to General Hospital.
	Lower ditto	21	3	6	7	...	5
	Aneurism	1	...	...	1		
Third	Shoulder joint	1	...	...	1		
	Upper extremities ...	17	2	...	15		
	Lower ditto	10	...	2	8		
Fourth	Upper extremities ...	10	...	10			
	Lower ditto	20	...	20			
Fifth	Shoulder joint	12	...	8	2	...	2 Sent to General Hospital.
	Upper extremities ...	57	1	36	2	...	18
	Lower ditto	41	10	13	2	...	16
Sixth	Shoulder joint	1	1				
	Upper extremities ...	7	...	5	...	...	2 Sent to General Hospital.
	Lower ditto	6	1	1	3	...	1
Seventh	Upper extremities ...	18	...	3	1	...	14 Sent to General Hospital.
	Lower ditto	9	1	...	1	...	7
Light division.	Shoulder joint	1	...	...	...	...	The whole of these cases sent to the General Hospital; results not known at the division.
	Upper extremities ...	21	...	...	...	...	
	Lower ditto	8	...	...	...	...	
	Trepan	4	...	...	...	...	
	Total	317	27	118	55	1	

RECAPITULATION.

Shoulder joint	19	1	11	3	...	4	Sent to General Hospital.
Upper extremities ...	163	5	64	29	...	65	
Lower ditto	128	19	43	22	...	44	
Trepan	6	2	...	...	...	4	
Aneurism	1	...	...	1	...		

Of 310 amputations, 25 died, 172 recovered in the field, and 113 were sent to the rear, of whom one-sixth may be considered to have died, making a total of 45 deaths in 310 cases, the proportion of upper extremities to lower in the 310 being as 182 to 128, and greatly influencing the result, which is consequently much more favourable than if the numbers had been reversed. The proportion of upper to lower extremities in the secondary operations, as by Return No. 1., is equally in favour of the upper, and can only be accounted for, when compared with Return No. III., by the army being

constantly in motion, and the hospitals at a distance. The difference of results at the several stations is also remarkable; it is so with the divisions in the field. The 3rd and 4th divisions under staff surgeons Lindsey and Boutflower, kept their amputations with them in bivouac, and their success is remarkable; that of the 4th division has no parallel. The light division, on outpost duty, could not keep their amputations. These two returns include 886 amputations.

The labours of the surgeons of the army may be judged of by the fact, that during the last three months of the year, to which these returns refer—viz., from September 25th to December 24th, 1813, the number of sick and wounded amounted to 37,144, a number nearly equal to that of the whole army.

No. III.

RETURN of SURGICAL CASES treated, and CAPITAL OPERATIONS performed, in the General Hospital at TOULOUSE, from April 10th to June 28th, 1814.

DISEASES AND STATE OF WOUNDS.	Total treated.	Died.	Discharged to duty.	Transferred to Bordeaux.	Proportion of Deaths to the number treated.
Head	95	17	25	53	1 in 5 19/17
Chest	96	35	14	47	1 in 2 36/35
Abdomen	104	24	21	59	1 in 4½
Superior extremities	304	3	96	205	1 in 101
Inferior ditto ...	498	21	150	327	1 in 23 6/7
Compound fractures	78	29	...	49	1 in 2 20/29
Wounds of spine ...	3	3			1 in 1
Wounds of joints ...	16	4		12	1 in 4
Amputations ...		...			
Arm 7	48	10	...	38	1 in 5½
Leg and thigh 41					
Total	1,242	146	306	790	1 in 8 138/143

Wounded Officers 1,17, not included, making a total of 1,359, among which thirteen cases of tetanus occurred, and all proved fatal.

SECONDARY OPERATIONS.	Total treated.	Died.	Transferred to Bordeaux.
Amputation of superior extremities	15	3	12
Amputation of inferior extremities	37	18	19
Operation of taking up the femoral artery	...	1	
Trephine	4	3	1
Shoulder-joint	1	1	
Total	58	26	32

Of the 48 primary operations, 10 died; of these, 3 of the thigh within a short time after the operation, being as high up as could be performed by the common operation. 41 of the operations were of the thigh and leg, seven of the arm.

Of the secondary operations, of 15 of the superior extremity 3 were lost, and of the 37 of the thigh, 18 died.

Of fractures of the thigh there were 43, of these,

20 died, 7 having suffered amputation;
5 were amputated and survived;
18 cured and under treatment.

Total 43

Of the 18 cured and under treatment, five only can be considered well, or as using their limbs; two more consider their limbs more valuable or serviceable than a wooden leg; and the remaining 11 wish they had been amputated at first, as they are not likely to do well, and if they recover, the limbs will be distorted and unserviceable. *(See Table* No. IV.)

The reputation of the surgery of the British army in the Peninsula, in 1814, and even at the present time, if compared with the success attending the surgery of the Parisian hospitals in 1848, must stand or fall by returns III. and IV. I was the principal medical officer on the field of battle, and, afterwards, of all the hospitals in Toulouse. They wanted for nothing; no treatment was carried out without my sanction; no operation was performed; no person died without my being satisfied nothing more could be done for him. The staff and assistant surgeons were principally of my own selecting, from my knowledge of their ability and of the manner in which they *could work if they pleased.* The best were Irishmen. One, Dr. Franklin, is now Inspector-general in India; another, Dr. Mahoney, is Inspector-general in Canada; a third, Dr. Roe, is Deputy-inspector in Ceylon. The others are mostly dead; but none claim nor ever claimed the slightest merit for having done their duty as it ought to be done.

No. IV.

RETURN of SURGICAL CASES treated, and CAPITAL OPERATIONS performed, in letter A, General Hospital, TOULOUSE, in charge of Staff Surgeon BOUTFLOWER, from April 10th to May 16th, 1814, inclusive.

DISEASES AND STATE OF WOUNDS ON ADMISSION.	Admitted.	Total treated.	Discharged to duty.	Transferred to Bordeaux.	Died.	Remain.	Proportion of Deaths to diseases treated.	REMARKS.
Head	12	12	..	2	6	4	1 to 2	Two died the day of admission, one after being trephined, the remaining three from inflammation and suppuration in the substance of the brain; in the whole the cranium was more or less fractured.
Thorax	26	26	..	5	14	7	1 to 2	Three died the day of admission; many of the remainder were complicated with other severe wounds.
Abdomen	10	10	..	2	7	1	2 to 3	Three died the day of admission.
Wounds of spine	3	3	..	..	3	..	1 to 1	In all there was paralysis of the lower extremities; one died on the eighth, a second on the fourteenth, and the other on the fifteenth day.
Wounds of joints	16	16	..	2	4	10	1 to 4	Two were admitted in a state of mortification, and died on the seventh day; one died after amputation; the fourth was a wound of the hip-joint, not admitting of amputation.
Compound fractures	25	25	..	2	7	16	1 to 3½	On two, amputation was performed very high on the thigh, after considerable hæmorrhage; a third was carried off by pneumonia.
Amputations	26	26	..	16	4	6	1 to 6½	In one case there was secondary hæmorrhage; the remaining three had fever of the bilious remittent type.
General wounds (severe)	270	270	36	212	8	14	1 to 34	Five were cases of tetanus supervening on wounds of the foot.
Ditto ditto (slight)	82	82	70	11	1	..	1 to 82	This was a case of enteritis.
Total	470	470	106	252	54	58	1 to 8	

RETURN of SURGICAL CASES treated, and SECONDARY OPERATIONS performed, as above.

SECONDARY OPERATIONS.	Total Number.	Died.	Under Treatment.	REMARKS.
Trephine	1	1	..	Died twenty-four hours after the operation.
Amputation, upper extremities	6	1	5	Attacked with bilious fever the day after the operation; died on the seventh day.
Ditto, lower ditto	9	4	5	In one, amputation was performed after tetanus had occurred; two were amputated very high in the thigh, the femur being broken, and the artery having given way; the remaining one sunk under bilious remittent fever.
Total.....	16	6	10	

Five cases of tetanus occurred; in one, the cold bath was the principal remedy; in the second, amputation was performed; in the third, the warm bath and compound ipecacuanha powder were used; in the fourth case, opium and ether, in excessive quantities, were exhibited; and in the fifth, the tincture of digitalis and bleeding were adopted. The result in all was fatal.

M. Malgaigne has alluded to that part of Return No. III. which mentions the primary amputations, but has not, I believe, noticed the secondary ones. Of the primary operations there were forty-eight, of which ten died. Of the forty-eight amputations, forty-one were of the lower extremities, and seven only of the upper—a peculiarity of this return he compared with Nos. I. and II., exceedingly remarkable. It demonstrates the great improvements which had taken place in surgery, in not cutting off arms unless in cases of great emergency, and in all which cases the favourable circumstances in which we were placed at Toulouse enabled us to exercise our judgment, uninfluenced by extrinsic circumstances. It is shown, by the secondary amputations, that fifteen of the upper extremity were afterwards done, but twenty-two against seventy-eight out of 100 amputations, is a lower proportion than was ever known before on a large scale; whilst the eighteen deaths against nineteen recoveries after amputation of the lower extremity, being secondary operations, as opposed to even ten out of forty-one primary operations, could leave no doubt of the propriety of performing an amputation at the moment of injury, in preference to leaving it to any subsequent period. It was the rule, therefore, of the British army, in 1814, and is the rule now, established beyond dispute.

The treatment of the compound fractures deserves no less attention, and shall receive it at a future day, when the results and the principles I have deduced from them will not, I trust, be found much in default when compared with those of the present time.

Surgeons of civil hospitals, and particularly of London, during the last thirty years, are apt to consider that another great improvement in surgery, the abstaining from the use of the trepan or trephine, is due to them. If those who incline to this opinion will look to the returns now laid before them, they will see that, whatever the practice may since have been in London, the example of refraining from this operation had been at least coeval with their own, even if it had not been set by their brethren in the Peninsula. The Return No. III. shows that of 95 injuries of the head, it was resorted to only in 4 cases.

No. V.

RETURN of OPERATIONS, &c., in the British General Hospital at ANTWERP, from June 21st to August 24th, 1815.

OPERATIONS, &c.	Number of Cases.	Recovered.	Died.	Recovering.
Amputation of the thigh	53	7	29	17
,, ,, leg	26	7	8	11
,, ,, arm	41	10	14	17
,, ,, fore-arm	30	13	3	14
,, ,, shoulder-joint ...	6	1	3	2
,, ,, hip-joint	1			1
,, ,, penis	1			1
Trepan ... ... —	9	2	5	2
Securing the carotid	1		1	
,, external iliac	1		1	
Excision of the head of the humerus..	1			1
Total...	170	40	64	66

Of the 66 cases reported recovering, three died, making, in all, 170 cases of operations of all kinds; of which 40 were discharged cured, 67 died, and 63 were sent to England. The hip-joint case died.

S. HIGGINS,
Deputy-Inspector General. (Since dead).

No. VI.

RETURN of SECONDARY CAPITAL OPERATIONS performed in the Hospital of the FRENCH Wounded Prisoners, at ANTWERP, between June 29th and Sept. 20th, 1815.

OPERATIONS.	Total treated.	Died.	Transferred.
Shoulder-joint	3	1	2
Thigh	19	7	12
Leg	30	12	18
Arm	12	3	9
Fore-arm	12	2	10
Hand	4		4
Fingers	7		7
Ear	1		1
Foot	1		1
Testis	2		2
Total	91	25	66

N.B.—The above cases were treated by Belgic medical officers, whose books give no further information.

(Signed) VRANEKER, M.D.

The above Returns, Nos. V. and VI., show the comparative mortality amongst the English and French wounded at Antwerp, after the battle of Waterloo. The success of the British surgeons, in amputations, was less than that of the Belgian surgeons in charge of the French prisoners, which latter will bear a not discreditable comparison with that of the present day, in the hospitals of Paris.

Returns VII. and VIII. show the result of the amputations among the British wounded at Brussels, than which nothing can well be worse. The officers fared better, and I have given a nominal return of them, No. IX., showing a loss of three out of twenty-nine, of all kinds, thighs, arms, and legs, a return which may be fairly compared with that of *the officers* who suffered lately in Paris. The cause of the difference in the result between the officers and private soldiers I have elsewhere pointed out, and as it is not creditable to the humanity of the good people of Great Britain, I do not repeat it.

No. VII.

RETURN *of the* NUMBER *of* BRITISH WOUNDED *Treated in the Hospitals at* BRUSSELS, *between the 16th June and 24th December*, 1815.

Total treated, 3,959.
Of which were discharged, 3,286.
Of the discharged were sent to England, 1,725.
Of which invalided here, 64.
Died, 554.
Remaining, 119.
Number of capital operations:—Total, 387; died, 146; remain, 25.

Remarks.—Nearly one in seven of the whole died, and if one-sixth loss be taken, on the 119 remaining, making a total of 166 dead, it will be nearly one-half of the capital operations, or rather less than the exact number.

D. MCNEIL,
Deputy-Inspector of Hospitals.
(Since dead.)

No. VIII.

RETURN of CAPITAL OPERATIONS, Primary and Secondary, Performed in the British General Hospitals, BRUSSELS, brought in from the Field, between 16th June and 31st July, 1815.

OPERATIONS.	General Total.	Primary Operations.	Died.	Remaining.	Proportion of Deaths to Operations.	Secondary Operations.	Died.	Remaining.	Proportion of Deaths to Operations.	Total remaining.	Of these doubtful.	Transferred to Antwerp.	REMARKS.
Shoulder-joint	18	6	1	5	1 to 6	12	6	6	1 to 2	11			A French soldier, who recovered.
Hip-joint	1	..	..	..	.. ..	1	..	1	.. ..	1	..	..	
Thigh	148	54	19	35	1 to 3	94	43	51	1 to 2	86	9	4	
Leg	93	43	7	26	1 to 6	50	16	34	1 to 3	60	..	4	
Arm	72	21	4	17	1 to 5	51	13	38	1 to 4	55	..	6	
Fore-arm	39	22	1	21	1 to 22	17	5	12	1 to 3	33	..	3	
Carotid artery tied	1	..	..	..	.. ..	1	..	1	.. ..	1			
Trephine	2	..	..	..	.. ..	2	1	1	1 to 2	1	..	1	
Total..	374	146	32	104	.. ..	228	84	144	.. ..	248	9	18	

D. M'NEIL, Deputy Inspector of Hospitals.

No. IX.

RETURN of OFFICERS on whom CAPITAL OPERATIONS have been performed in the Field and in BRUSSELS, from the 16th June to 12th October, 1815.

REGIMENT.	RANK.	NAME.	REMARKS.	EVENT.	WHERE AT PRESENT.
General Staff.	Lieut.-General.	Marquess of Anglesea.	Amputated leg	Convalescent.	England.
Ditto.	Major-General.	Sir G. Cooke.	Left arm amputated	,,	England.
Ditto.	Colonel.	Sir H. Hardinge.	Left arm amputated	Well.	Army.
Ditto.	Major.	Erskine.	Left arm amputated	Cured.	England.
Ordnance.	Major.	Parker.	Amputated thigh	Doing well.	England.
Ditto.	Captain.	Harris.	Right arm amputated	,,	England.
Ditto.	Lieutenant.	Cromie.	Both legs amputated	Died 24 June.	
Ditto.	Ditto.	Harvey.	Arm amputated	Doing well.	England.

No. IX.—(*continued.*)

REGIMENT.	RANK.	NAME.	REMARKS.	EVENT.	WHERE AT PRESENT.
15th Hussars.	Lieut.-Colonel.	Dalrymple.	Leg amputated	Doing well.	England.
Ditto.	Captain.	Thackwell.	Right arm amputated	Well.	Regiment.
23rd Dragoons.	Lieutenant.	Wall.	Left leg amputated above knee	,,	England.
1st Guards.	Lieut.-Colonel.	Lord F. Somerset.	Right arm amputated	Doing well.	England.
Ditto.	Ditto.	Stewart.	Left arm amputated	Well.	England.
Ditto.	Captain.	Burghess.	Amputated thigh	,,	England.
Ditto.	Ditto.	Cameron.	Right arm amputated; under treatment for wound of thigh; stump recovered and healing rapidly	Doing well.	Brussels.
3rd Guards.	Lieut.-Colonel.	Sir A. Gordon.	Thigh amputated high up	Dead, day after operation.	
1st, or Royal Scots.	Lieutenant.	Lane.	Right arm amputated	Well.	England.
4th Foot.	Ditto.	Richardson.	Trepanned; recovering from operation, but labouring under mental derangement		Brussels.
30th ,,	Ditto.	Lockwood.	Trepanned	Convalescent.	Brussels.
4th ,,	Captain.	Browne.	Trepanned	,,	Brussels.
32nd ,,	Ensign.	Alderson.	Right arm amputated	,,	
40th ,,	Ditto.	Clarke.	Arm amputated	,,	England.
52nd ,,	Lieutenant.	Anderson.	Thigh amputated	,,	England.
73rd ,,	Ditto.	Browne.	Amputated arm	Died, date unknown.	
92nd ,,	Ensign.	Bramwell.	Right leg amputated	Convalescent.	England.
95th ,,	Lieut.-Colonel.	Beckwith.	Left leg amputated	,,	England.
Ditto.	Captain.	M'Cullogh.	Arm amputated	,,	England.
Ditto.	Lieutenant.	Walsh.	Amputated left thigh	,,	England.
1st Light Dragoons, K.G.L.	Captain.	Bothnier.	Right thigh amputated	Doing well.	Brussels.
1st Light Battalion.	Major.	Boushier	Right arm amputated	,,	Antwerp.
4th Line Batt.	Lieutenant.	Hartwig.	Right thigh amputated	Well.	England.
Ditto.	Ditto.	De la Farque.	Right thigh amputated	,,	England.

D. M'NEILL, Deputy Inspector of Hospitals.

Conclusion.—The object of this lecture has not been to allude to the surgery of France with any other feeling than that of the most profound respect, but to show, upon two points, what was the practice of the Surgeons of the British Army in 1814, the records of which are by many forgotten, if they ever were known. These records are now complete, with two exceptions,—a lecture on hospital gangrene, which circumstances of late occurrence have rendered necessary; and one on the constitution of the medical department of the Army in the Peninsula. The first half of this no one can now write but myself, and no one ought to write the last half but Sir James McGrigor.

LECTURES ON THE ASIATIC CHOLERA.

By GEORGE ROSS, Esq., Surgeon to the Western City Dispensary, and Author of "Papers on Typhus Fever," and "Essays on the Processes of Digestion and Nutrition."

No. V.

It is with some diffidence that I approach a portion of my subject surrounded with so much perplexity,—upon which so many bold and contradictory opinions have been uttered, and so many plans of practice, orthodox and heretical, have been pursued. The modes of practice adopted have been divided into various classes,—for example, the specific, the pathological, the chemical, the rational, and many others. There has been a remarkable variety of rational plans of treatment, for of course each author appropriated this self-complacent title to his own practice, and distributed the others among his opponents. There is clearly, therefore, more than one rational plan, and the irrational systems are too numerous to relate. It is somewhat amusing to observe writers defining the rational system, and at the end of their dissertations to find that the plan proposed is exactly that they have employed. If there be no modesty, there is at least great candour in this confession of the respect they entertain for their own skill. When Cobbett published his grammar, he declared that it was the very best that had ever been written, and maintained his declaration, by adding, that he intended it should be the best; he wrote it in the best manner he could, he believed it to be the best, and he should be a liar if he said anything contrary to what he thought. So for the Rationalists; the only difference is, that they give the lie to one another. However, each of these authors must be judged by a jury—the profession—according to the evidence—the facts of his own practice. We must not be content to take his practice at his own valuation of it. The lunatic, when he was questioned as to the cause of his being in Bedlam, replied, "that the world and he had a dispute; the world said he was mad, and he said that the world was mad; the world being more numerous, had a majority, and he was outvoted." Some of the Rationalists may possibly find themselves in the same situation.

The opinion, however confident, which medical men express of the mode of treatment which they have pursued, is utterly valueless, unless the facts of their practice lend it corroboration. I have been amused, by reading the heroic assertions that have been published in favour of particular systems; and, on comparing the mortality under the vaunted system with that under other modes, have been surprised to find, that the fatality preponderated on the side of the most successful practice! This is the testimony of facts against opinions, and shows the self-deception to which men yield in matters of therapeutics.

I have endeavoured to avoid these errors. By collating all the facts that appeared to me to be credible and unexceptionable,—positive in themselves and complete in their relations,—by arranging and tabulating them, I have attempted to discover the most successful treatment in cholera; and if I am not thus prepared to recommend a system cleared from all error, I am, at least, qualified to point out injurious practice. Some of the alleged facts may be erroneous,—I admit it; all are not cases of cholera that are so called. Bad diagnosis is a source of error that will always tend to render calculations on medical practice uncertain; but, then, it is an error likely to occur in every set of cases, and we may expect that the errors of one register will counteract the errors of another. I have, also, done all I was able by discrimination and selection to avoid this liability to error, and have excluded all cases from my Tables which did not appear, according to the reports, to exhibit well marked and decided symptoms of the Asiatic disease. I have acted in this manner invariably, and without the slightest bias in reference to the results of treatment.

When special reports have not accompanied the cases, I have received them in the aggregate as genuine cases upon the authority of the authors. I shall, however, feel it necessary, in commenting on the various Tables, to call attention to particular sets of cases, of whose correctness I may entertain any suspicions. Whenever the results by the same mode of practice in different hands are very strongly contrasted, I shall advert also to a possible source of error in the reports, so that we may be able to come to a definite and well-grounded opinion without prejudice of persons or bias of authority.

The following Table exhibits the results of the treatment of 1,821 cases occurring in England, exclusive of the City of London, of which I have collected the returns. This and the succeeding Table are arranged according to the increasing rate per cent. of mortality for facility of reference:—

COMPARATIVE TREATMENT AND MORTALITY OF CHOLERA IN ENGLAND.

TREATMENT.	Number of Cases.	Deaths.	Rate per Cent.	Remarks.
Salines, with Cold Water	81	7	8·5	A Return from Greville-street Dispensary.
Tartar Emetic	21	4	19	A Return from Droit-with Lunatic Asylum.
Salt Emetic and Cold Water	607	112	20.39	Including Dr. Ayre and Dr. Peacock's Cases.
Calomel alone	331	107	31	
Blood-letting, with Calomel and Opium	210	117	56	
Stimulants alone	167	96	57	
Do. with Calomel and Opium ...	356	214	60	
Venous Injection	48	29	60	Injection of Saline Solutions.

I will now add another Table, based upon a Table

framed by Mr. F. De Grave, for the City of London:—

CITY OF LONDON.

TREATMENT.	Number of Cases.	Deaths.	Rate per cent.
Combination of salts used at Greville-street Hospital	26	8	30·77
Calomel	75	35	46·66
Miscellaneous	17	8	47·06
Calomel and Opium	196	112	57·14
Opium	81	47	58
Stimulants	63	42	66·66
Combination of Salts proposed by Dr. Stevens	25	22	88
Venous Injection	20	18	90

Salines.—A short comment on the foregoing Tables may serve to bring out the facts in more distinct relief. By both Tables we find that the saline treatment as practised at Greville-street was highly successful, and, as a contrast with the received mode of treatment by calomel and opium, and stimulants, I may state that, at Greville-street, the mortality by the latter system was as high as 78 per cent., and in the City, according to the above table, it rose to a very high figure. The formula employed at Greville-street was—Carb. soda, ʒ ij.; sodii chlorid., ʒ ij.; potass. chlorat., gr. viij.; aq. q. s. pro haust. This draught was given about every quarter of an hour. The patient was also placed in a hot saline bath at 120°, in which 14 lbs. of salt were dissolved. Cold water was drank *ad libitum*.

Although I have been unable to collect a greater number of trustworthy facts in reference to the employment of salines, yet I have observed, in the course of my researches, an almost universal opinion in favour of their efficacy. Of course those who find in this practice a confirmation of a theory, speak in raptures of its merits; others, less sanguine, admit the success of this kind of practice, but doubt its specific influence over the disease. A few treat them as useless or injurious. I do not desire to reconcile these opinions at the present moment; my business is with the facts, and whether the benefit conferred was active or passive is of minor consequence.

Tartar Emetic.—There is hardly any remedy that has been spoken of with greater approbation than tartar emetic. In the Droitwich Lunatic Asylum, 21 cases were treated with an emetic of 3 grains of tartarized antimony at the commencement, followed up with 1 grain of opium every hour. Twenty-six other cases were treated there with calomel and opium and stimulants, of whom 17 died, or in the ratio of 66 per cent.: there could be no doubt, therefore, that stimulation was bad. A Mr. Littleton, of Saltash, was in the habit of dividing half a drachm of tartar emetic into 5 grain doses, and giving one every twelve minutes until vomiting had ceased. He then administered 40 or 50 grains of calomel. He highly applauds the tartar emetic plan, but unfortunately he has not tabulated his cases, which appear to have been very numerous; his testimony, therefore, has lost all its direct value. Many other writers have spoken in favourable terms of the use of tartar emetic.

Salt Emetic and Cold Water.—The cases in the Table are collected from a variety of sources:—Dr. Fiddock's Report on the cases at the St. Giles's Dispensary; Dr. Venables' cases at Wick; Mr. Benman's, of Covent-garden; Dr. Hoskings', of Guernsey; Mr. Godrich's, of Chelsea, &c. Dr. Hoskings states that, of 62 cases treated on this plan, only 16 died; whilst, under stimulants and opiates, the same number died out of 37 cases. Mr. Godrich treated 12 cases in this way and all died; he, however, adds, that they were all hopeless cases before trial. With the exception of these cases, reported by Mr. Godrich, the mortality under this treatment was remarkably low in all other instances, as the table proves. The dose is about two tablespoonfuls of common salt, in from four to eight ounces of cold water, every quarter of an hour until vomiting is produced; then cold water, in large draughts, to allay the insatiable thirst and heat at stomach.

Seeing the low rate of mortality which followed this practice, it would appear that the benefit, both in these cases and in those treated by the Greville-street plan, was mainly owing to the common salt. At any rate, we are authorized in concluding that common salt is one of the most useful of the saline remedies. The addition of chlorate of potash, in the Greville-street prescription, would seem to be judicious, and attended with success. It is found to be useful in other cognate diseases in which the vitality is low. We must not overlook the fact, that large quantities of cold water were permitted to be drank by the patients under the saline plans; and, although I have not collected any cases showing the results under the simple cold-water plan, yet there it is reason to believe that is of great utility.

Calomel.—The most discrepant opinions are expressed relative to the treatment of cholera by calomel. Dr. Ayre's and Dr. Peacock's cases are included in the 331 cases cited in the Table; but, if these cases had been omitted, the results of the treatment by calomel would have been 62·9 per cent. instead of 31 per cent. How comes it that the calomel treatment, in the hands of these gentlemen, was so highly successful? Each of these gentlemen adopted the same plan, viz.: the administration of one or two grains of calomel, with from one to five drops of laudanum, every five, ten, or fifteen minutes. Dr. Ayre omitted the laudanum when 60 or 80 drops had been given. Under this system Dr. Peacock states that he did not lose a single case out of 30; and the mortality among 191 cases treated by Dr. Ayre was not more than 18 per cent. In a recent communication to a contemporary journal, Dr. Ayre cites the number of his cases as 219, the deaths 43; being a mortality of 19·6 per cent. This mortality is remarkably low.

On the other hand, small doses of calomel, in conjunction with port wine, were given by Mr. Banner, of Liverpool, and the mortality was 52·6 per cent. At the Cholera Hospital, Holbeck, small doses of calomel, with large doses of brandy, were at first given and disapproved; afterwards the reverse plan was adopted, with more success;—nevertheless the mortality was 53 per cent. These latter cases, and many others that might be cited, prove no more than this, in comparison with the cases treated by Dr. Ayre, that the stimulants with which the calomel was associated were positively injurious to the patients.

Other gentlemen recommend calomel in large doses,—say, on the average, half a drachm, repeated every hour or two, combined or not with opium; but the mortality under this plan was not so low as to be considered an indication of satisfactory treatment. Dr. Searle has strenuously advocated the use of large doses of calomel; and my friend Mr. Bird, who, during the years 1831-2, had extensive opportunities of observing the epidemic at Merthyr Tydvil in Wales, has also expressed to me his conviction in their efficacy. Dr. Blackmore, in a recent communication to the *Provincial Journal*, says, that calomel alone induces serious remote effects. In the city of London we find that when calomel alone was given, the mortality was only 46·66 per cent.; but, when calomel was combined with opium, it was as 57·14 per cent. The stimulant system resulted in a still higher mortality. It would appear, therefore, that opium and stimulants were decidedly prejudicial. There is evidence, then, to conclude that calomel is most efficacious *when uncombined with any other remedy*; and the question may now be asked, whether the plan of treatment employed by Dr. Ayre was accompanied by so low a mortality by virtue of its own merits, or in consequence of defective diagnosis. Some discussion took place in the year 1832, when Dr. Ayre first promulged his plan, and reported his cases, about the accuracy of his statements, and when doctors differ upon the correctness of diagnosis, who shall decide? At this distance of time I certainly cannot undertake to pronounce an opinion. Nevertheless, this suspicion damages the evidence. Granting that Dr. Ayre's cases were genuine cases of the disease, does the calomel exercise a positive influence over the malady, or is it wholly inert? I should not have thought of following out the inquiry in this close manner, if Dr. Ayre had not himself invited examination by repeatedly publishing his opinion that, during the stage of collapse not a particle of the calomel was absorbed, and yet that its efficacy was peculiarly shown during this stage. He mentions, in a communication to the Secretary of the Central Board of Health, the case of a woman, 91 years of age, among others, who recovered from the stage of collapse by calomel, and yet informs us, in the next sentence, that "during the period of the collapse no absorption of it takes place." If this be true, what merit was due to the calomel for the woman's recovery? Either Dr. Ayre's patients recoverd from the stage of collapse by the aid of the *vis medicatrix naturæ* alone, and no thanks to the calomel, or his explanation of its action is unsound. How can a medicine cure that has never entered the system? It is plain, that if the patient has rallied from the state of collapse without or in despite of medical aid, that the claim set up for calomel as a curative remedy is invalid. Dr. Ayre's theory proceeds upon the necessity of exciting a flow of bile, and yet he informs us this result cannot be expected in cases of collapse until the patient has emerged from that state, and is, therefore, virtually cured. I would defend Dr. Ayre from his own theory, and be content with the facts he has stated, if I could be quite satisfied that they were facts. I think that the evidence he has brought forward demands attention, and the institution of new sets of experiments with the view of testing the efficacy of his plan of treatment. I really believe that if not altogether so successful as he states, it will still be found far more useful,—less dangerous, perhaps, I should rather say,—than opiates, stimulants, and other very active remedies. Dr. Ayre allowed his patients to take as much cold water as they desired, and he objected to stimulants. Much of his success might have been owing to this auxiliary remedy.

The treatment of cholera, by the administration of large doses of calomel has been also recommended. I have had some experience of this mode of practice in typhus fever, and in the early stages of that disease have found it to exercise the greatest efficacy. In cholera it is said to be equally beneficial, but the facts, as observed in England, do not support the assertion, so far at least as they have been accurately reported. I am reluctant to give too much prominence to opinions, even though emanating from judicious men. Calomel, in one or two scruple doses, acts as a sedative, and tends to arrest the vomiting that is so trying to the patient. Some authors say that the vomiting is a curative process; I shall refer to this hereafter. I have relieved obstinate vomiting in other cases by a large dose of calomel; but it is a dangerous weapon when fever is absent, and occasionally produces excessive salivation. Calomel in large doses does not purge. There can be no doubt that the administration of calomel, in small or large doses induces a very different therapeutic action; but I do not so clearly see that this difference can obtain when small doses of calomel are so frequently repeated, in accordance with Dr. Ayre's plan, as to throw into the stomach, within an hour, as much as would be introduced if given in a single dose. Small doses may be conceived to have a better chance of absorption; but Dr. Ayre says, that during collapse they are not absorbed. I doubt this, for I have observed, that in typhus fever, at least 24 hours elapsed after the administration of a large dose of calomel, before any change could be observed. An immediate effect should not be expected in cholera. On the whole, it appears to me, that the evidence respecting the utility of calomel in this disease, is very equivocal; and that it is still questionable, whether or not it exercises its specific action to control the disease. Unless as a specific, it has no claims; and it is upon this ground alone, so far as I can ascertain, that it has been employed. I have great doubts of its beneficial influence, though I would not discourage further trials, and should be glad to have my doubts removed. It is said, that calomel in large doses,

has been wonderfully efficacious in India; but what are the facts? The subject requires examination. In India, small doses are useless, and large doses cure; in England, large doses are injurious, and small doses cure! Surely a man may be forgiven if he venture to doubt. During the anterior and subsequent febrile stages, which frequently characterise the disease in England, calomel would doubtless be found of use. Under these circumstances, the disease should be treated by the ordinary rules of practice.

Opiates and Stimulants—Any one who has taken the pains to review the history of the epidemic cholera, and carefully to compare the opinions that have been expressed in reference to its treatment, cannot hesitate to condemn the employment of either of these remedies for the cure of this terrible disease. By a reference to the foregoing Tables, we find a gradually increasing rate of mortality under these several plans with their various combinations, and it would seem that the mortality, when calomel was employed, was augmented in due ratio as it was combined first with opium and then with stimulants. Under the stimulating system the mortality was highest, with the exception, perhaps, of the routine combination of calomel and opium and stimulants, when the mortality was literally murderous.

Venous Injection.—Of venous injection I shall merely, at present, say that its results are not sufficiently propitious to warrant any confidence in its remedial agency.

[To be continued].

A CLINICAL LECTURE ON CANCER OF THE KIDNEY.

By Dr. LEES, Physician to the Meath Hospital, and Lecturer on the Practice of Physic at the Original School of Medicine, Peter-street, Dublin.

GENTLEMEN,—I purpose calling your attention to-day to a case of encephaloid disease of the kidney, which we have had recently under our observation in the wards of the hospital,—a disease of rather rare occurrence, but so perfectly illustrated by this cast, taken by my friend, Mr. Ledwick, which constitutes a lasting record of the volume of the diseased organ, and also by a section of the kidney, exhibiting the structural changes which have supervened, that, in selecting this case for clinical instruction, I feel confident that I consult your interest and future advantage.

Case.—Robert Dinning, aged sixty, was admitted, under Mr. Smyly, for hydrocele; and he, in examining the case, discovered a tumor in the right lumbar region, for which he requested me to see him. I found an emaciated, unhealthy-looking old man, with an ovoid tumor situated on the right lumbar region, between the false ribs and the crest of the ilium. The tumor was about the volume of the *closed fist;* soft, slightly tender to the touch; elastic, with a deceptive feeling of fluctuation, but without œdema or venous enlargement. I could also trace two additional tumors, connected, by their origin, with the larger mass,—one immediately above the umbilicus; the other on a level with that point, extending in a direction backwards and outwards. These were not at all painful; the liver appeared to be slightly enlarged, but not well defined: there was, however, neither ascites nor jaundice.

He states, that he always enjoyed good health, with the exception of pains across the loins, which he considered to be rheumatic; but, for the last two years, he has occasionally passed bloody urine and gravel. He first noticed the swelling about a month since; but it gave him no uneasiness, unless when subjected to pressure; therefore he did not complain of it on his admission, and was only solicitous that he might be cured of the hydrocele. He experienced no difficulty in passing urine, which was of a pale colour, feebly acid,—S.G. 1·007,—slightly albuminous, and, on cooling, deposited the triple phosphate. The question, therefore, was, on what depended those symptoms, and what was the source of the tumors? On consultation, Mr. Smyly and I agreed that they were referable to disease of the kidney, and that the disease was of a malignant character. I will now state to you, in detail, the reasons which led us to form this diagnosis.

The first idea which suggested itself was, that it might be a case of simple chronic abscess, which it resembled in many points,—in its general appearance, its situation, and the presence of an obscure sense of fluctuation. This, I may remark, was so deceptive, that it induced many students, who were present during the examination of the case, to conclude that it was a mere collection of purulent matter; but taking into consideration the history of the case,—the age of the patient, combined with the absence of any symptoms indicative of disease of the spinal column,—we were compelled to reject, at once, such a view of the case. However, in some cases, the diagnosis is exceedingly difficult; and I think that I cannot impress this fact more forcibly on you, than by taking an extract from a most instructive clinical lecture, delivered by Mr. Hamilton, of the Richmond Hospital, and which you will find in the *Dublin Hospital Gazette.* When speaking of the difficulty of diagnosis in fungus hæmatodes, he says:—"Seeing the difficulty of diagnosis in those cases, I sought, when a student, some mark which would be a generally distinguishing feature of them. I thought, for a time, that their uneven surface and lobulated character would do so,—and so it often will; but I soon met with a case which showed me that it was not always constant. A child, two years and a half old, was brought to the hospital with a tumor in the left side of the belly, hard, circumscribed, smooth, even, and elastic; a feeling like fluctuation, with numerous large veins on the surface; not painful; only noticed a few weeks before; nothing apparent in the back; but the child's health was not good, and it did not walk or stand right. There was a decided difference of opinion on the nature of the case. A few weeks after, the child died, and the right kidney was found affected with fungus hæmatodes, forming an immense tumor, growing over to the left side, where it was most apparent." The next question for our consideration was, whether the tumors might take their origin from the liver, caused by the tubera of Farre, which, you are aware, may attain a very large size, and may present themselves at any part of the abdomen, in fact, in such unexpected situations, that the most eminent practitioners have often erred in their diagnosis, until warned of the fallacy of their conclusion by the appearance of hæmaturia. But, in this case, the absence of dropsy or jaundice, and, above all, the physical condition of the urine, rendered it all but certain that the liver was free from any advanced organic lesion. It therefore became evident that the disease must involve the kidney; and the further progress of the inquiry should be, to determine the exact nature of the affection. Well, Gentlemen, I will now enumerate those diseases of the kidney of which a lumbar tumor is an objective symptom. It is present in hydatids—distension of the organ from obstruction to the flow of urine, caused by calculus, or any other obstruction to the passage of the urine; abscess; encephaloid disease. Now, in all those cases which I have mentioned, the tumors have a certain general resemblance in their form, situation, and sense of fluctuation, which they communicate to the touch; but if the tumor is caused by abscess, or by distension of the substance of the organ by obstruction, there is more or less pain continually felt, particularly aggravated by motion of the body; while, in the former, febrile attacks occur frequently, accompanied by purulent urine, if the cavity of the abscess communicate with the ureter. In the other renal cases which I have mentioned, the history of the cases must be our principal guide in determining the diagnosis.

We had some difficulty in distinguishing the condition of the urine which existed in this case, from the altered character of the secretion induced by the presence of calculus. In a former lecture on this latter affection, I mentioned to you, that the urine was pale, excessive in quantity, albuminous, bloody, and depositing the triple phosphate; but in the present case the absence of the symptoms of irritation, peculiar to calculus, viz., pain shooting down the ureter to the testicle, retention of urine, retraction of the testicle, combined with the peculiar cachectic condition of the patient, argued the non-existence of a calculus, and confirmed me in the idea that the case was one of malignant disease of the kidney, which I stated to you at the bedside. The event proved the accuracy of the diagnosis, for in a few days the man sunk into that low form of fever which usually precedes the dissolution of persons affected with malignant disease, when death put a period to his sufferings, and the *post mortem* examination revealed the following lesions:—

Autopsy.—On laying open the cavity of the abdomen, and raising the ascending colon, an enormous mass of disease came into view, which, on examination, proved to be the right kidney fully equal in size to the right lobe of the liver,—a volume scarcely to be anticipated from external evidences. The surface presents numerous large prominences, which are well exemplified in the cast before you, and were perfectly *appreciable through the abdominal walls,* a fact which should induce us to pay particular attention to the exploration of the lumbar and umbilical regions in renal disease. Here I have made a section of the kidney, and it is easily perceptible that scarcely a vestige of its normal structure remains. Here are cavities containing a substance resembling cerebral matter, when hardened in acid; others, with similar contents, but of the consistence of brainy matter, softened by composition, and a larger cavity, which corresponds with the summit of the kidney, and was closely adherent to the liver, contains a grumous fluid, consisting of blood, pus, and the detritus of the abnormal structure. The ureter is equal in calibre to the abdominal aorta, and perfectly full of a similar matter to that of the kidney. The renal vein also contains encephaloid matter forming a medium of communication through which, by the current of the circulation, the obnoxious elements of this disease are transmitted to distant organs. The bladder is contracted, and presents, as you see, a large fungus of a conical form, measuring two inches across its base—soft, vascular, and spongy—a small quantity of coagulated blood adheres to the irregular surface of the tumor. This is evidently of a malignant nature. I may also mention that the remaining viscera of the abdomen were free from disease.

Gentlemen, there are some points connected with the history of this case, which are particularly worthy of attention. First, the comparative latency of the urinary symptoms, which were so trivial that the patient failed to call our attention to them, although remarkably querulous with respect to the hydrocele. Secondly, the occurrence of this form of cancer at an advanced period of life, for, although in children this form of disease is far from uncommon, in old age the form of disease termed scirrhus prevails with very rare exceptions. Now, by casting your eye on this drawing, you can at once perceive the changes which occur in a kidney affected with the disease to which I have alluded. The organ is tuberculated on the surface—small masses of cancerous matter are deposited in the cortical structure, varying from the size of a pin's head to that of a pea, of a yellowish white colour, equally disseminated throughout both kidneys, which appear rather diminished in size than otherwise. Indeed, this drawing is an excellent exemplification of the universality of scirrhus. It was taken from the viscera of a poor woman, who died in the hospital of cancer of the breast. The lungs, the liver, the kidneys, the uterus, the breasts, were all similarly affected. Now, in Dinning's case, the other viscera of the abdomen were healthy, not even was the liver engaged, although in contact with this mass of disease, exhibiting in a remarkable degree that tendency of the system to resist inoculation, which exists in some cases, and I am sorry to say they form the exception to the general rule.

I regret that we were not allowed to examine the thoracic viscera, because from the existence of encephaloid matter in the renal vein, I would conclude that similar deposits might in all probability be found in the lungs, as you may recollect that I have frequently demonstrated during my lectures the

the venous system forms one channel by which cancerous matter is disseminated throughout the body. You can then understand how it occurs, that cancer existing primarily in the kidney, when it becomes disseminated, that the lungs are more frequently affected than the liver, by recalling the fact, that the renal vein opens directly into the cava or general venous system, and that any morbid product must pass through the pulmonary capillaries, where, with few exceptions, it is arrested in its further progress before it can reach the liver. But the case would be different where organs are affected, whose venous branches are the tributaries of the portal system; for should the stomach-rectum or spleen be affected with cancer, the liver displays a remarkable tendency to participate in the disease; yet still there are some cases in which the germs of cancer transgress the boundary formed by the lungs, and become deposited in the liver and spleen. But such cases are few indeed. These facts constitute a practical illustration of the law enunciated by Cruvelheir, deduced from experiments on the venous system of the lower animals, with which I hope you are all familiar, as I think it would be injudicious to enter into their details on the present occasion.

Gentlemen, we cannot trace any clear connexion between diseases of the urinary system generally, and the development of cancer. Thus, in a case which I recently saw with Mr. Frazer, an old man, aged sixty, had a large tumor in the left lumbar region, which was diagnosed by a very eminent practitioner to be enlargement of the spleen. The man died, and dissection revealed a large degenerated kidney, although he never made the slightest complaint during life of any affection of the urinary organs. In fact, the direct diagnosis in those cases depends on the presence of a tumor and the condition of the urine. The tumor generally situated in the lumbar region is irregularly circumscribed, unequally prominent, giving a deceptive feeling of fluctuation, as if fluid was contained in it, but it is really more elastic than fluctuating; seldom painful, except on pressure; no alteration in colour of the skin; the urine may retain its natural characters, although occasionally there may be a slight alkaline reaction, and an unusual tendency to undergo decomposition. But when the renal structure is more deeply implicated, blood is often present in the urine, which indicates the breaking up of the cancerous matter, and its communication with the pelvis of the kidney and ureter. The characteristic feature of this hæmorrhage is, that it is not constant, but recurs from time to time. In some rare cases the urine is purulent, and cancer cells can be detected in it with the aid of the microscope, so that the frequent occurrence of bloody urine in a person who has suffered from continued pain in the lumbar region, but who has not at any time passed gravel, nor had complete or partial retention of urine, becomes, in the words of Rayer, a highly significative element of diagnosis, particularly if the lumbar pains persist in the intervals of the hæmorrhage as bad as during its continuance, and if the bleedings recur without any appreciable cause. The treatment which should be adopted in such cases I will reserve until my next lecture, which I propose to devote to it and the causes of renal hæmorrhage.

ORIGINAL CONTRIBUTIONS.

REPORT OF THE WOUNDED IN HER MAJESTY'S 29th REGIMENT, WITH THE ARMY OF THE SUTLEGE, 1845-46.

Communicated by G. J. GUTHRIE, Esq., F.R.S., President of the Royal College of Surgeons of England.

[To the Editor of the Medical Times.]

SIR,—Mr. Taylor, surgeon, 29th Regiment, forwarded to me the accompanying Report from India, of the wounded of his regiment some 18 months ago. I send it to you for publication, if you should think it sufficiently interesting, now that the acuteness of the feelings of the friends of those who have suffered have perhaps subsided. I have the honour to be, Sir,

Your very obedient servant,

G. J. GUTHRIE.

4, Berkeley-street, Nov. 11, 1848.

Kussowlee, 31st May, 1846.

It was the fortune of the 29th Regiment to take a prominent part in the two severest of the four battles which accomplished the destruction of the Sikh army, and placed Lahore in possession of the British force. The prolonged contest at Pheroshuhur on the 21st and 22nd December, 1845, and the decisive and final action at Sobraon on the 10th February, 1846, occasioned as severe losses to its ranks as any battle in which the 29th Regiment has ever fought, with the exception of Albuhera.

Rather more than five months have elapsed since the date of the action at Pheroshuhur, and nearly four months since that at Sobraon, and the cases of wounded now remaining under treatment are all likely to terminate favourably: a sufficiently perfect statement of the total loss by those two battles may therefore be presented, and is as follows:—

Battles.	Strength Present.	Killed.	Wounded.	Total Killed and Wounded.	Proportion of Strength Killed and Wounded.
Pheroshuhur	Officers 29	3	3	6	1 in 4⅘, or 20·7 per cent.
	N.C. Officers, Rank and File 761	56	182	238	1 in 3 $\frac{191}{238}$, or 31·3 per cent.
Sobraon	Officers 30	1	13	14	1 in 2⅛, or 46·6 per cent.
	N.C. Officers, Rank and File 508	35	128	163	1 in 3 $\frac{118}{163}$, or 32· per cent.

Of 16 officers wounded, 13 are or will be recovered to the ranks.

Of 310 non-commissioned officers and rank and file wounded, 204 are, or will be recovered to the ranks.

The equal proportion of mortality in the two classes is, perhaps, attributable to the near equality of circumstances shared by both classes during the campaign.

There are several circumstances bearing upon the proportion of mortality amongst the wounded of both classes, but more particularly the second, which must be taken into consideration. Since the arrival of the regiment in India in the rainy season of 1842, it has always been sickly; but more particularly so since the date of the epidemic remittent fever, which visited the regiment during the last five months of 1844; very few of the men escaped that disease, and the deaths occasioned by it numbered 81. The evil consequences of that epidemic have not stopped there; the disease seems completely to have Indianized, if I may so speak, the health of the corps, leaving in it ever since a proportion of fevers, enlarged spleens, and dysenteries, which did not previously exist. It was, I believe, in a great measure owing to the continued sickliness resulting from this epidemic, that the regiment was removed to Kussowlee, its present station; but the men had not enjoyed the advantages of the hill climate more than three weeks when the campaign opened, and the regiment was returned to the plains. That the morbid effects of this fever contributed to the fatal termination of many wounded cases, there were many marked instances in proof, the disease plainly returning; and in several men not wounded, a return of the fever was brought on by the fatigues of the service, and in one of these instances proved fatal.

The wearied condition of the men prior to the first action, no doubt, told unfavourably on the wounded. The regiment had, during the previous nine days, traversed the distance between Kussowlee and Moodkee by a succession of forced marches of from 20 to 30 miles a day; the roads the whole way were deep with dust, the days hot, the nights cold; wells were scarce, and the men suffered greatly from thirst: so rapidly did one march succeed another, that bread could not be made, and in lieu of it, flour and *ottah* (a) were served to the men to make *chupatties*. These chupatties are made with equal parts of flour and ottah mixed with water, then more or less kneeded; and when subsequently pressed into a round, flat mass, like a large, thick, captain's biscuit, fried with a mixture of all kinds of fat called *ghee*. The substitute for bread thus obtained, even when well made, is unwholesome, and, when badly or carelessly made, is only fit food for an elephant, which animal is always thus fed when on the march.

On joining the army at Moodkee, the regiment had one day's halt; but on the following day, or on the 21st—the first day of the action, at Pheroshuhur,—the regimental parade was formed at half-past two a.m., and from that time till they fell wounded in the evening they were under arms; they had also marched between seven and eight miles on a very dusty and crowded road, and suffered sadly from want of water, which there were no means of procuring, and the day was exceedingly hot. Each man carried sixty rounds of ball cartridge, and two days' rations in his havresack.

A material circumstance, influencing the proportion of mortality amongst the wounded, is the general description of wounds received, whether by artillery or musketry. Where the great majority are wounded by artillery a higher ratio of mortality is to be expected than where the reverse obtains. At Pheroshuhur, a very great majority of the wounded were by artillery, the number of each description being—

By artillery	137
,, musketry	43
,, explosion	4
,, sword (or tulwar)	1
Total.....	185

I regret that I cannot furnish a similar statement of the number of each description of wounded at Sobraon; but as the nature of the contest was the same as at Pheroshuhur, viz., an attack of entrenchments defended by a numerous and well-served artillery, there is great reason to suppose that the proportion of each description of wounded was similar.

The grape and canister shot used by the Sikhs was of wrought iron, and consequently neither so round nor so smooth as the cast-iron shot usually employed; the wounds, therefore, were proportionably more serious. Of the bullets of the Sikh soldiery, it is to be observed that they were about one-third smaller than those of the British soldiers; and to this difference of sizes is probably to be attributed the occurrence of a case in which the shaft of the humerus was simply perforated, about an inch below

(a) A coarse meal from wheat, or barley, or other grain.

the head of the bone. This case occurred at Sobraon, and the wound was subsequently much aggravated by the supervention of hospital gangrene, then playing fearful mischief amongst the wounded at Ferozepore. This patient still remains under treatment, and is now doing well.

In considering the proportion of mortality amongst the wounded, the miserable fate which befel them at Pheroshuhur must be remembered. They all lay upon the field from the 21st to the 24th, when they were conveyed in hackeries or country carts into Ferozepore. During the three days they thus remained exposed to the powerful heat of the sun by day, and the very disproportionably cold air of the night, many of them suffered from most agonising thirst, and no water could be obtained. The excessive thirst of the men, and the impossibility of obtaining water, may be judged of by the fact, that on the morning of the 22nd, men of this, and other regiments, were seen to drink their own urine. A great many of the wounded, too, were not dressed till the 25th, for it was late on the evening of the 24th when they reached Ferozepore, and nothing more could be done for them that night than to get them housed and give each of them some bread and tea. Some narcotic and other draughts were also administered. Thus, the 25th was the earliest period at which several of the severer cases came first under observation, and thus several amputations had to be performed at a most unfavourable period. Of five amputations then performed,—viz., one of the arm, one at shoulder-joint, and three of the thigh,—only one of the last-named, and the arm-case, recovered; and that arm-case was the first case in the 29th hospital to take on hospital gangrene. The remaining five fractured thigh-cases brought into Ferozepore did not admit of amputation, from the immense swelling of the limb in each case; and in one of these cases the surface of the limb glistened with the extreme distension from inflammatory swelling, together with infiltration of blood: that patient died, as did also another of the five cases not admitting of amputation.

In explanation of the deficient succour afforded to the wounded at Pheroshuhur, it is necessary to relate the circumstances in which the medical officers were placed, and the untoward event which occasioned the loss of the whole hospital field equipment on the night of the 21st.

On the day of the halt at Moodkee, which was the day preceding the battle, all baggage of every description was forbidden to be brought with the army the next day, and the camp was ordered to be left standing. Two days' rations were issued to each soldier, and officers were allowed to have only one servant each to accompany them. Hospital tents and baggage being forbidden with the rest, all articles of hospital equipment essential in the field, such as cases of instruments, sponges, plaster, lint, bandages, and one or two medicines, were unpacked from the camel-trunks, and placed in a *doolie* (a); the plaster was cut into strips, ligatures waxed, retractors prepared, and everything made ready for the expected battle next day. In another doolie was stowed some brandy, and wax candles in case of night-work. The remaining doolies—numbering, in all, only twelve—were laden with cooking vessels, and leathern bags, or *mussucks*, full of water, the value and necessity of which supply had been learned from the experience of the three or four preceding days: soldiers unable to proceed were left in the camp. The 29th regiment left but four, and marched from Moodkee, minus that number, the same strength as it left the foot of the hills. This is greatly to the credit of the discipline of the regiment: many of the men were worn out and foot-sore from the previous eight day's forced marching, and many also suffered from sickness of stomach and diarrhœa from the same cause; but they would not give in: the spirit of the soldiery outweighed all sense of such suffering; and they were only afraid—as they were heard to say amongst themselves—that their luck, as at Waterloo, would be, to be too late.

The regulated number of doolies—or conveyances for the sick—for a regiment in the field, is one to every ten fighting men; and the 29th regiment, when taking the field, should have been furnished with seventy-six doolies, with six bearers to each doolie; but a sufficient number of bearers was not collected, and the regiment left the hills with only twenty-four doolies, and scarcely five bearers to each doolie. No further means of conveyance could be obtained on the road: on the contrary, under the very hard work of forced marching, half of the bearers deserted, leaving the doolies on the road; and but twelve remained with the regiment when it reached Moodkee.

These twelve doolies, laden as already mentioned, were kept up close to the rear of the regiment during the march on the morning of the 21st; and when the line was formed for attack, the doolies and the medical officers were close behind it.

The doolies were halted and the field hospital opened on the ground where the first wounded fell. By previous concurrence of the commanding officer, the bandmen now acted as hospital orderlies to bring the wounded to the rear, and two of them in the performance of this duty were amongst the first killed. The cases which came under observation at the commencement of the action were very frightful, being mostly wounds from cannon-shot and shell. The propriety of amputation was always clear to the patient as well as to the surgeon, and in these severe cases there was always an eagerness to have the operation done immediately. One of the earliest cases of this description was that of Sergeant Ritchie; a cannon-ball completely carried away both folds of the axilla of his left arm, dividing the artery, and smashing into pieces the head and upper third of the shaft of the humerus; the limb remained attached to the trunk merely by a portion of the deltoid and the integument covering that muscle; of these, the only available soft parts left, a flap was made, and the glenoid cavity and surface of the wound being cleared of the fragments of bone, the flap was brought down and retained in its place by the usual means. This soldier recovered, notwithstanding he lay upon the field till the evening of the 23rd, without comfort or attendance of any kind, and was, on the 24th, jolted into Ferozepore on a hackery. The case is deserving of notice for two reasons; firstly, because not a single ligature was required or used, and secondly, because certainly two-thirds of the face of the stump was the surface left by the passage of the cannon-ball, and yet it healed very kindly. No untoward symptoms attended the cure, but an occasional feverishness accompanying formations of matter lower down on the ribs of that side which had been bruised by the passage of the ball.

I cannot say exactly how many capital operations were performed by Dr. Young, the assistant surgeon, and by myself that evening; but not more than five or six, and of those cases four are now living; three have been invalided and are now on their way to England; the other, also invalided, prefers settling in India. These four cases are as follows: one shoulder-joint, two left thigh, one right fore-arm. In the last-mentioned case the stump was attacked with hospital gangrene, and very materially injured thereby.

It is useless to attempt any description of the scene which the field hospital presented: wounded from several regiments were there, all crowding in and beseeching at the same time for assistance. Had there been more means of keeping order and arrangement, much more work might have been done. Much mischief arose from parties of men of other regiments, and even officers, coming to the rear, and in spite of remonstrances taking away the doolies for wounded comrades, and helping themselves to the water, for which on all sides the cry was piteous and incessant; thus, in a short time, notwithstanding the ample supply of water I had brought into the field, I was soon left with only one vessel full, and to preserve that for the use of the wounded exclusively, and such cases as most required it, I was obliged to place it in charge of a soldier able to take care of it.

About an hour after the commencement of the action, Colonel Taylor was brought in wounded. He had been struck by a round shot on the side, and was labouring a good deal from the effects of the blow and the shock together. I had fortunately some water then, and this, with a little brandy, revived him. On examining his side, it was found greatly bruised, and the skin partially abraded; but no ribs were broken. He was laid on the ground with the rest of the wounded; and later in the evening, feeling better, he went away on a gun-carriage.

In the midst of our labours at the field-hospital, darkness set in. The candles we had brought were now lighted, with a view to continue the dressing of the wounded, though all parties were fairly worn out from fatigue and want of refreshment. Orders soon arrived, however, to put out the lights. These were not at first attended to; but they were repeated with the explanation that we should draw down upon us the fire of the enemy. We were further ordered to remove the wounded from that place, which we were told was unprotected, and to join the regiment, said to be a short distance to our right. With the few means of conveyance at hand, it was impossible to move all the wounded; but with the help of the ammunition camels, officers' horses, stray horses, and the doolies still remaining, the greater number that could not walk were provided for; and it may be said of those that were left on that ground, that they had no chance of living under any circumstances. One of these, I recollect, had his abdomen torn open by grape-shot, and the folds of intestines protruded were in rags; yet this man twice got up to accompany us, and was with difficulty persuaded to lie down again.

In endeavouring to make our way to the regiment, we approached fires which we saw in the direction given to us, and, on nearing them, discerned them to be tents on fire within the Sikh entrenchments. Here we were assailed with cries from numbers of the wounded of the regiment, who recognised the voices of our party: urgent were the entreaties for water, and for removal from that ground. To remove these men was impracticable; but I assured them they should have assistance in the morning. It was very dark; but I think I counted fifteen men in a small space close to the trenches; they were most of them very severely wounded in the lower extremities. To finish the history of these men, I shall here add, that when our troops had again taken possession of this ground the next day, I found most of those I had seen there ever night with their throats cut. One man, a corporal, Withy, though he had a dreadful gash in his throat, and another across his face, could still faintly articulate.

After leaving these men on the night of the 21st, we skirted along the entrenchments towards another line of fires, running at a right angle to those we had just seen before us. There also we heard much noise of voices and hammering, and made pretty sure of falling in with the regiments. We had not time, however, to approach very near, before some muskets were discharged at our party, and one man on a camel wounded. In the hurried retreat which immediately ensued, the natives threw down the *petarrahs* (a) containing instruments and everything else, and made off as fast as they could. Every particle of hospital equipment was lost in the darkness and confusion, and the wounded were dispersed. As I and others were retiring, we were challenged; and upon advancing, I recognised Sir Henry Hardinge: whilst replying to him, an officer of my own regiment, recognising my voice and hearing my difficulty, came up, and said "Taylor, here is your regiment." It was in fact bivouacking within musket-shot of the trenches but lying silent without fires, we had missed it. Thus our capability of further assisting the wounded was altogether lost.

(a) A light, native-framed cot, answering admirably as a bed, or as a means of carriage for a sick or wounded patient, so that, once in his doolie, he is never removed from it during the march.

(a) Light travelling boxes, of which a native carries two slung on a bamboo, resting across his shoulder.

On the 22nd, the portion of the camp, taken over night and deserted, was speedily retaken, and with little loss. I then saw the wounded I had spoken to over night. To those remaining alive, scattered over the ground traversed that morning, we could administer but little help and comfort; and the regiment continuing its onward course, subsequently occupied a position on the other side of the camp, at least a mile away from where the wounded of the day previous were lying scattered. The renewal of the fight about midday by Tej Singh, prevented any attempt to collect the wounded; but the next day, the 23rd, parties were continually out all the day effecting the removal of these sufferers; and, on the 24th, the wounded were ordered into Ferozepore, and hackeries furnished for that purpose. I accompanied the wounded, leaving Assistant Surgeon Young with the regiment.

As before stated, it was late in the evening of the 24th before the hackeries got to the end of their journey; and the removing the wounded into the building I had secured for them, with the distribution of some bread and tea and opiates, finished the labours of that night. In the mean time the hospital baggage of the regiment had come up from Moodkee, and early the following morning the treatment of the wounded was effectually commenced.

The fact of my having been the only medical officer with the 182 wounded of the regiment from the date of their arrival in Ferozepore, till the 26th of the following month, when I rejoined my regiment, will, I trust, be received as sufficient excuse for the absence of regular "cases" in this Report, and the scantiness of surgical details generally. My time, it will be readily understood, was too fully occupied in the practical duties of the profession to admit of my keeping any but the most simple, and absolutely necessary records. By a rough memorandum, made on the 25th and 26th, I find that I then had under my charge the following number of each description of wounds:—

Stump cases	6
Gun-shot injuries of head	8
Ditto ditto of neck	2
Ditto ditto of thorax	1
Ditto ditto of abdomen	2
Ditto compound fractures	30
Ditto injuries of joints	6
Ditto ditto of testis	1
Extensive destruction of soft parts by round shot and shell	8
Contusions from cannon-balls	9
Miscellaneous gun shot wounds	105
Incised wounds	1
Burns	3
Total	182

Between the 25th of December, the date of opening hospital at Ferozepore, and the 26th of January, the day I gave over charge of the hospital, 24 of the wounded had died, and 76 had been discharged. But 13 had been re-admitted, and 8 cases of other diseases had also been sent in from camp; there remained, therefore, on the 26th of January, a total of 103 under treatment.

On the morning of the battle of Sobraon the regiment was under arms at 4 a.m., and marched about a mile and a-half to the ground which it was ordered to occupy. At day-break the action commenced with the firing of the heavy artillery. Soon afterwards the left, or Sir Robert Dick's division, became engaged. It must, however, have been near midday before the 29th regiment, with the right division, was ordered to advance upon the batteries. Hitherto, but one man of the regiment had been wounded, for it had been lying sheltered in a Nullah; as soon, however, as it showed itself and commenced the advance, the work of destruction began. The distance it had to traverse to reach the batteries was about a mile, and in doing this and accomplishing the possession of the battery opposed to it there fell, of officers, Col. Taylor killed, and 13 wounded, including Col. Barr serving on the staff. Of non-commissioned officers and rank and file there fell 35 killed and 128 wounded.

As shown at the commencement of the report, this action was, in proportion to the strength of the regiment engaged, fully as severe a one as that of Pheroshuhur. The wounded were all dressed and in their tents that evening. Five amputations were done on the field, viz: 1 shoulder-joint, 1 arm, 1 thigh, and 2 below the knee. One of the latter and the arm case terminated fatally, the other 3 did well.

During the two following days the wounded were removed into Ferozepore, and thither I went with them, but receiving no instructions to remain, I returned on the 14th in time to rejoin my regiment at Khoonda Ghat, to which place it had marched to cross the Sutlej. I remained with the regiment till the 18th, when it had crossed into the Punjab and advanced as far as Kussoor. At that camp the arrangements for peace appeared to have been settled, for general orders, dated the 17th, directed all regimental hospital establishments to return to Ferozepore, leaving only with each corps one medical officer, and one subordinate. I again deemed it my duty to be with the wounded, and leaving Assistant Surgeon Young with the regiment, I reached Ferozepore the same day, the 18th.

The hospital of the 29th regiment was now more crowded than ever, and hospital gangrene was here, as in all the other hospitals, working great mischief among the wounded.

The war being now at an end, arrangements were commenced for the disposal of the wounded during the hot season. Great waste of time and unnecessary labour was occasioned to medical officers by the vacillation which attended these arrangements. Finally, however, with respect to the 29th regiment, 42 were put into boats at Ferozepore on the 2nd of March, to proceed *viâ* the Indus route to England, of whom 8 died on the river, and the remainder of the wounded leaving Ferozepore on the 11th, preceded the regiment to Kussowlee, reaching that station on the 24th of the same month. The regiment returned on the 11th of April.

During the march of the wounded from Ferozepore to Kussowlee, there only occurred one death. There was no further spread of hospital gangrene after leaving Ferozepore, and all gangrenous and sloughing cases improved. The severer cases—to the number of 52, including officers—were carried in doolies with either corded or floored bottoms; the remainder travelled in hackeries, or walked, if able so to do.

With respect to the question of primary and secondary amputation, the result of cases of amputation amongst the wounded of Her Majesty's 29th regiment, is in favour of the former, and done upon the field within four hours of the receipt of the wound.

Of 10 cases of primary amputation ..... 2 died.
Of 12 cases of secondary amputation ..... 8 died.
Of 22 of both classes of ditto ..... 10 died.

Of the ten cases of primary amputation, four were done upon the field of Pheroshuhur, and five upon the field of Sobrson, the whole nine within four hours after the receipt of the injury. The tenth case, an arm amputation, was done eighteen hours after the patient was wounded. The class "secondary amputations" includes operations at different periods from five days to five weeks after the infliction of the wound. The detail of operations is as follows:—

	Primary.			Secondary.			
Shoulder-joint	2	died	0	1	died	1
Arm	2	,,	1	2	,,	1
Fore-arm and hand	1	,,	0	3	,,	1
Thigh	3	,,	0	5	,,	4
Leg	2	,,	1	1	,,	1
Total	10		2	12		8

Secondary hæmorrhage occurred in only one of these cases. The stump was immediately laid open, and the artery secured; but the patient, from long suffering and loss of blood together, was too much reduced, and did not recover.

It is curious that the only two deaths following primary amputation should have been in the only two officers who suffered amputation. The death of Lieutenant Jones—the arm case—was the effect of dysentery, under which he had laboured ever since the date of Pheroshuhur. His stump, to the last moment, appeared to be doing well, notwithstanding the dysenteric affection. In this case, too, the nature of the wound must be taken into consideration: a great portion of the fore-arm, including the elbow-joint, was carried away by a cannon-shot, and more blood was lost than usual after such an injury. The patient never fairly rallied in spirit, though his pulse was good. He died at Ferozepore on the thirteenth day after the operation.

Ensign Mitchell was raised from the ranks shortly before the battle of Sobraon, on which occasion he was struck by either a grape or ginjall shot, which fractured the tibia into small fragments close to the ancle joint. That structure, and the neighbouring soft parts, were also much lacerated. Amputation was performed at the calf of the leg, and never was an operation borne with more firmness,—nay, positive indifference, the patient himself assisting. For the first few days he went on well, but the face of the stump then took an unhealthy action, very much of the nature of hospital gangrene, and the patient died on the 9th day of irritative fever.

The mention of Lieutenant Jones's case reminds me to observe upon the general prevalence of diarrhœa and dysentery amongst both officers and men from the time of the battle at Pheroshuhur until they crossed the Sutlej. The wounded men suffered particularly in this way, and many besides Lieut. Jones were lost in consequence. This bowel complaint was probably due to the alternations of temperature to which all classes were then exposed for four days and nights, and also to the putrid water, —or *Sikh soup*, as the soldiers called it, for dead bodies of Sikhs were subsequently found in the wells from which all parties drank so freely after taking possession of the Sikh camp on the 22nd.

About a fortnight after the wounded from Pheroshuhur had been assembled at Ferozepore, tetanus was, I believe, observed in all the different regimental hospitals. Two very marked cases amongst the wounded of the 29th regiment proved fatal. Those cases presented strong trismus and opisthotonus, with the mental faculties unobscured till nearly the last moment. In one, the wound was from grape-shot, entering the left groin and passing out at the nates of the same side. The shot must have coursed very near to the hip-joint; and I may here remark that grape-shot wounds, in which the track of the shot passed near the hip-joint were always severe cases, and several proved fatal under the irritative fever which accompanied such a wound. A case of this description exhibited at the same time a partial tetanic affection, and it is doubtful whether it should be included or not under the deaths from tetanus.

Imperfect tetanic symptoms, such as partial trismus, with a mumbling mode of speaking, accompanying fever, were observed in many cases at the time alluded to, when the three above-named cases occurred, and tetanus was generally prevalent in other hospitals. Such cases did well under the administration of emetics and evacuants in the first instance, and æther and narcotics afterwards.

With respect to the treatment adopted in the two pure cases of tetanus, that of the patient with the grape shot wound of the hip, occurring in a stout, plethoric young man, with full pulse, was treated by V: S: emetics, purgatives, fomentations, æther, and opium. In the other case, the wound being of the hand, and extensive, amputation of the fore-arm was performed a little above the wrist. The tetanic symptoms were relieved for a time, but returned with unabated violence in a few hours, and the patient died.

In two cases which proved fatal of wounds from grape-shot of the lower extremities, severe spasmodic twithcings of the muscles of the wounded limbs followed, unaccompanied by constitutional or other spasmodic symptoms. One limb was amputated, but the twitchings continued in the stump. Morphia in grain doses, frequently repeated, seemed to give relief.

COMPOUND DISLOCATION OF THE RIGHT HUMERUS.

By H. HAYNES WALTON, Esq., F.R.C.S., Surgeon to the Central London Ophthalmic Hospital and to the St. Pancras Royal General Dispensary.

My attention having been recently directed to dislocations of the shoulder, it occurred to me that it would be advantageous to make public a case of compound dislocation of that joint, that was under my care when house-surgeon at St. Bartholomew's Hospital.

The accident is very rare; and little has been said about it, and authorities in general do not allude to it. The treatment and termination of this case convey instruction that is profitable. I can well imagine a surgeon, who possesses no information on the subject, hesitating on the measures he should adopt in a similar instance. So far as I know, only two like cases have been recorded, and which I shall quote in the few remarks I shall make at the end of this paper.

George Mangell, aged nineteen, admitted on the night of Jan. 20th, 1842, into St. Bartholomew's Hospital.

Mode of Accident.—While at work at a threshing-machine of three horse power, his arm got entangled in one of the wheels during its revolution.

Symptoms.—The shoulder is flattened, the arm a little lengthened, the elbow at some distance from the side, and the limb is fixed.

Amount of Injury.—A wound ten inches in length extends nearly around the shoulder, commencing in front, just below the inner tubercle of the humerus, passing obliquely through the axilla, and terminating behind at the base of the acromion. Anteriorly, only the skin is divided. The muscles beneath, although exposed, are uninjured, and the brachial plexus is not denuded. Posteriorly, the axilla is laid open, and a portion of muscle hangs out. The skin has retracted considerably, and is, besides, so extensively detached from the subjacent muscles, that the entire finger can be passed under it, on either side of the wound, without reaching the limits of its separation. The head of the humerus, denuded of its capsule, is felt lying against the inferior costa of the scapula; its neck can also be distinguished, and, in front of it, the brachial artery can be felt pulsating. No bony structure could be seen, as the upper part of the arm could not be drawn away from the trunk sufficiently for that purpose. The partially-detached piece of muscle is a bit of the latissimus dorsi; the situation from which it has been torn cannot be distinguished.

Treatment and Reports.—The first steps I took were to remove the piece of muscle, by dividing the few ragged fibres which united it laterally, and then to sever the tendinous insertion from the humerus. The portion was about an inch and a half square.

I now proceeded to the reduction of the dislocation. This was done by two assistants fixing the body and the scapula by a jack-towel, while two others exerted extension by laying hold of the fore-arm. I then placed my left hand under the upper part of the arm as a fulcrum, and at the same time grasping the elbow with the right hand, and using it as a lever, replaced the bone in about three minutes. The edges of the wound were brought together by sutures, and the arm confined to the side of the body by a bandage. The fore-arm was supported by a sling.

The wound united kindly, partly by adhesion, partly by granulation. No constitutional disturbance followed the injury. Several days after the accident, suppuration took place on the outer part of the chest below the axilla. I evacuated the matter by incision.

Feb. 20. The arm-sling and bandage are laid aside: he can raise the arm without pain. The shoulder-joint admits of more motion than he is able to perform voluntarily. The deltoid muscle is so shrunken, that the outline of the humerus and the acromion is perceptible.

March 11. The wound is completely cicatrized; the patient has little power of raising the arm. He performs the under motions freely. Discharged.

REMARKS.

The two cases I alluded to, and promised to mention, are narrated by Sir Astley Cooper and Mr. Fergusson. I shall first give that of the former author. "Work on Dislocations," page 450. "The accident occurred in the practice of Mr. Dixon, of Newington, who thus describes it to Sir Astley Cooper. Robert Price, 55 years of age, on returning in a state of intoxication from the Borough, fell down upon his shoulder. Upon examination, I found the head of the bone had passed through the integuments of the axilla, lying exposed upon the anterior part of the chest, and situated over the pectoral muscle on the right side. The reduction of the dislocation was easy, being performed without the necessity of raising him from the state of stupor and insensibility he was lying in, by the usual method of extension and counter extension, taking care only to guide the bone into the glenoid cavity; he was then put to bed, and an evaporating lotion applied. On the following morning, considerable pain and tension had come on; he was bled and purged freely; a large poultice was applied over the joint, and anodines given to lessen pain and procure sleep; leeches were frequently applied in the neighbourhood of the joint for the first 10 days, or fortnight, after which a copious discharge of pus issued from the wound in the axilla. The constitution now felt the effects of so important an injury; he became irritable, fretful, and lost flesh; healthy pus was now discharged freely from the joint for ten or twelve weeks, when it somewhat abated. A succession of small abscesses, situated in the cellular membrane surrounding the joint, were exceedingly troublesome for several months, some of which formed extensive sinuses and required to be freely dilated. The discharge of pus was kept up from the joint for nearly twelve months, when it finally ceased, leaving the joint anchylosed, and the wound closed. He was quite recovered in fourteen months from the accident, at which time he called on me, and felt gratified by showing how freely he could make use of the fore-arm, and handle the pen for all the purposes of business. He is still living in Paradise-row, Stockwell, and employed by the parish of Lambeth as a collector of assessed-taxes."

Sir Astley Cooper makes the following remarks—"Such a case will require an immediate reduction, by the means which I have described for the dislocation of the os humeri forwards; and, in general, the more violence done to the injured limb, the more easy is the reduction, from the diminution of the constitutional powers which so great a shock produces. When the bone is replaced, lint dipped in blood is to be applied to the wound; or, if the wound be large, a suture should be employed, and then the lint applied. Adhesive plaster should be used to support approximation, and the limb must be kept close to the side by means of a roller applied round the body, and including the arm, thus preventing the least motion of the head of the bone; by these means the suppurative inflammation may be prevented, and the cure proceed without protracted suffering, or any danger to the patient's life."

Mr. Fergusson, in his "Practical Surgery," page 198, says: "I have seen one example of compound luxation of this joint. It was occasioned by the spoke of a large water-wheel, which, in revolving, came in contact with the arm, caused a rent through the deltoid and skin, and thrust the end of the humerus prominently outwards. The patient, though stunned, was not seriously injured elsewhere; yet it was thought advisable to amputate. The state of shock continued for several hours; and the operation, partly on this account, and also to give time to procure instruments, was delayed till next morning. Meanwhile the head of the bone was replaced, which was easily done, and the edges of the wound were brought together. When the surgeons met again, the man seemed in such a favourable state, and the parts looked so well, that it was wisely resolved not to use the knife. The wound closed without a bad symptom, a slight synovial discharge continued for about three weeks, and some months after I saw this individual in excellent health, and already able to make a tolerable use of the injured arm."

Although the three cases possess the common feature of dislocation with external wound, they differ in the direction assumed by the head of the humerus, as also in other particulars that I need hardly point out.

It is surprising that the integrity of the humerus, in my case, should have been preserved, since the application of the force was through the shaft of that bone, and, in all probability, was applied about its middle; for the shirt and jacket-sleeves were much torn at that spot, and uninjured at any other part. The mobility of the scapula, whereby it accommodates itself to the motions of the arm, together with the dislocation occurring at the weakest part of the joint, must, I think, be considered as circumstances tending to prevent fracture. From the extent of damage done to the soft parts, and particularly to the skin, it is evident that the humerus must have been greatly twisted, and carried from before to behind, or in the opposite direction, with great violence. In Mr. Dixon's case the violence was received at the head of the bone, and therefore fracture was not a likely complication. It cannot be gathered, from Mr. Fergusson's description, the precise manner in which the accident he relates occurred.

I cannot refrain from noticing the important lesson the latter case inculcates. The fortunate occurrence of delay resulted in the salvation of the patient's arm. How many parallel results have been obtained, and what practical information has accrued from circumstances that appeared to be untoward interruptions to the surgeon's intentions!

From the result of these three cases, it must now be received as a settled point, that, in compound dislocation of the humerus, without injury to the great blood-vessels or to the brachial plexus of nerves, as a general rule, the proper treatment is, to reduce the dislocation, and endeavour to effect union of the lacerated parts. That instances might arise in exception to this rule, no practical surgeon will doubt; but it would be out of the scope of this paper to say more than is necessary to point out the fact that the cases related establish.

There was no difficulty in reducing the dislocation. I was not aware when the head of the bone returned to the glenoid cavity: it was by passing my finger into the wound during the extension, to ascertain what progress was being made, that I discovered the reduction had been accomplished; probably it had been effected in a shorter time than is specified in the notes.

The suppuration at the side of the chest seemed to have been in the tract of detached skin, for pus escaped at the axilla when pressure was made on the collection at the side; but, as its discharge could not be naturally effected through the wound, I made an incision for its free exit. The patient's recovery was decidedly rapid: in twenty-four days the arm was liberated from all bandages, and he performed the under motions tolerably well. On the 11th of March the wound had quite healed. There was very little bleeding when the accident occurred. Although a large piece of the latissimus dorsi muscle was removed, that muscle still retained some connexion with the humerus.

I saw the patient two years after his dismissal from the hospital: he was pursuing his usual avocations; he had gained power in the use of the arm, and could nearly raise it at a right angle to his body. The deltoid muscle was quite atrophied: this must, I suppose, be attributed to injury of the circumflex nerve.

I refrain from going into the subject at greater length, thinking it better to be concise, and preferring that my reader should use his own mind, and think over and compare the cases, and make his own deductions, rather than run the risk of tiring him with my comments.

RESPIRATION IN ANIMALS THAT HYBERNATE.—CURIOUS FACT RELATIVE TO A BAT.

By ROBERT ANNAN, Esq., M.R.C.S.E.

The number of animals that hybernate is very great. Most of these, as the amphibiæ, or oviparous quadrupeds, insects, and worms, are distinguished by the peculiar organization of their respiratory organs, from the more perfect animals, which seem to be incapable of hybernation. But there are others, viviparous quadrupeds,—as the dormouse and marmot, having a double heart, double circulation, and perfect lungs, and to whom perfect respiration, in any other state than that of torpor, is reputed as necessary as it is to man. The phenomena, therefore, of torpor in these is much more surprising than in animals with a single heart, and whose respiration can be suspended for a longer time without injury to life, and which the experiments of naturalists have hitherto failed to explain, even when the phenomena, or most of them, were under the full control and observation by the experimenter.

The most graphic description, perhaps, of *hybernation*, is that by Mr. White, (a) who gives an account of a land tortoise—known to be a very long-lived animal—that lived more than forty years in a walled court. During that period, it regularly retired under ground about the middle of November, and came forth about the middle of April. On its first appearance in the spring, it discovered very little inclination for food; but, in the height of summer, it was very voracious. As the summer declined, its appetite grew less; and, during autumn, it hardly ate anything. In the month of April, 1780, Mr. White informs us, —"A moist and warm afternoon, with the thermometer at 50, brought forth troops of *shell snails*, and, at the same juncture, the tortoise heaved up the mould, and put out its head, and the next morning came forth, *as it were raised from the dead*, and walked about till four in the afternoon." (b)

From the time of Pallas and John Hunter to Reeves and others, *Bats* have been frequently selected as the subject of experiment; and in prosecuting his inquiries relative "to the general principles of the blood,"—his great work—John Hunter tells us,—"It is asserted by some author, whom I do not recollect, that the blood of a bat coagulates when in a state of torpor; and Mr. Cornish, surgeon, at Totnes, Devonshire, to whom I applied for some bats in the torpid state, sent me them; but in the carriage they always died. However, he took opportunities of examining them, and he found that the blood was in a certain degree coagulated; but it soon recovered its fluidity on motion and heat." (c)

Spallanzani, too, devoted the greater part of his life to the investigation of respiration and hybernation, and almost every description of animated beings,—worms, insects, fishes, serpents, tortoises, lizards, frogs, hedge-hogs, dormice, bats, and man, were the subjects of his experiments. To the subject of *Bats*, however, he has paid more exclusive attention, having left behind him, according to Senebier, the prospectus and introduction to a work (whether ever published, I know not) exclusively confined to this subject. (d)

Bats, as is well known, are gregarious animals; of the family *vespertilliones*, subdivision, *cheiroptera*, in the order *carnapiers*, of Cuvier. They copulate like other quadrupedes; they bring forth young, and nourish them with milk, as other quadrupeds do. For the sake of heat, apparently, they cling closely together suspended by their hinder legs from the roofs of old buildings, with their heads downwards, a posture which, but for the peculiarities of their organization, would be fatal to a multitude of other animals, especially to man and quadrupeds. In summer, when in full health, according to Dr. Reeves, of Norwich, (a) whose experiments were posterior to those of Spallanzani, the temperature is 101 deg. 102, varying, however, with every change of temperature of the atmosphere; the pulsation of the heart 100 in the minute; as they grew torpid, 60; as the torpor increases, *fourteen*, beats have been distinctly counted. When torpid bats cannot be made to breathe at all. They have been placed in the exhausted receiver of an air pump without perishing. They are insensible to pricking their feet and nose. Wounds have been inflicted, limbs broken, without the mutilated animals expressing any signs of pain.

But the most surprising of all these phenomena is the suspension of respiration; for these animals, when active, seem as incapable of surviving respiration as other quadrupeds, with a double heart and lungs, not having the faculty of hybernation. When exposed to the open air, although the temperature is below the freezing point, and considerably lower than that which suspended their respiration, they revive from their state of torpor. According to Spallanzani they absorb oxygen and give out carbonic-acid, and sometimes azote; and the food they live on is supposed to give a large quantity of carbonic-acid. They perish in azotic, carbonic-acid, and hydrogen gases; their lungs have a direct influence upon the air which is inspired, and, after death, their bodies, as well as fragments of them, absorb oxygen and azote, and give out carbonic-acid and hydrogen. As the action of the lungs, along with that of the heart and stomach, is suspended during torpor, they do not die when placed in the unrespirable gases, nor do they change the atmospheric air. Such seemed to be the leading facts hitherto ascertained, connected with the action of respiration in the bat, and other animals, as the marmot, dormouse, &c.

It does not appear, however, that it had occurred to any naturalist to test the powers of life in the torpid bat, marmot, &c., by a *continued and lengthened out and complete seclusion from the atmospheric air*. If, in this, I am correct, then the following short and interesting narrative will be viewed as supplying *an experiment*—if I may use the term—which preceding naturalists, and animal physiologists, had failed to furnish.

The account in writing was sent to me by Admiral Sir Charles Adam, Governor of Greenwich Hospital, on whose estate, near to Kinross, the incident occurred; the collateral facts having been carefully ascertained by him and his factor, (steward,) Mr. Dowie. But as the circumstances were uncommon,—so far as known to me, unprecedented, —Sir Charles Adam politely accompanied and assisted me in making additional inquiries,—to his and my own entire satisfaction, as far as unexceptionable human testimony could afford; the portion of the tree to be afterwards described, which had contained the *bat*, being unsaleable and useless, having been inadvertently thrown on a pile of burning brush and underwood in the plantations, and so scorched as to render its examination of no value by Mr. Dowie, to whom it was shown next day.

The following is the account:—A silver fir-tree had been felled in the first week of October, which, as is very common with that species, had separated into two stems, about twelve feet from the ground, of which several similar examples were pointed out to me by Sir Charles Adam, in the course of our walk through the fine woods of Blair Adam; but they afterwards grew together into a single stem for eighteen or twenty feet in length, and twelve inches diameter, the tree being, in all, about thirty-five feet in height.

When cross-cut—a few minutes after being felled —four feet below where the junction was supposed to have commenced, blood was observed on the saw, and a small hollow was discovered very near to the heart or centre of the tree; an object was observed to move,—a boy put his fingers in, and drew out a large *bat*, one of the ears of which was found cut off; but the animal which had borne the rude application of the saw without drawing back or flinching, apparently, on being handled by the boy, and after a few seconds hastily thrown on the ground, where it lay, motionless, for from a quarter to half a minute, at length moved, and then flew away over the tops of the adjacent trees. When first found, the animal was placed with its head downwards, towards the root of the tree. The hollow place from which the bat was taken was ascertained to be about seven inches long, tapering a little, and from two to three inches in diameter, the tree having been cut "neatly"—as expressed by the head forester—at the bottom of the hollow; and there were at least five years of new solid growth around; the bark complete and sound all over, above and below. On careful examination, saving where cross-cut, there was no communication with or outlet to the air in any way.

As regards the explanation of life being here, apparently, prolonged so remarkably in a warm-blooded animal, I think it unnecessary to enter: the theorist will, I dare say, *attempt*, at least, an explanation; the sceptical will altogether deny or impugn the accuracy of the facts. A learned and experienced Professor of Natural History, to whom I sent the account through a friend,—previous, however, to the last investigation,—positively discredited the possibility of such an occurrence, in absence of the evidence to be afforded by the portion of the tree; and at this I am not surprised. All I can say is, that I have endeavoured faithfully to collect and narrate facts,—facts so circumstantially and minutely detailed, and so corroborated, as to leave no doubt on the mind of Sir Charles Adam, or myself, as to their truth. Let the reader judge and determine for himself. If I may presume to offer one remark, it is,—that, in this instance, the premises being admitted, the animal must have *remained torpid;* and to this alone it owed the prolongation of the vital powers,—*analogy*, conjoined with the singular properties of the blood as developed in the experiments of John Hunter, in certain other cases of the wonderful prolongation of life, not being unfavourable to it. And I am not without hope that the account, as given, may lead naturalists to institute such experiments as may throw light on or determine the question of *prolonged hybernation*,—an inquiry which had not been attempted, so far as I know, by previous naturalists. Accident has here pointed out a hint at the mode of doing so, which, by a little management, perhaps, might be easily imitated.

And, in taking leave of this subject, I beg leave to conclude by quoting a passage from the admirable and philosophical work—"The Musculo-Cardiac Function" appearing weekly in the *Medical Times*, by Mr. Wardrop, and who I am happy to be able to call my friend. "Mihi, quoque, grata semper manebit in memoria, ob amicitiam, studium benignum, quo me, Eheu! permultis ab hinc annis, in primitiis scientiæ medicæ; et postea, patria relicta, adversa valetudine laborantem, hospitiis, consitiis, preceptisque, adjuvistis." However difficult it may hitherto have been satisfactorily to explain any of the phenomena of living bodies, yet, whenever a step has been gained in Physiological science, we are struck with the remarkable simplicity in the means which nature employs for accomplishing what had appeared to us a most complicated function in the animal economy. In endeavouring, therefore, to explain any of those phenomena of living beings which have hitherto evaded research, it may be anticipated, that if such inquiries be successful, they will not lead to the discovery of *new* laws, but, probably, unfold the same simplicity of means for performing those operations which have already been disclosed by human intellect."

Kinross, November 6th, 1848.

(a) Natural History of Selbourne. Pages 135, &c., and 262.

(b) See Smellies' "Philosophy of Natural History." Vol. II. Chap. vi. P. 405.

(c) Hunter "On the Blood." P. 25. Original edition. 4to.

(d) See his Posthumous Works, "Par Jean Senebier." 3 tomes. 8vo. à Geneva. 1807.

(a) An "Essay on the Torpidity of Animals," by Henry Reeves, M.D., 1809.

THE HEPATIC AFFERENT VESSEL.

There are in the body three *afferent* vessels, or vessels which take blood *to* parts. The first is the hepatic, and consists of the spleen, and the splenic and portal vein and its branches. The second is

the pulmonic, and consists of the right auricle and ventricle, and the pulmonary artery and its branches. The third is the systemic, and consists of the left auricle and ventricle, and the aorta and its branches. The hepatic veins are the hepatic *efferent* vessels, and take the blood *from* the liver. The pulmonary veins are the pulmonic *efferent* vessels, and take the blood *from* the lungs. The mesenteric veins, which terminate in the middle of the hepatic afferent vessel, and the superior and inferior venæ cavæ and their roots, and the coronary vein, are the systemic efferent vessels, and take the blood *from* the general system. Intermediate between the terminal branches of each afferent vessel and the primary roots of the corresponding efferent vessels, are the capillaries, which are *perferent* vessels, *i. e.* take blood *through* parts. All blood-vessels, therefore, are either afferent, perferent, or efferent. Now, I have a few words to say in behalf of the hepatic afferent vessel. It is a *vein* with a *spleen* for its commencement. The pulmonic afferent vessel is an *artery* with a *heart* for its commencement: and, again, the systemic afferent vessel is an *artery* with a *heart* for its commencement. If the hepatic afferent vessel had also been an artery with a heart for its commencement, in the auricle of which the mesenteric veins had terminated, the three afferent vessels would have been all alike; and then the function—that is, the office and action—of the first would have been understood simultaneously with the functions of the other two. There would have been no difficulty at all in the matter then; and there is very little, if any, now. The first thing necessary to a right comprehension of the subject, is, that the hepatic afferent vessel should have an admitted existence, as such, which at present it has not, and then it will soon have a recognised use. Let anatomists do it this simple though tardy justice. Let them accord to it its legitimate rank by acknowledging it to be an afferent vessel as well as the other two, and that it is the *first of the three*; and then it will soon be seen, firstly, that *it* receives from the alimentary tube by the mesenteric veins the fluidified or digested solids and the fluids, in other words the food and drink,—and, moreover, all medicines whether solid or fluid,—and which are absorbed, not by the lacteals, but by the gastro-intestinal capillaries; and, that it is both erroneous and absurd to suppose that an out-of-the-way vessel like the left subclavian vein receives through such a long and slender tube as the thoracic duct "the fresh nutritive materials derived from the digestive process." (Dublin Dissector, 5th edition, p. 446). Secondly, that it is the hepatic afferent vessel *itself*, and not as at present believed, *another* afferent vessel, the systemic, which propels the blood through the hepatic capillaries: and, thirdly, that the reason the hepatic afferent vessel does not consist of a heart and artery like the pulmonic and systemic afferent vessels, but of a spleen and vein, is, because a different kind of motion of the blood is required through the hepatic capillaries to that through the pulmonic and systemic capillaries; that is, an intermittent and slow motion, and not a constant and rapid one. If a constant and rapid, instead of an intermittent and slow motion of the blood through the capillaries of the liver had been necessary, then the hepatic afferent vessel would have consisted, not of a spleen and vein, but of an auricle, a ventricle, and an artery, and the mesenteric veins would have terminated in the auricle. On the other hand, if an intermittent and slow, instead of a constant and rapid motion of the blood through the capillaries of the lungs had been necessary, the right auricle and ventricle would have been a spleen, and the pulmonary artery and its branches a vein, like the splenic and portal, in the middle of which the superior, inferior, and hepatic cavæ would have terminated. And, again, if an intermittent and slow, instead of a constant and rapid motion of the blood through the capillaries of the general system had been necessary, the left auricle and ventricle would have been a spleen, and the aorta and its ramifications a vein, like the splenic and portal, in the middle of which the pulmonary veins would have terminated. For the three afferent vessels we should then have had one heart and artery (hepatic), and two spleens and veins (pulmonic and systemic); and not, as now, one spleen and vein (hepatic), and two hearts and arteries (pulmonic and systemic). The hepatic afferent vessel, which is venous throughout—roots, trunk, and branches—and both distensible and contractile, by its slow alternate distension and contraction, causes an intermittent and slow motion of the blood through the hepatic capillaries; the pulmonic and systemic afferent vessels, by their rapid distension and contraction, cause a constant and rapid motion of the blood through the pulmonic and systemic capillaries. Now, a constant and rapid is the reverse of an intermittent and slow motion of blood; and, as opposite physiological effects require opposite anatomical causes for their production, heart and spleen, and artery and vein, must be opposites; or, as they may be called, *anatomical antitheses;* and this accords with, and is no inapt illustration of one of the first principles of philosophy, viz., that "*opposites placed together give light to, and explain each other.*"

November, 1848. J. J.

*** The spleen is not to be regarded as a distinct or isolated organ, but as the roots or commencement of the hepatic afferent vessel. With the exception of the elastic capsule, and its prolongations through the interior, and the nerves and lymphatics, the spleen is entirely vascular, *i. e.*, consists of blood-vessels,—viz., the branches of the splenic artery, and the roots of the hepatic afferent vessel, with the intermediate capillaries. The capillaries furnish points of origin for the roots of the hepatic afferent vessel, which could not originate from nothing, or from anything else than capillaries. The artery is for the purpose of forming the capillaries, which it does by dividing and subdividing, and ultimately terminating in them. Its tortuosity minimises the quantity of blood that passes through it, for it is evidently not the blood of the splenic artery that is wanted, but the bloodvessel.

ON THE MEDICINAL PROPERTIES OF MERCURY AND THE CHLORATE OF POTASH.

By J. ALLISON, Esq., Surgeon, Bridlington.

The long lists of remedial agents furnished by nature and art contain two classes of substances of remarkable power for good or evil, namely, the compounds of mercury, and those of chloric acid. Some of the former have been known from a very remote period of history, and for centuries past have been used for the cure of disease; the existence of the latter has only been revealed by the chemists of our own time, and their therapeutical value has been hitherto almost entirely overlooked. There is reason to believe, however, that the salts of mercury and those of chloric acid are capable of producing directly opposite effects on the animal system, and that their physiological and medicinal properties are antagonistic. The *Medical Times* of the 28th ult. contains an exceedingly interesting communication from Mr. Sayle, of the West Norfolk and Lynn Hospital, on this subject, in which he has done me the honour to transcribe a letter which I sent to the *Medical Gazette*, in 1846, on the use of the chlorate of potash in cases of severe ptyalism, and affections in which the fluids of the the body were supposed to be in a similar state to that in which they exist under the excessive action of mercury. Mr. Sayle refers to the details of two cases he furnished to the *Medical Times* in 1844, in which the chlorate of potash was beneficially employed; and claims the priority of having brought the remedy under the notice of the profession; but he is in error if he supposes that I assume any title to originality in the matter, for the chlorate was used, empirically, it is true, by medical men even before he published his cases, as may be proved by reference to some of the earlier numbers of the *Provincial Medical Journal*. I feel happy, however, to know that our views of its action, if they do not exactly coincide, are very nearly the same; and that, unknown to each other, we have been using it in accordance with a similar theory, and with the same success.

It was from the researches of Professor Mulder that I first conceived the rationale of the action of the chlorates. The readers of the *Medical Times* are aware of the investigations of that distinguished chemist, relative to the composition and properties of protein and its oxides, of which he describes three; and of his belief that the protein of the blood, in the form of an oxide, is the vehicle for conveying the oxygen of the atmosphere from the lungs to parts where the destruction of old, and the formation of new, organisms are continually being effected. The nutrition of an organised structure he regards to be immediately dependent on the oxidation of that which has fulfilled its design; the deposition of the protein of muscular fibre, for example, being accomplished simultaneously with the reduction of its oxide, the oxygen combining with the effete matter, which is ultimately eliminated in the form of oxidised products by the lungs, the liver, kidneys, and other secreting apparatus, and by the epithelium cells of the mucous membranes and skin. It will also be recollected, that he views the buffy coat of the blood, the corpuscles of mucus and pus, and the matter of tubercle as oxidised protein. "The inflammatory coat," says he, "is not fibrin. It is my opinion that the inflammatory crust may be considered as a combination of the hydrates of the protoxide and tritoxide of protein." In all inflammatory diseases, therefore, there is an abnormal quantity of highly oxidised blood circulating in the system. Whether the theory and *rational* formulæ of Mulder should be confirmed by future experiments or not, there seems no reason to doubt the correctness of his analysis; and the general inference from his investigations is, that in the phlegmasiæ, in fever, in tuberculosis, and diseases naturally allied to these, the blood is in a state of hyperoxidation. But it is by no means probable that such a state is occasioned by any increased activity of the respiratory process, but rather on account of the indisposition of the organised structures, from whatever cause it may result, to undergo those transformations from a more to a less complex form, which characterise all the phenomena of vitality, which are indispensable to a state of health, and the final cessation of which is *death*. There is not a more certain index of this inflammatory condition than the state of the renal secretion, the substitution of lithic acid, or its salts, in the urine for the more highly oxidised product of metamorphosed structure, urea, indicating the extent of the malady, and amount of danger.

In the phlegmasiæ of every form, the utility of mercury is universally acknowledged; all experience proves, that the existence of inflammatory action, properly so called, and the general effects of that substance on the system are quite incompatible. According to the virulence of the disease, so is the resistance to be overcome; the quantity which would be merely sufficient in one case to restore the deranged equilibrium between the respiratory function on one hand, and the nutritive and secretory functions on the other, would, in another of less urgency, occasion the most fearful consequences. In all the forms of pure anæmia, including affections that occupy widely different places in all the schemes of nosology hitherto devised, the intolerance of mercury is notorious; all the phenomena of such diseases, exhibiting a state of the system the very reverse of that in inflammation. If, in the numerous affections to which the latter designation may be applied, the blood is in an excessively oxidised condition, it is not an unfair inference, that, in the others, it is deficient of the amount of oxygen necessary for the maintenance of the vital force; and that, to correct such a departure from the normal standard, it is necessary, by some means, to supply the deficiency. Under the belief that these views were substantially true, the propriety of the internal exhibition of substances rich in oxygen, in anæmia, and ptyalism, from the incautious use of mercury, suggested itself. Recollecting the high equivalent of the chlorates, and the

facility with which they part with their oxygen when brought into contact with organic matter, I determined to test their powers; and the chlorate of potash is the salt I have ever since used for the purpose.

A simple calculation shows that 245 grains of the chlorate of potash yield, on decomposition, about 149 grains of the chloride of potassium, one of the constituents of healthy blood; and 96 grains, or 281 cubic inches, of oxygen. At the instant of separation, the latter element is in a state much more prone to exert its affinities than in that in which it exists in the atmosphere. Gaseous bodies, which have no disposition to unite with others, in some instances do so readily, when their particles are brought into closer proximity. Oxygen, condensed to the one-thousandth part of its volume, as it is in platinum powder, unites immediately with hydrogen. In their ordinary condition, it is impossible to cause oxygen and sulphurous acid to combine; but if the former be presented in the finely-divided platinum, or mingled with the particles of water, sulphuric acid is instantly formed. The oxygen of the atmosphere has no effect on the sulphuret of lead; but if it come into contact with the peroxide of hydrogen, it is immediately converted into the sulphate of lead. Other examples might be furnished to illustrate the influence of elasticity on affinity; they all prove that gaseous bodies have a stronger attraction for each other and for solids, as their atoms are nearer; and it is well known that the oxygen of the chlorate of potash, in its nascent form, in the act of separation, is in the most favourable condition to combine with matter within the sphere of its action. That the effects of the chlorate on the animal system is virtually in harmony with these principles, I entertain no doubt; its employment in numerous cases has confirmed my belief; and there is every reason to hope that it will become one of the most extensively useful, certain, and safe agents in the cure of a hitherto intractable class of diseases. That no disappointment may follow its use, it is only necessary to be perfectly sure that the state of the fluids is such as requires it; otherwise, an error in diagnosis would produce an aggravation of the malady.

But, although it would thus appear that the preparations of mercury and the chlorates are antagonistic in their action, and that their use is indicated respectively in opposite conditions of the blood; still it is not at all probable that mercury has any direct deoxidising power over that fluid. Health depends on a proper balance between the respiratory and the nutritive and secretory functions, any disturbance of which is followed by the phenomena of disease. In inflammatory affections the two latter are impaired; the oxygen which should be separated in those processes is retained, locked up, in the system; and, if the derangement continue, a state of physical rest, or death, is the result. There is no reason to suppose that any vital or other force can be generated without chemical change; and as little reason is there to doubt, that it is the oxidation of the hydrocarburets and nitrogenised elements of the body that sustains the life of the animal. Although we may be ignorant of the mode in which it exerts its power, mercury seems to act by restoring those partially-suspended processes; and every practitioner is aware, that, in proportion to the severity of the disease, that is, the loss of equilibrium in the correlative functions, so is the resistance offered to the action of the remedy.

In some respects I totally dissent from the opinions of Mr. Sayle. He expresses himself as if he believed that the chlorate may be given with impunity, irrespective of the condition of the circulating fluid, and adduces a case to show to what extent it can be borne. But whoever will watch its effects will be convinced, that like all those active remedies which, amid the conflicting theories that bewilder the profession, never fall into disuse, there is a limit to the sphere of its usefulness, as well as to the number of diseases in which it may be employed. The same rules which guide the practitioner in the exhibition of other remedies ought to guide him in the use of this. While in all the forms of true anæmia the best effects result from its employment; so, in all the diseases of a truly inflammatory character, it would be positively mischievous, and, like all powerful medicinal substances, the quantity which might be advantageously given to surmount a certain pathological state, would, if continued after its cessation, become a poison. This is in perfect harmony with the philosophy of all the agencies which hourly minister to our health and comfort: when abused they cause our destruction. The case which Mr. Sayle advances in support of his opinion, belongs to an order of diseases in which the use of the chlorates is strongly indicated,—an order in which even infinitesimal doses of mercury are followed by the most serious consequences, as all who have been so unfortunate as to hazard its employment can testify. Mr. Sayle, moreover, conceives that the chlorates might be beneficial in phthisis by supplying that oxygen to the blood which the diseased lungs are supposed incapable of conveying; but this view of the matter, plausible though at first sight it may appear, involves a great fallacy. Although the respiratory organs may be in a frightful state of disorganization, there is still every reason to believe that the condition of the blood differs only in degree from that in which there is obvious inflammatory action; that fluid is surcharged with oxygen, not because the healthier portions of the lungs assume a more exalted state of activity, but simply because the reciprocal functions of nutrition and secretion are unequal to its consumption; it can only then be deposited in the substance of the lungs and other viscera in the form of pus and tubercle. As in many other instances, the very name of the disease has invested it with a mysterious and ominous speciality; and until it has ceased to be regarded as something altogether different from every other, it will continue to send its tens of thousands annually to a premature grave. The physical and chemical characters of those deposits, and of the blood and urine, and the treatment sanctioned by the successful practice of the first pathologists of the day, are highly confirmatory of the truth of these general remarks. The other cases of Mr. Sayle are exceedingly instructive. In three of them, at least, the patients had been salivated for the cure of syphilis, and were suffering from the abuse of mercury. The preparations of that metal are unquestionably proper in the treatment of every form of the disease; but experience proves that there is a point, if its action be carried beyond which, when it produces a disease as deplorable as that which it may have just arrested. That such a state of anæmia existed in the cases referred to, is obvious; and, as might have been expected, the chlorate of potash was instrumental in restoring the blood to its normal condition.

Regarding the hypercritical remarks of the Editor of the *Medical Gazette* on my communication to that Journal, republished in the *Medical Times*, of the 28th ult, that the formula K,ClO^6 represents an unknown salt of potassium; and that he knew of no oxacid compound of chlorine containing *six* equivalents of oxygen, I may state, that he ought to have been aware, that within the last few years the views of many of the most distinguished chemists, English and Foreign, have undergone a considerable change respecting the constitution of the salts. The theory of Davy, that the chlorides are the types of all saline bodies; that the substitution of one electro-positive element for another, leaves the general formula unaltered, has now numerous supporters. If it be, as many suspect, that hydrogen, from its behaviour with other substances, is a gaseous metal, the more recent views become less improbable. Thus by replacing H by K, we should have—

H, Cl = Hydrochloric acid,

K, Cl = Chloride of Potassium; and from the analogies of the physical and chemical properties of the chlorides to those of the "oxygen salts," there is much probability that the first member of the following equation represents the true constitution of the salt, whose therapeutical powers form the subject of part of the present communication:—

$K, Cl\ O_6 = K\ O + Cl\ O_5$; just as

$H, S\ O_4 = H\ O + S\ O_3$; or

$K, S\ O_4 = K\ O + S\ O_3$.

Empirically considered, these members are respectively the same; but as rational expressions of the constitution of the salts, those to the left are more in accordance with that advanced state of the science, of which the *Medical Times* is such a successful exponent.

Nov. 6, 1848.

PROGRESS OF MEDICAL SCIENCE.

ACADEMY OF MEDICINE.

Meeting of Oct. 22; M. Royer Collard in the Chair.

DANGERS OF CHLOROFORM: A REPORT BY M. MALGAIGNE.

When ethereal inhalation was first introduced into surgical practice, its advantages were readily acknowledged by the profession, and at the same time the dangers attending its exhibition were pointed out. Its sudden and powerful action showed, as M. Flourens happily said, that ether was a marvellous and terrible agent. Animals submitted to its influence died, when inhalation was continued some few minutes only beyond the period necessary for the production of anæsthesia; and in the hazardous attempts of American surgeons, etherization continued in a young man ten minutes after the establishment of unconsciousness, proved very nearly fatal. Besides the direct and really poisonous action of ether in immoderate doses, other perils arose from the mode of exhibition, the degree of aptitude, and the docility of the subjects. Some of them, instead of inhaling the ethereal vapour, merely received it into their mouth or swallowed it; and closing obstinately the larynx against the introduction of air loaded with ether into the lungs, favoured, themselves, the production of asphyxia.

Hence it might be foreseen, that, in imprudent hands, accidents would not fail to take place, and soon the medical journals registered cases in which ethereal inhalation had been instrumental in causing death.

An extremely remarkable fact then occurred, well calculated to prove how surgeons, emboldened by daily experience, appreciated the deaths attributed to the anæsthetic agent. Chloroform was without any comparison more powerful; this circumstance precisely insured its success. Thus, at the very time when some timorous imaginations, too readily alarmed, represented ether as a poison, and almost proposed its total rejection, the majority of the profession, adopting chloroform, expressed on the contrary an opinion, that ether, not being sufficiently active, should give way to some more powerful agent.

We should not, of course, attribute to this fact an undue degree of importance, and an error, even though universal, still remains an error. It is, however, right to observe that in the present instance we have not to do with one of those rarely employed agents, or one of those equivocal medicines, the slow action of which allows a doubt as to its reality. Chloroform is daily employed in private and in hospital practice; whether a remedy or a poison, its action is manifest in a few seconds—at most in a few minutes, and when, having used it thousands of times, surgeons do not scruple still to have recourse to it, we must acknowledge that circumstance to be an important warning not to adopt lightly the few isolated cases brought into opposition with thousands of contrary observations, but to examine with rigorous severity these exceptional cases, in order to ascribe to them their real value—their proper signification.

Thus, for instance, before we ascribe to chloroform a fatal issue to which it may have been foreign, is it not fair to inquire if the subject was not under the influence of some other acknowledged cause of death? For, in such instances, the inhalation of chloroform may have been only a coincidence, and if even it was admitted that the anæsthetic vapours contributed to bring about the cessation of life, they should still not be accused,—but a counter-indication to their exhibition should be established.

In the more difficult instances of sudden death during inhalation of chloroform, and without any other appreciable cause, it is in our opinion proper to compare the phenomena of agony,—and the anatomical alterations,—to those which experiments have demonstrated to exist in animals killed by inhalation, and then to endeavour to discriminate between the positive and incontrovertible effects of the poison, and what may be referred to the mode of its exhibition.

Let us first of all inquire, how death occurs in animals from inhalation of chloroform.

Scarcely had Dr. Simpson's success been reported in this country, when the influence of chloroform on animals was studied by ingenious and able experimentators: few inquired into the anatomical alterations produced. The physiological action was chiefly kept in view, and particularly the action upon the blood. In this respect two very different opinions were brought forward. M. Amussat maintained that chloroform, as well as ether, darkened the colour of arterial blood; the majority of physiologists came to a contrary conclusion; and after the repeated researches of Gruby, Girardin, Verrier, &c., and those of M. Renaud on ether, it appears to us to be proved that the change of the arterial blood from scarlet to black is due to the mode of administration employed; whenever the anæsthetic vapours have been mixed with a sufficient amount of air, not only the red blood did not become darker, but the venous blood became brighter than usual.

M. Gruby was the first who gave some details on the *post-mortem* examination of animals. He stated that after death the texture of the lungs remained of a bright rose-colour, although their large veins as well as the cava,—cerebral, mesenteric, and renal veins,—the tissue of the liver, of the kidneys and the cavities of the heart, were distended by black blood.

Thus, no marks of asphyxia remained, and M. Gruby's operations had been conducted in such a manner as to permit the animals to inhale the chloroform abundantly, mingled with atmospheric air.

M. Sidillot, on the contrary, found that in dogs killed by inhalation, the lungs and brain were in a state of congestion. Now, in M. Sidillot's experiments, air did not freely mingle with the vapours of chloroform, a circumstance which we deem sufficient to explain the difference in the results. . . . . In the experiments made by the Commission appointed by the Edinburgh Med.-Chirurgical Society, the blood was constantly found coagulated in the right cavities of the heart, and in some of the victims, asphyxia was proved to have taken place by the congested state of the lungs, whilst in others the lungs remained healthy. Whatever may have been the causes of these differences, these experiments at least show, that death from anæsthetic inhalations is not necessarily accompanied by asphyxia; and, that if I may so express myself, asphyxia is a superadded phenomenon. Ether, although less energetic, seems to act in the same manner as chloroform; both agents have been experimented upon by M. Amussat, and, with both, he found that, from the first inspiration, asphyxia was announced by the change in the colour of the arterial blood, a remark accounted for by his using for the purpose of inhalation a caoutchouc bottle, which embraces tightly the muzzle of the dogs; M. Longet and M. Sandras employed a less dangerous apparatus. The former with ether, the latter with chloroform, have proved that absolute insensibility may be obtained without any modification of the arterial blood. The resistance of the lung seems to diminish with general sensibility; and the quantity of air sufficient for the continuation of hæmatosis at the beginning of the operation is no longer so towards its termination. A curious experiment of M. Longet, appears to give to this assertion a full demonstration: he succeeded in prolonging, as far as three-quarters of an hour, and even longer, the complete unconsciousness of animals, without asphyxia, and without peril to life, by admitting gradually a larger amount of air into the apparatus; and with more perfect instruments, in which respiration is freely performed, air being abundantly mixed with the vapours, M. Renaud has, in dogs, produced death without any asphyxia whatever,—merely by anæsthetic intoxication.

In animals therefore, inspirations of chloroform can, when continued too long, occasion death, even when every precaution is adopted for the purpose of allowing free access of air to the lungs; but in such cases death is not sudden: a pigeon required three minutes and a half, a rabbit more than five minutes, a little dog over nine minutes. In the experiments of M. Renaud, a dog of ordinary size resisted three-quarters of an hour.

If, on the contrary, the entrance of air is not sufficiently free, one minute and a half is enough to cause death in dogs; and even when a certain amount of air is at first admitted into the inspirator, if that quantity be not increased in proportion as the experiment progresses, the animals die of asphyxia, although their death is slower than in the first instance.

Let us now examine how far the cases of death from inhalation, observed in the human subject, can be compared with these experiments.

M. Sidillot was the first who reported cases in which death might be referred to the inhalation of chloroform. In the four cases which he published, a fatal termination occurred on the tenth, eleventh, and twenty-eighth day after the exhibition of the anæsthetic agent. All these patients were under the influence of dangerous affections; and two of them M. Sidillot acknowledges to have suffered from incurable disease: how, then, could chloroform be accused of having brought on the fatal results which ensued? The English journals, however, soon published more conclusive cases.

The first was that of Hannah Greener (see *Medical Times*, Feb. 18). Death occurred within one minute after the cessation of inhalation, and was ascribed by Dr. Meggison and Sir John Fife to pulmonary congestion,—by Dr. Simpson, on the contrary, to the means employed for the restoration of animation.

Whilst the debate on this unfortunate event was continuing with a considerable degree of vivacity, another case of death occurred, which placed powerful arms in the hands of the adversaries of chloroform.

[To be continued.]

NATURE AND TREATMENT OF YAWS. BY DR. PAULET.

(Archives Gén. et Méd., Sept. and Oct. 1848.)

The disease called yaws—*gattoo*, *pian*, *bobas*, or *frambœsia*—is a cutaneous disease, supposed to have originated in Western Africa, and frequent in America, the East Indies, and Australia. This contagious and hereditary disease is constituted by a tubercular eruption of a bright yellow colour, granular, like a raspberry. It seldom occurs twice in the same subject; and, when abandoned to nature, goes through its periods of invasion, eruption, and suppuration, ending in extensive ulcerations, which frequently bring on marasmus and death. The disease is transmitted by a virus, which, by its contact with the skin or mucous membrane,—whether in a state of erosion or of integrity,—becomes absorbed into the system, and, after an incubation, varying in length from twelve days to nine weeks, betrays its presence by a special eruption of a dead white or yellow colour. These maculæ, of the size of a small pea, may occupy all parts of the body, and gradually increase in size until they have acquired that of a raspberry. The tumors soon ulcerate, secreting a viscid matter which forms a yellowish crust. The latest symptoms consist in tumors of the size of a cherry, which have a tendency to ulceration.

The treatment which Dr. Paulet recommends consists in attention to cleanliness, good and nutritious diet, the exhibition of sudorifics, and cauterization of the ulcers with nitrate of mercury. During the first week the liquor ammoniæ acetatis should be exhibited, every second day, in doses of 3j.; and saline purgatives should also be frequently prescribed.

APPLICATION OF ANÆSTHETIC AGENTS TO WOUNDS.

M. T. Roux, surgeon of the Navy, has endeavoured to ascertain how far the topical application of ether, chloroform, or aldehyde—either in a state of vapour, or in a fluid condition—to the surface of wounds, affected their local sensibility. When a wound is exposed to the vapours of chloroform, a sensation of heat is at first experienced, and a slight tumefaction is observed, which soon is replaced by complete insensibility of the part. These results are less marked when fluid chloroform is poured over the wound or sore. This application does not interfere with the regular progress of cicatrization; and its effects are more evident in recent injuries than in ancient ulcerations.—D. M'Carthy, M.D., Physician to the British Embassy.

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THE MEDICAL TIMES.

SATURDAY, NOVEMBER 18, 1848.

CHOLERA—TYPHUS FEVER.—SANITARY REFORM.

When the English people first mooted the great question of a National Sanitary Reform; when they proposed looking into the actual social condition of all classes,—for it really amounts to this,—expelling from the land all nuisances proved to be deleterious to the health of the community; draining and sewering the broad Kingdom of England; and securing to every one a dwelling befitting a civilised man of the year 1848, and not a filthy, brutal, demoralised white barbarian of the Middle Ages; we conscientiously believe that the people of England generally had not the slightest idea of the magnitude and extent of the evil they proposed touching. So long had they reposed in that pleasant self-satisfaction, engendered partly by a natural,—we had almost said a national overweening self-confidence,—partly by a want of practical education, partly and mainly, no doubt, by a sensitiveness proverbial and national as to the sacredness of rights of property and rights of privilege, that when it was hinted that our villages, our manufacturing towns, nay, London itself, that perfection of all cities,—the healthiest, cleanest, wealthiest, most civilised of all the capitals of civilised nations,—required sanitary reform, the affair was scouted as an impudent delusion, got up by foreigners and disloyal persons, by philanthropic and political jobbers, and unworthy the smallest notice.

In this light, the great question of sanitary reform is still regarded by many, by physicians and surgeons of the highest eminence—by practical men of all classes—clear-headed men, who, though quite alive to the necessity that exists for an elevation of the poorer classes from their present distressful and seemingly hopeless position, yet deny stoutly the main conclusions of all that portion of the evidence submitted to Parliament, which, if admitted as correct, warranted a belief in the adequacy of filth and foul air to engender the wide-spreading pestilences of fever and dysentery, influenza and cholera. They readily admit that

nuisances of an extraordinary character abound; that they ought to be abated, and, if possible, suppressed; that severe injury is caused to the general health and comfort of the community by a shameful neglect of sanitary regulations on the part of corporate bodies ruling over innumerable towns and cities; that a proper system of drainage and sewerage has not been adopted—has not been recommended—has not even yet, despite of science or its professors, practical and theoretical, been discovered; that, from a want of knowledge, or, more probably, from a selfish disregard, on the part of builders and proprietors, dwelling-houses are being daily constructed unfit for the abode of civilized men; and, finally, that, in consequence of these accumulated evils, the standard of health of the community is constantly more or less depressed—infant life greatly damaged; whilst the chance of recovery from a serious accident or disease is at all times precarious, often impossible. But they deny the major propositions laid down by the Government Commissioners as to the causes of epidemics, and, as a consequence, view in an unfavourable light the proposed remedies; adopting language so often used both in and out of Parliament, they denounce the entire movement as a mere job, whose object, if not political, yet obviously tends to the aggrandizement of a section already sufficiently influential, namely, "the Department of the Woods and Forests."

It is not our intention to discuss this point at present; ample opportunities will be afforded us when it is attempted to put the Bill, with its 150 clauses, in operation; the smaller emendatory Bill itself will immediately try the question. Our object at present is rather to afford a few suggestive hints which may induce, we hope, some of our medical subscribers to place before the public the results of a wider experience.

If the true causes of the origin of fever and influenza, cholera and dysentery, be still unknown,—as we conscientiously believe,—and although it were proved that cesspools and dead wells, unflushed sewers and neglected drains, streams contaminated at their sources, and wells poisoned by their proximity to cesspools and lay-stalls, have little or no influence in getting up a fever or giving wings to the mysterious Eastern cholera, the community generally,—that is, the sufferers themselves,—are quite sensible that there is something wrong in the social condition of England and of Britain,—a something which requires a remedy,—a moral disease caused by and reacting on the physical condition of the commonwealth. Hence their readiness to listen to discourses on the causes assigned for a condition of society rendering the boasted superiority of the civilised over the uncivilised state at best problematical, in as far, at least, as individual happiness is concerned; hence their readiness to catch at any remedy proposed for the alleviation, if not removal, of so lamentable and degraded a state.

Although our main object as journalists must always be, in matters of this sort, the submitting to our medical subscribers those facts and circumstances which mainly affect them; the pointing out to them, in as far as our information enables us to do, the efforts made to deprive the professors of the medical and surgical art of their due share in the responsibility and honour, and profit, in the directing of all public hygienic measures; of showing them how, by the unhappy constitution of their medical corporations and societies, they had been betrayed and pushed aside by a jobbing governmental clique; how the persons to whom they confided their interests had sold them to Poor-law guardians, overseers, commissioners of health of towns, town-council corporations, and others: still it is impossible not to be alive to the fact, that, *nolens volens*, medical men had either, generally speaking, never viewed the great question of public health from an elevated point, or, having done so, had not been listened to by the local authorities of the kingdom.

If we adopt views like these, it implies that medical men have lost that position in society which common sense points out to be theirs; that they have been pushed from their seats by bricklayers and carpenters, surveyors, members of Parliament, bakers, grocers, clergymen; in fact, by any one choosing to put himself forward, but especially by the surveyor, and the bricklayer, and the builder, and the wealthy vestryman, not unfrequently drawing large rents from the dilapidated and filthy hovels they are pleased to term dwellings, and having a direct interest in lodging the general community at as little expense to him as possible; but, above all, as we shall show hereafter, the builder; to him we owe the construction of such dwellings as we shall presently describe.

But if it be that the medical man had failed to recognize the growing evils—the constantly increasing deterioration of the dwellings of the poor—the neglect of suitable arrangements even in houses paying a comparatively large rent—and lastly, the influence of these accumulated sources of malaria and of disease upon the general health, then this must have arisen from his own imperfect education, leading to narrow, grasping, selfish views, unbecoming the professor of a liberal art.

Now, whether it be that one or both these causes have operated in displacing the medical man from his position and due influence, we are not at present disposed to state; they merit a careful future consideration. Our object at present is to consider some preliminary points in this great inquiry, proceeding from details to generalizations, from facts to theories, without which facts in themselves are barren and unproductive.

The panic excited by the approach of cholera may be turned to the very best account. Individuals will become more careful in the articles of food and clothing, and in their general course of life; corporate bodies will be called on to bestir themselves; nuisances removed per force, as it were, by the force of public opinion, and in despite of the strict letter of the law; social order will, no doubt, greatly benefit; and without compromising their professional opinions, which ought always to be offered with great caution, physicians and surgeons may aid in this general righting of society.

Much sound advice may be offered the public. The Asiatic cholera has nothing to do either with cold or heat. It spreads from the warmest parts of the earth to the coldest. It has not, we believe, crossed the Equator as yet; our South African and Australian colonies there are still untouched. But in cold and wet weather it may be advisable to wear a broad flannel roller nicely adjusted around the trunk, as high as the chest; this will, we think, be found superior to most other bandages; is of easy application, and within the reach of all.

In the matter of diet, we believe there exist many unfounded prejudices. Fish and vegetables have been all but proscribed; for this we cannot discover the slightest grounds; food, sound in quality, whether vegetable or animal, must be perfectly safe. It is the abuse which is dangerous, and not the use; it is the quality and mode of preparation which should be looked to, and not the kind. Persons affected with, or subject to diarrhœa or looseness of the bowels, ought, no doubt, to avoid soups and vegetables, confining themselves to a diet of roasted animal food and bread, in moderate quantities; but for all others, fish and vegetables are perfectly safe. Of drinks, the safest and best by far is a little old port wine. But Lisbon and Spanish wines are also excellent. It were a humane, and even prudent measure for the public, to demand the removal of all duties, even nominal, on Spanish and Portuguese wines. There are wines sold as the growth of Teneriffe and Oratavia, of the value of which against the diarrhœa of infants we have had some experience. That brandy agrees with many constitutions may be admitted, but spirituous liquors should be avoided as much as possible.

When cholera makes its appearance, it would be advisable that the rest of the family remove from the house in which it appears; there cannot be a question as to the propriety of this measure. Cholera is not contagious; this, therefore, is not the ground on which it is recommended that the rest of the family should not continue to eat and sleep in a building where cholera seemingly originated.

But on the heels of this most alarming plague, as if to make good the old saying, that misfortunes seldom come singly, typhus fever, a sort of domestic enemy, appears with the first cold weather, likely to spread, as frost and snows lay bare and desolate the fields. A well-meaning and most humane gentleman, Mr. Osborne, assisted by some others, has lately brought this matter prominently before the public. The retired village of Hilton starts all at once into notice; it is denounced as a plague-spot in happy England. Sheerness follows. Yarmouth had already been before the public. Of Manchester, and Leeds, and Glasgow, and Edinburgh, and London itself, everything had been said which could be said against their sanitary condition. Of Bethnal-green enough has been said and written, to render the exhibition of the yellow flag there quite unnecessary; and now it is proposed to place Sheerness in the same schedule with Bethnal-green and St. Giles, Hilton, and a thousand other towns and villages, whose condition would, on a careful examination, prove their claim to a place in the same unhappy schedule.

In a preceding number, our readers will find a graphic description of Sheerness, by "An Eye-witness." An amiable physician, long resident in the town, comes forward and denies the correctness of those statements, which tend to give to Sheerness an unenviable character. Both may be right and both wrong. It is probable that there are many streets in Sheerness which are not in the condition they should be in; that nuisances have gained head; that the residents, by long habit, have ceased to notice or to observe them; that to the owners of the lay-stalls, these abominable accumulations of filth are anything but eye-sores,—sources of profit, rather, calculated to fertilise the adjoining fields. Thus, very different views may be taken of the same question. In the mean time, we lean to the opinion, that, were it only for the sake of decency, the heaps of refuse so described had better be removed from the streets and lanes of Sheerness; dead wells filled up, and done away with; cesspools regulated and Deodorized; drains cleared out, and *large sewers* built up, and finally abolished as public nuisances. Let the people of Sheerness look to themselves, and not at all to Government Boards; they have the remedy in their own hands: new brooms, and plenty of

pure water, will restore to Sheerness its lost character; secure a return of visiters of rank, and greatly benefit the agriculturist, to whose care the liquid and solid refuse should be consigned, instead of to the bosom of Old Father Thames, already reduced to so sad a condition by the filth of London.

INGRATITUDE OF THE GOVERNMENT TO THE MEDICAL PROFESSION.—DOCK-YARD SURGEONS DOCKED OF THEIR SALARIES.

The Government appears determined to use powerful efforts to exclude talent from the Royal Navy, and to insult those medical officers who are now connected with it. It is not enough that the assistant surgeons be consigned to the gun-room—to the noisy companionship of beardless youths, just escaped from the trammels of school, but the surgeons are to suffer, if not in their status, at least in their incomes. Retrenchment is the order of the day; but the salaries of high officials are *tabooed*, and no sacrilegious hand must touch them. The incomes of the Dock-yard clerks, and of the hard-worked surgeons, are to be docked, to save the young sprigs of nobility, or the favourites of high official personages, from the painful necessity of lessening their establishments.

The experiment has been tried upon Union surgeons, with considerable success, of exacting the greatest amount of professional labour for the smallest sum; and now the physicians and surgeons of the navy, who have passed their whole lives in the service of their country, are to be rewarded with stipends for their duties in a *dock-yard*, which do not amount to more than the salaries of druggists' assistants.

We call upon the Surgeons of England to testify, in the strongest manner, their disapprobation of this conduct of the Government. It is another insult offered to them through the medical officers of the service. Their cause is ours, and, in leaving them to their fate, we only render more certain our own degradation. The whole history of the medical profession, in the army and navy, shows most potently the ingratitude of the ruling powers to a most meritorious class of officers. While non-medical officers are decked with the insignia of honour, a ribbon or a medal is considered too great a gift for the men who mitigate the horrors of the battle-field and contribute most materially to the strength of the army and marine. No one has deserved more of his country than the late President of the College of Surgeons of England, who has this day published in our columns some important facts on military surgery; yet he remains without any other civil title save that which he possessed when he first entered the service. Other countries appear to set a high value upon medical science. England, the first nation in the world, is the last to give all due encouragement to the men whose vocation is pre-eminently benevolent. In Mr. Guthrie's valuable Paper, published to-day, in reference to the wounded of the 29th Regiment, in the late war with the Sikhs, some startling facts come out in reference to the *liberality* of the Government to medical officers in the field of battle. Their Herculean labours had to be performed under the most disadvantageous circumstances, and it reflects high credit upon the surgeons, that the mortality of the wounded was so small. Little preparation was made by those in command to meet the casualties of a sanguinary battle, so that wounded soldiers lay upon the field, under a burning Indian sun, for nearly two days, without the possibility of the surgeons administering to their wants. This neglect of the medical department of the army augments fearfully human suffering, and subsequently entails upon the country a heavy expense. We shall return to this subject.

INCREASED MORTALITY FROM SMALL-POX—NEGLECT OF VACCINATION.

Fifty years have scarcely elapsed since Jenner ascertained that vaccine matter, introduced through the skin into the human system, is capable of modifying or preventing the small-pox. It was one of those discoveries of which science may justly be proud, as the benefits are confined to no age, no nation, no class, and no sex. Jenner's successes and sorrows stand recorded in the pages of the world's history, and tell us that, whatever progress has been made in civilisation, bigotry and prejudice have now as strong a hold upon the human mind as in the days when Greece proscribed her most devoted patriots, and Rome rejected the truths of a Divine revelation.

The announcement of Jenner's discovery took men by surprise. It burst like a flood of light upon the world, and philosophers were dazzled by its brilliance, and confounded by the obscurity from which it rose. Great discoveries have always exposed the discoverers to imminent perils; because men hate those who become their superiors, and resist innovations which do violence to old-established systems.

The first vaccinator was an obscure apothecary of an insignificant village. To a University education he was stranger; and, in this age of titles, he could boast of none of those affixes which may either indicate academical merit or personal vanity. In his obscurity he prosecuted his researches, which were afterwards to astonish the world and bless mankind; and, his experiments perfected, he made known the result, and received, as a reward, bitter persecution. Such, at first, is the fate of really great men, though afterwards they may receive the grateful acknowledgments of science and mankind.

Jenner lived to see vaccination adopted by almost every nation, and each pronounced its panegyric; since then, the multiplied experience of the profession has more clearly demonstrated the truth of his great proposition. In a science which some have said contains hardly any settled principles, here is a mode of checking a disease almost to a certainty; and yet, after the lapse of half a century, in the face of all the benefits it has conferred upon the people, a large amount of prejudice exists against it. Small-pox, in the present day, ought to be a malady of rare occurrence; but we are startled with announcements in the weekly returns of the Registrar-General, that it is steadily on the increase. The proof is afforded in the deaths which are periodically recorded, and a glance at the returns shows that the fatal cases are principally confined to those who are unvaccinated.

It might have been thought, that the systematic exhibition of facts to the world would have been sufficient to have annihilated prejudice; yet there are persons upon whom evidence appears to have no weight, and who seem determined not to profit by the truth. Every one knows the multiplied evils which the small-pox brings on the human family. In numerous instances it inflicts calamities which terminate only with life—it disfigures the finest countenance, and exposes the sufferer to a premature death. Its antidote is the most simple and certain with which we are acquainted in counteracting any disease. Why, then, do large numbers of the people seek to perpetuate this frightful scourge, by voluntarily exposing themselves to its contageous influence, or by inoculation? This is a question especially interesting to the profession, and which we will endeavour to answer.

The vulgar generally entertain the opinion, that vaccination frequently conveys into the system the germs of other diseases which are subsequently developed to the injury of the constitution. This opinion is as old as the time of Jenner, and it is not improbable that he innocently gave rise to it, by asserting that the vaccine matter was similar to the fluid secreted from the heel of a greasy horse. The theory now appears truly absurd; but we must make some allowance for the errors even of great men. Jenner afterwards discovered his mistake, and renounced his theory; but the prejudice which it produced exists at the present time.

There are many people who entertain the idea, that cow-pox is no preventive of the small-pox; and hence they refuse to allow vaccination in their families. The profession, perhaps, has been a little at fault in promoting this erroneous opinion. The early advocates of vaccination ascribed to it virtues which it did not possess; and hence the confidence of the public became weakened, when it was seen that the more fatal disease might occur after the milder one had been introduced into the system. The opinion, that vaccination was an infallible preventive of small-pox, exerted an injurious influence also on the members of the profession, for it produced a laxity of practice which has been productive of the most serious results. Matter was employed without its goodness being ascertained—the operation was performed carelessly—and the patient's health neglected. In after years persons were seized with small-pox in families who were considered safe from its attacks; and, from the carelessness of medical men, the prejudices of the people were increased.

A Correspondent, whose letter we this day publish, has suggested another reason for the neglect of vaccination, and that is, the manner in which the provisions of the Vaccination Act are carried out. This opinion requires the serious consideration of the profession, inasmuch as it carries with it a considerable degree of plausibility. The Government has manifested a concern for the extension of the cow-pox, and has provided that the poor shall be vaccinated at a cheap rate. Our correspondent complains, that for this purpose a union medical officer is appointed as general vaccinator in a district where several private medical practitioners reside. The contractor "is empowered and instructed not only to intrude himself on the patients of others, but to demand a fee for his services—a fee from a fund which the very medical men contribute to, who are the only persons, as regards their own patients, possessing their confidence. Hence it is that offers of services, coming as they frequently do from strangers, are unwillingly complied with, or wholly rejected." To meet this evil, it is suggested that every legally qualified practitioner should become vaccinators under the Act. The confidence of the poor would thus in a great measure be restored, and the members of the profession would feel a greater stimulus to extend the benefits of vaccination. It is our duty, by every means in our power, to lessen public prejudice on so important a subject; and if justice to each other is calculated to promote this, it ought not to be delayed. We hope that the suggestion will not be without its influence on the profession.

REVIEWS.

The Periodoscope, with its Application to Obstetric Calculations, and the Periodicities of the Sex. By W. Tyler Smith, M.B., &c. London: J. Churchill. Pp. 47.

The object of the Author in publishing the Essay before us, is to make known to the profession an Obstetric Calendar, or table, on which the principal events of pregnancy are noted, and by which the time of parturition of any given pregnancy may be ascertained. The basis upon which the Calendar is constructed is the menstrual period, the Author adopting the now extensively received opinion, that, at the catamenial crisis, females are not only peculiarly apt for impregnation, but that these epochs exert an influence on the grand uterus, and determine the time when its contents shall be expelled.

It is important for obstetricians to bear this fact in mind, when circumstances render it necessary to employ art to induce premature labour; for we have no doubt, from cases which have come under our observation, that this can be more easily accomplished "at the periodic dates" than at other times. The Author supposes also, that the hæmorrhage in placenta prævia generally commences at a menstrual crisis, but that afterwards it is liable to return at intervals, until the uterus has been emptied of its contents.

The following is Dr. Smith's description of the Periodoscope:—

The small, moveable disc of the Periodoscope contains the 52 weeks of the year, and it is also divided into thirteen lunar months, or ovarian periods. The circle beyond this contains a fixed scale of the catamenial periods; and the outer segment of a larger circle contains a scale of 280 days, the normal duration of pregnancy, divided into the ten catamenial cycles of gestation. I mark five days upon the calendar as being the ordinary duration of the catamenia; but, as I shall have to repeat, in some women it is greater, in others less, than this. Reckoning the catamenial period preceding conception, and the lochial period of parturition inclusive, I have figured on the instrument 11 catamenial dates, so that the outer scale really represents 285 days. The best mode of computing the time of parturition I believe to be this: we should find the date of the commencement of the last catamenia, upon which conception would, in ordinary cases, ensue a few days after the cessation of the catamenial flow, and we may then expect that the ovarian irritation, or the lochial flow, which determines the occurrence of natural parturition, will commence with the sanguineo-mucous secretion, or with the uniform contraction of the uterus, at the commencement of the eleventh catamenial date; and that labour will become fully developed on some one of the days of this ovarian period, or of the days in which the ovule would have descended the fallopian tubes, supposing there had been no conception, and the catamenial discharge and ovulation had proceeded regularly. Thus, the scale of calendar months being moveable, and the scale of lunar months or ovarian periods being fixed, all that need be done is to turn the moveable circle round, so as to make the arrow at the word "conception" point to the date at which the last catamenia commenced, when the second arrow, at the other end of the scale, will point to the exact date when the commencement of "Parturition" may be expected: The lunar or ovarian scale of pregnancy will also mark accurately the date of each of the periodic excitements which occur, with more or less distinctness, during pregnancy; so that we may at once, without the trouble of a moment's calculation, read off for the use of patients the probable time of parturition, and the dates when all physical irritation and causes of abortion are to be specially avoided. Of course, these remarks apply to strictly natural cases of utero-gestation occurring in women whose catamenia appear every 28 days. The only possible source of error, with an exact instrument, is, that 52 weeks only make 364 days instead of 365, and that leap-year always contains 366 days: but this is allowed for with the greatest ease, if it should happen that the pregnancy includes December and January, or February in leap-year. Otherwise, there is no mistake in the calculation of a single day. Any variation in the length of pregnancy from this standard, is either before or after the proper time.

Although the present year (1848) is leap-year, I have allowed only twenty-eight days for February, since it will be much easier to add one day for February every fourth year, than to subtract one day from this month in the three intervening years. In December, there are only 30 days represented on the scale of calendar months, instead of 31; this was necessary, in order to make the calendar scale correspond exactly with the scales of the catamenia and of gestation. The irregularity of this one day beyond 52 weeks, if included, would have vitiated the whole instrument. It will be necessary, therefore, in all calculations with the Periodoscope, to allow one extra day for February every leap-year; and in all years in which gestation includes the end of December and the beginning of January, to allow one day in the lunar scale, in order to complete the 365 days of the solar year. That is to say, whenever the whole of December is included in a given calculation, the probable time of expected parturition will be one day later than the day of the month indicated on the Periodoscope; in leap-year, whenever February is included, it will also be one day later; and when February and December are both included in a pregnancy occurring in leap-year, the date of expected delivery will be two days later, just as in the ordinary loss of one day in each year, and of two days in each leap-year, when reckoning by the common almanack.

The instrument is an ingenious contrivance.

On Femoral Rupture; its Anatomy, Pathology, and Surgery; with a new mode of operating applicable to Cases of Strangulated Herniæ generally. With Plates. John Gay, Surgeon to the Royal Free Hospital, &c. London: Highley. 1848.

We regret the press of matter, and of engagements, which have so long delayed our noticing this admirable work of Mr. Gay. Whether we regard the mere getting up of the work, that is, the paper, plates, and printing; or the more important contents, we may venture safely to affirm, even without having examined the volume with the care it merits, that few, if any, monographs superior to this by Mr. Gay, have for some years issued from the London or from any other press.

The work is dedicated to Mr. Coulson, the Author's friend. In a brief but well-written Preface, the Author narrates the circumstances which led him on to engage in this work. "By the study (he observes) of the anatomical relations of the parts concerned in the production of femoral rupture, to relieve the mass, when strangulated, by a new method of operating, which I believe to be more simple and safer than any which has hitherto been practised or described; the principle of which is capable of being applied to the relief, not only of femoral, but to all outward forms of strangulated herniæ."

We have hinted already at the very brief glance we have been able to bestow on this very beautiful and most important work; in a subsequent early notice, we hope to make ample amends for this. The drawings from the life have been exquisitely lithographed; the drawings are by Mr. Bagg, whose great artistic power requires no commendation from us.

Sure we are that this work will not disappoint its readers. To Mr. Gay it does great honour. No source of information seems to have been omitted or neglected.

The principle of the new operation, it is stated, consists in reaching the seat of stricture, when external to the sac, by a small incision made through healthy structures, and in such a situation that the hernial mass shall not be injured or disturbed thereby.

Moreover, Mr. Gay's work contains a correct description of the parts concerned in femoral rupture, drawn up from a careful examination of above seventy subjects; the various modes of operating hitherto proposed by surgeons; and an inquiry into the causes of death consequent upon hernial operations.

Some thirty years ago we heard Mr. Boyer observe, in a public clinical discourse, that death after an operation for strangulated hernia was of rare occurrence in the French hospitals. In the English ones, we have reason to believe that at that period the mortality was high. The cause of this difference was sought for in the delay which generally occurred in the English hospitals,—a delay which, we believe, has in later times been done away with, in as far at least as circumstances would admit of. Statistics of M. Malgaigne went far, however, to upset the prevalent idea of the low mortality after such operations in French hospitals; but we distrust the statistics of M. Malgaigne, and beg to remind him that figures are not always facts. But these important points, with many others, have been done justice to by Mr. Gay, whose work we shall have the pleasure of introducing to the favourable attention of our readers in a more extended notice.

THE POOR-LAW MEDICAL STAFF, AND THE BOARD OF HEALTH.

(To the Editor of the Medical Times.)

Sir,—It pleased me to see, in your last Number, a letter noticing recent regulations of the Board of Health, which approved, too, of the editorial remarks you so judiciously made, in your previous week's Journal, on the subject, in relation to "Union Surgeons." It is a matter of regret, however, that any should address you under a fictitious signature. The righteousness of the cause of the Poor-law medical officers should embolden all who write thereon to declare their opinions with manly open-heartedness, and a straightforward name and address. However good an anonymous letter may be, the moral weight of the personal respectability of the writer is *lost*,—nay, an indirect injury is sometimes inflicted on an espoused cause through the visit of "the fearful disciple *by night*." "Alpha" will kindly pardon this passing structure, and assist us further by his pen and zeal. If, perhaps, he dropped a little of the sore feeling toward the Guardians, which personal neglect, or even injury, may very justly have awoke, but which prudence and policy should alike keep out of print, he might not in future object to attach his signature to his observations—"Hard names break no bones;" yet they not only check *conciliation*, but too often engender hatred, or active antagonism. It may be the more pardonable for me to have dwelt on this point, and the character of anonymous letters, as now and then such have been received by the Committee, which would have rendered good service, had they been more temperate and attested.

Reverting, however, to the immediate object of my letter to you, Sir, it should be remarked, that the new position of the Poor-Law Medical staff, in relation to the Board of Health, imperatively demands the notice of the profession at large, of the public, and, through it, redress from the Legislature.

Two modes offer channels for successful exertions:

1st. An extended agitation among the members of the profession, having for its object the sympathy and co-operation of the public in behalf of the union surgeons, and of the sick-poor.

2nd. A steady pressure through this out-of-doors agitation on the different Members of Parliament, that successful motions may be made in the House of Commons in the coming session, to amend the administration of Poor-law medical relief, after the manner of the suggestions appended to the memorial recently presented by the Committee of the Convention, by the "College and the Hall" to Sir George Grey.

To assist in accomplishing this end, it is very important that medical men through the provinces be induced to press the subject on the notice of their county and borough Members, so that prejudice being removed, and knowledge gained on the matter, the House may be, at least, not indifferent to the contemplated changes.

In furtherance of these great objects; great, though only means to an end, it has appeared to me very desirable to bring about a second General Meeting of the Convention, that, through it, their Committee, re-assured by strong "resolutions," and re-animated by the encouragement of co-operative exertions, may widen their scope of action, and spread their influence, as from a centre, to all the profession, and to society at large.

It will be noticed, that I have not dwelt at all on the power of the Poor-law Board, as a means to amend the position of the medical officers whom they control. To say truth, I have nearly given up all idea of receiving any valid redress from this quarter, except under pressure from some other body or party. Lord Melbourne declared *that* to be the worst of all possible Governments, "in which the parties armed with reputed authority were too weak to carry out the mea-

sures they believed to be right." Do not certain steps recently taken, and the "*ultimatum*" on the Upton-on-Severn Union, very much bear on this point, saying, with a sort of silken apology,—

"*Video meliora proboque;*
Deteriora sequor."

In conclusion, let me thank our friend "Alpha" for even his anonymous letter. It is an effort in the right direction; it is better far than the "*Laissez-faire*" system. Let me also express a hope, that the Profession, and the Poor-law Medical Officers more particularly, may show a willingness to incur the cost and trouble of shortly assembling in "Convention" from all parts of the Kingdom.

Depend upon it, that judicious and strong resolutions thus passed, and views enunciated with the additional weight of a year's experience, coming, as it were, "*incude novo*," will awaken fresh attention, and rekindle or fan the flame of that moral agitation, without which no wide, beneficial change, in these modern times, can be accomplished.

I have the honour to remain, Sir,
Your very obedient servant,
CHARLES F. J. LORD.

Hampstead, Nov. 14, 1848.

[To the Editor of the Medical Times.]

SIR,—Previously to the insertion of your Leading Article last week, relative to the position of Poor-law medical officers, under the circular emanating officially from the Board of Health, and printed expressly for their use, it struck me that those directions were a fresh imposition upon us—an addition to our duties, already disproportionate to the payment we receive.

Backed by your talented Leader on this subject, I addressed a letter to the Board of Health, requesting to know from whom we are to receive remuneration, in case we carry out effectually (as we alone can) the eminently useful provisions of the recent Act of Parliament.

We are to look to the Poor-law Board for our remuneration—a Board set at defiance by the Board of Guardians at Upton—a Board which, in twelve months, have never received an impression, though the Committee of the Convention of Poor-law Medical Officers have knocked and hammered at it repeatedly. The General Board of Health turns us over to the Poor-law Board, the Poor-law Board to the Guardians, the Guardians to the Magistrates—and they, as no conviction results from our certificate of a nuisance, tell us, "We have no power to pay your fee, as the case is withdrawn by the parish officers, the nuisance having been removed, and the parties satisfied."

The sanitary movement has acquired a vigour unthought of; and, if Government strive hard now, it can be placed upon "a monument more durable than brass." All that is wanted is, to give additional powers to Union medical officers, additional pay, and to make them officers of health as well as disease.

I remain, Sir, your obedient Servant,
ALFRED EBSWORTH.

Bulwell, November 9th, 1848.

"The General Board of Health,
"Gwydyr House, Whitehall,
"7th November, 1848.

"SIR,—I am directed by the General Board of Health to acknowledge the receipt of your letter of the 4th instant, and in reply to state, that the question of the remuneration of Union medical officers rests entirely with the Poor-law Board, and the General Board of Health have no powers in relation to it.

"I am, Sir, your most obedient Servant,
"HENRY AUSTIN, Secretary.

"To Alfred Ebsworth, Esq.,
Bulwell, Notts."

TER-CHLORIDE OF CARBON.

[To the Editor of the Medical Times.]

SIR,—In your last week's Journal is a communication from Mr. Boyton, describing the effects of *terchloride of carbon* in doses of 8½ minims every quarter of an hour in cases of cholera. He strongly recommends the terchloride of carbon in preference to chloroform in such cases. The *Lancet* of July 15, 1848, contains a paper by Mr. Tuson, on the effects of terchloride of carbon, which he describes as "a clear, transparent *fluid*, smelling strongly of chlorine, as its name implies; it consists of three parts of chlorine and one part of carbon; the dose from one to four drops, in water, two or three times a day."

In the work of Berzelius, Vol. I., p. 131 of the Brussels edition, we find described,—

1. A *solid* substance, consisting of a combination of one atom of carbon with three atoms of chlorine. This is devoid of colour or taste. Its sp. g. is nearly twice that of water. It fuses at 320 deg., and boils at 356 deg. Fahr. It is insoluble in either cold or hot water, but soluble in alcohol, and still more so in ether. These solutions are not affected by nitrate of silver.

2. A fluid compound of equal volumes of chlorine. Its sp. g. is 1·5526. Although liquid, it is *insoluble* in water.

3. A combination of equal volumes of chlorine and carbon. It occurs as a sublimate. It, too, is also insoluble in water.

In some recent publications, the terms, chloric ether, chloroform, and terchloride of carbon have all been applied to the same liquid, which has a fruity odour, sp. g. 1·480, and which consists of two portions of carbon, one portion of hydrogen, and three portions of chlorine.

The formula of three atoms of chlorine and one atom of carbon being described by Berzelius to produce such a different product from that used by either Mr. Boyton or Mr. Tuson, I was induced to make some inquiries into the subject. As *one* result, I find that diluted chloroform (varying in strength very considerably) is, to a great extent, supplied for the terchloride of carbon. Now, as it is evident from the above quotations from Berzelius, that the agent used by Mr. Boyton and Mr. Tuson is not the terchloride of carbon, unless it be in solution, which solution may vary in strength; and as it is important to pharmaceutists to supply an article uniform in strength, from which so much benefit is to be expected, I venture to express a hope that one of those gentlemen will favour the profession, through the medium of your columns, with the formula of the preparation he has employed.

I beg to remain, Sir, your obedient servant,
WILLIAM HOOPER.

Pall-mall East, Nov. 8, 1848.

WORKING OF THE VACCINATION ACT.

(To the Editor of the Medical Times.)

SIR,—In your last number, containing a report of the public health during the last quarter, you say, "The deaths from small-pox have been many, notwithstanding the efforts made to promote vaccination. From some cause the prejudices against vaccination amongst the uneducated are great," &c.

I deem it to be not a difficult matter to point out a reason why a prejudice against general vaccination does so exist.

It is, I believe, simply because the working of the Vaccination Act is entrusted to a quorum of officials, who in their known disregard of justice to the medical profession, have so imperfectly carried out their trust, that the great national advantage, perhaps naturally enough expected to arise out of the Vaccination Act, has not been realized.

As things now are managed, a union medical officer is appointed as general vaccinator in a district, occupied, perhaps, by several medical men in private practice. This one contractor is, in his vaccinating capacity, empowered and instructed, not only to intrude himself upon the private patients of his neighbours,—but to demand a fee for his services,—a fee from a fund which is to some extent contributed to by the very medical men who, although not vaccinating contractors, are the only persons, as regards their own patients, possessing their confidence.

Hence it is that offers of services, coming as they now do, are often unwillingly complied with on the part of parents and others, vaccinated, from the very reasonable fact that the officer is a stranger to the patient, and still oftener perhaps from the same cause, are such offers wholly rejected.

The mode of procedure, then, I apprehend, which only would be just to the medical profession, as well as efficient to the nation is, that the Poor-law Commissioners, or some other authority, should appoint all legally-qualified medical practitioners of a certain standing, as vaccinators under the Act.

Then, in this all-important matter, would every person have the advantage of the advice and opinion of the only man in whom he can place confidence, while the surgeon who has made a practice by continued industry, would no longer fear that such private practice is subject to the intrusion of a stranger, under the sanction of what is called a national authority.

I am, Sir, your obedient servant,
WM. MOORMAN, Jun., Surgeon, &c.

Saint Columb, Cornwall, November 13, 1848.

THE RE-OPENING OF THE FACULTY OF MEDICINE OF PARIS.—Nov., 1848.

The re-opening of the Faculty and School of Medicine, which took place in the commencement of the present month, under the presidency of M. Bouillaud, must have been an affecting and touching scene to many. What strange events have not these young men seen since they met there on the same occasion in 1847! The students are described as being much fewer in number than on former occasions. So much the better, we should say, for France and for them. A greater—if not a more useful—career has opened up, no doubt, for many bold and turbulent spirits, unfitted by their nature for the exercise of a humane and peaceful employment.

The illustrious Orfila, the father and founder of toxicology, is no longer Dean of Faculty; M. Bouillaud supplies, apparently, his place. We shall be glad to learn that he approaches, in energy of character, genius and ability, his illustrious predecessor. Other changes, no doubt, have occurred, for even here politics have their influence. M. Bouillaud is a practical physician;—M. Orfila a man of science,—a man of inventive genius—an encourager of men of talent—a zealous and generous promoter of every project likely to benefit science and the Faculty.

The *Union Medicale*, from which we have this information, describes the scene as sufficiently imposing. For the bust of Ambrose Parè, now removed, that of Liberty has been substituted. M. Gauarrel delivered a discourse setting forth the merits of the illustrious Galvani. The discourse of the Dean, M. Bouillaud, was strongly political. A member of the *Risquons Tout* Club could scarcely have spoken more energetically. He called on France to arise in her might, and liberate Poland and Italy. He is the personal friend of M. Carnot, to whom he owes his appointment. This explains the whole affair.

From M. Bouillaud's discourse we learn, that during the Monarchy the *concours* had been abolished, and numerous smaller schools of medicine established throughout France, for political purposes. This is likely enough, and would, in this country, be called a legitimate and constitutional mode of diminishing the number of students in Paris.

The usual clap-traps about national glory, &c., were distributed pretty liberally throughout the Address, which was well received.

The position held by the medical men in France is not good; they seem never to have recovered from the effects of Molière's terrible satire—a satire they justly merited. Our medical countrymen, in Hogarth's time, were a fine subject for the satirist's pencil. Let us hope, that by a judicious and correct preliminary education, the future surgeons and physicians of France may efface at last all recollections of this sort, and take their place everywhere as gentlemen and scholars. It is right, no doubt, as M. Bouillaud remarks, that the education of the surgeon and of the physician should be eminently practical; the public have a right to demand this of him. But he owes to himself another duty and another education: the education of a gentleman and a scholar, without which he can neither hope nor expect to rank with the members of other liberal professions. Without this he is, in fact, but a mere tradesman; such the public must ever esteem a man whose mind has never risen above the exercise of a practical art.

GOSSIP OF THE WEEK.

MEDICAL PROTECTION SOCIETY.—A Meeting of members of the Medical Profession was held on Monday evening, November 6, at the London Tavern, Bishopsgate-street, to give the founder and friends of this Society an opportunity of explaining its claims upon the support of the profession. The meeting was called in consequence of a requisition, signed by upwards of forty medical men, resident in the Tower Hamlets, and was convened "to consider of the capabilities of the Office for carrying out its operations, and to render it such support as it might be found to merit." John Propert, Esq., of Cavendish-street, was in the chair. Various speeches were delivered on the occasion, and one of the speakers suggested, that he believed uneducated practitioners might be successfully prosecuted in the County Courts.

KING'S COLLEGE, LONDON.—The Council of this College have come to the resolution of immediately electing Professors of Military Science, with the view of commencing, with the ensuing year, a class for military education. The report, however, is without foundation, that communications have taken place between the Horse Guards and the College authorities on this subject.

APPOINTMENT.—Henry Mitchell, Esq., has been elected Assistant Surgeon to the Middlesex Hospital.

UNIVERSITY OF EDINBURGH.—INDUCTION OF PROFESSORS.—The Town-Council met on Thursday, at twelve o'clock, in the Patrons' room of the University, for the purpose of admitting Mr. Syme and Mr. Liston to the respective chairs of Clinical Surgery and of Hebrew. It was found, however, that there was not a quorum of councillors present, and the meeting adjourned to three o'clock, to which time accordingly the Senatus Academicus, which had assembled, had to adjourn. Having again met, the Council admitted Mr. Syme and Mr. Liston to the professorships to which they had respectively been appointed; and the College Committee afterwards proceeded to the Senatus Academicus, which were assembled in their own room, where Bailie Melville, as college bailie, introduced the new Professors, and announced that they had been already admitted.

PRUSSIAN UNIVERSITIES.—Six universities exist in Prussia, possessing faculties of medicine, viz., Berlin, Breslau, Konigsburg, Groeswald, Halle, and Bonn. The medical course extends over a period of four years. Subjects for dissection are supplied from malefactors dying in prisons, and those executed. At the termination of the four years of study, the candidates for the degree of Doctor have to present, and to defend, a thesis in Latin, and to undergo an examination in logic, and in the medical sciences. The diploma of Doctor costs 1,250 francs, but gives no right to practice, this being obtained after passing several other examinations embracing the subjects of medicine, surgery, and midwifery.

DESTRUCTION OF THE TURKISH MEDICAL SCHOOL.—The late extensive conflagration at Constantinople (11th October) has destroyed the school of medicine of Galata-Serail, with the dispensary, the museums, the library, the botanic garden, and the residences and goods of the 40 professors, and of the 400 students. The loss sustained is valued at 15,000,000 piastres, comprehending the collection of 15 years, made at great expense and trouble. This deplorable event has consequently put a stop to the course of instruction for the present.

BOARD OF HEALTH.—The General Board of Health sat, on Tuesday, at Gwydyr-house. A Deputation from Lancaster, consisting of Mr. R. B. Armstrong, M.P. for Lancaster; Professor Owen, the Mayor of Lancaster, Mr. Howitt, and the Town Clerk, was received by the Earl of Carlisle and Mr. Chadwick. Lord Ashley afterwards took his seat at the Board for the first time, having been previously absent from ill health.

CHOLERA.—Information having reached the Admiralty that some cases of cholera had occurred on board the Seaflower, stationed for the protection of the English fisheries at Jersey, their Lordships ordered medical officers to be despatched from Portsmouth in the Myrtle steamer.

THE CHOLERA IN EDINBURGH.—The number of new cases of cholera on Saturday amounted in Edinburgh to 18, and the deaths to 7; in Leith, 14 new cases, and 4 deaths; and in Newhaven 1 death. On Sunday the new cases in Edinburgh amounted to 12; deaths, 6; and 1 recovery. In Edinburgh on Monday the new cases were 25; deaths 13; recoveries, 2. In Leith 24 new cases, and 4 deaths. Yesterday there were in Edinburgh 12 new cases, and 8 deaths; and in Leith 14 new cases, and 5 deaths. The disease appears to have left Newhaven, as no new cases have been reported there for the last five or six days. The epidemic has made fearful havoc at the small village of Loanhead during the last few days, where the cases reported amount to 23, of which number 17 proved fatal from Friday night. The victims were chiefly colliers, and they all lived within 400 yards of each other. There have also been 8 cases in the parish of Liberton since Friday, 4 of which have proved fatal, and 1 at Calcots Moss, parish of Newton. The cases reported from Leith were chiefly in the centre of the town. In Edinburgh a great proportion of the victims resided in some part of that long line of over-crowded and filthy streets extending from Croft-an-righ, near Holyrood, to the Grassmarket and West Port.—*Edinburgh Witness.*

There have been 18 cases reported in Portobello since the disease commenced, ten of which have proved fatal, and four recovered. In Loanhead about 40, altogether, have been seized, the fatality amounting to about the half. In one house in that village four sisters, belonging to the paper-mills, lay dead at the same time. There has been one fatal case at Cockpen, and the keeper of Tynecastle toll-bar died of the disease after an illness of a few hours. A case has been reported from Falkirk. Three cases have occurred in Glasgow, two of which have proved fatal.

CHOLERA.—Many cases of cholera have occurred in the town and neighbourhood of Dunkirk. On the 3rd of November, there had been 30 cases, of which 9 proved fatal. Other cases have occurred, both here and in the communes of Wathen and Holgne, but it is not certain how many deaths may be attributed really to Asiatic cholera. The disease is said to have been produced by bad living. M. Magendie has been sent by the Minister of Agriculture and Commerce, to examine into the nature of the disease.

St. Petersburgh, Oct. 27.—There were 10 fresh cases of cholera: 8 recoveries, 6 deaths. *Oct.* 28.—7 new cases: 8 cures, 6 deaths.

Berlin, Nov. 5.—Number of cholera patients, 2,365. On the 6th, two new cases occurred about noon; total, 2,367. Deaths, 1,522; cures, 688; under treatment, 157.

Lisbon.—The inhabitants are greatly alarmed at the approach of the cholera.

Rotterdam.—A letter from Rotterdam of the 6th inst. states that the cholera, which appeared there on the 1st inst. has raged with great violence. On the preceding day 41 new cases were declared, and 29 deaths, whilst there were but 7 recoveries. During the previous five days there had been 298 cases, 157 deaths, 121 recoveries, and 16 remained under cure.

Only 16 cases of cholera had occurred in Hamburgh since the first of the month, making the total number of cases 3,362, of which 1,671 have been fatal.

A letter dated Dantzic, the 3rd inst., states that the cholera is raging in that city with intense violence. There were no fewer than 62 new cases in one day. 388 individuals had already been attacked, of whom 185 died, 34 had recovered, and 179 were under cure.

In the small town of Gartz, in the district of Stettin, the cholera has carried off 102 persons out of a population of 700.

A MAGNETISER CONDEMNED FOR ILLEGALLY PRACTISING MEDICINE.—A man of the name of of De Graaf, a magnetiser, was accused, after having plunged into the magnetic sleep a female, who also served the somnambulist,—of having prescribed remedies which had been served to the patient, thus infringing the law of the 12th of March, 1818, relating to the exercise of the healing art. Conformably to the terms of this law, De Graaf was condemned. The courts of Liege and Brussels have gone still further, and have not only condemned those magnetisers who do not administer medicines, but who simply employ the magnetised water.

MUNIFICENT BEQUEST.—Dr. Antonio Cagnola, of Milan, who died last May, has bequeathed 55,000 francs to Professors Kromer, Belli, and Glanelli, for the following purposes:—They are to found with the interest an annual prize, to be granted for the best memoir upon a subject relating to medicine, chemistry, or physics. In default of these professors, the judges are to be the professors of medicine, chemistry, and physics, of the University of Pavia, and of the Lombard Institute of Sciences. The legatees will have the power to apply a part of the same annually to indemnify the author of a memoir, who has been compelled to make great sacrifices. A reward must be bestowed upon the author of a useful discovery on the treatment of pellagra, upon the nature and treatment of miasmas and contagion, on the direction of balloons, and upon the manner of detecting feigned diseases. The testator has appointed that the medal shall be of gold, of the value of 600 francs, having embossed on it the emblems of the medico-chemico physical sciences, and an inscription—"The Gift of Dr. Cagnola, of Milan."

LONGEVITY.—The Spanish journals mention two cases of remarkable longevity; the one is a negress of Havannah, who died at the age of 125. She was married at the age of 15, and had given birth to twenty children, of which there is one son alive, aged 99. This woman had the possession of all her faculties to the last. The other is a female who died at Cruz de Vontereda, aged 108, having, to the period of her death, all her faculties and most of her teeth.

FEVER AT VENICE.—At Venice periodic fevers continue to desolate the garrison. Seven hospitals, each containing a thousand beds, have been fitted up to receive patients. The number seized up to the 15th September, amounted to 6,470. The mortality has not exceeded 1 in 100. The salts of quinine have been employed; but in more serious cases the quinquina in substance has been given, with, however, but little success. At Chiogga, where there are 3,000 in garrison and the surrounding forts, a large portion have been seized with fever, and three hospitals have been fitted up for their reception. The forts of Malgherer and Trepoints, have each a small hospital of thirty-six beds, established by the liberality of the Venetian ladies.

DEATH FROM CHLOROFORM.—On Tuesday last Mr. Carruthers, a gentleman of fortune, residing at Dormount, Annan, lost his life from the incautious application of chloroform. It appears that the deceased was afflicted with asthma, and having found relief from inhaling the subtle vapour, had frequently recourse to it. Being an expert angler, and extremely fond of piscatorial recreation, he sometimes employed himself rather late in adjusting his hooks and making artificial flies. On Tuesday morning he was found sitting at the table apparently following his occupation, in the position in which his servant had left him on the preceding night; but it was soon discovered that the unfortunate gentleman was quite dead, and to all appearance life had been extinct for some hours. On the table was the evidence of the fatal occurrence—the handkerchief which he had used in applying the chloroform to his mouth. His death forms another melancholy instance of the folly of employing such dangerous agents for the purpose of obtaining a temporary relief from pain.

SALE OF POISONS.—Robert Reed, a druggist at Yarm, has been committed to York Castle on a charge of manslaughter, he having caused the death of Elizabeth Hislop, by selling arsenic for magnesia, whereby she was poisoned.

WET-NURSES AND LACTATION.—Dr. Schneider, of Fulda, inveighs strongly against corsets and other pectoral portions of female dress, as a great

means of preventing females from making good nurses. The pressure on the breasts of young women weakens these organs, depresses and hardens the nipples, and obstructs the lactiferous ducts. It is, according to Dr. S., a very rare thing to find a perfect nurse. If we cannot be sure of finding an unexceptionable nurse, Dr. S. recommends Zwierlein's plan of taking a goat as a substitute. He has himself made upwards of thirty trials with children whose mothers were unfit to suckle their offspring, and has in all of them obtained successful results by making the children draw the milk directly from the teats of the goat. No animal is so well fitted for this purpose as the goat. We are to select a young, tame, healthy animal; take care not to feed it too well, especially if the child is strong and plethoric; have it carefully rubbed down and cleaned, and give it frequently salt with its meat. A small wooden platform, to which one or two steps lead, is to be erected close to the wall of the room: it must not be polished, that the animal's feet may not slide. To the wall, or to a beam of wood, a leather strap is fastened, which, when the goat has mounted on the stage, can be easily secured round its neck; and, to prevent its disturbing the child by moving backwards or forwards, its hind legs are to be secured in like manner. Lastly, at the end of the stage there is to be placed a tin dish with a cover, to catch any discharge from the animal.

THE ECLECTIC PRACTITIONERS, OR THE SO-CALLED PRACTICAL MEN.—There are medical men in high positions, greatly occupied with numerous patients, who, from a want of study, of intelligence, or of time, from a natural indolence, or from being too old to master recent important improvements, affect a supreme disdain for every thing that concerns doctrine or generalization, either physiological or philosophical. They call themselves practical men, and speak ironically of *theorists—men of science or of the closet*, such who labour most for the advancement of medical science, and whose knowledge crushes and confounds them. These so-called practical men are those who have no doctrine and no general principles, who gather together ready made formulæ and isolated cases, without any kind of scientific discernment. The only medicine they study is that contained in small books of prescriptions, published in 18mo., which they carry in their pocket, and know by heart. We have frequently had occasion to remark that a practical man, that is, a man who boasts of knowing nothing of scientific medicine, is a medical machine inferior intellectually to a master mason, a locksmith, or a cabinet-maker, for these have principles and a sort of doctrine which they apply in their business. They were appreciated in a like manner by a learned individual whose authority no one could doubt, and who said, —"The true eclectic works without conviction, without principle, without idea. He is continually enlarging his circle, in order to enclose within it facts of the most contradictory nature—they sacrifice in a sort to every god, and create a kind of scientific pantheism, not less fatal to true science than pantheism, properly so-called, is to true religion."

SANITARY PRECAUTIONS ON BOARD EMIGRANT SHIPS.—Her Majesty's Colonial Land and Emigration Commissioners, in consequence of the re-appearance of cholera in this country, have issued a notice specially drawing the attention of captains of vessels, with emigrants to North America and other British colonies, to the Queen's Order in Council for preserving order and securing cleanliness and ventilation on board their ships, in pursuance of the 13th section of the Act 11th Victoria, cap. vi., and the provisions of the Passengers Act. No vessel proceeding to North America is to carry more than one passenger to every two tons of the registered tonnage of the ship; nor, whatever be the tonnage, more than one passenger to every twelve clear superficial feet of deck on which the passengers live, and one passenger for every thirty superficial feet on the orlop deck. The master is liable to a penalty not exceeding 5*l.* for every person in excess. The lower deck of the ship must not be less than one and a-half inches in thickness, and properly secured to the hold beams; the height between decks is to be six feet at least; there must not be more than two tiers of berths, and the bottom of the lower tier must be six inches above the deck. The berths are not to be less than six feet in length and eighteen inches in width for each passenger. All ships carrying 100 or more passengers are to carry a duly qualified surgeon; a proper supply of medicines is to be provided for the voyage, and no ship is to proceed until the medicine chest and passengers have been inspected by a medical practitioner. All passengers who may be discovered to be affected with any infectious disease, either at the original port of embarkation, or at any port in the United Kingdom into which the vessel may subsequently put, may be re-landed with those members of their families, if any, who may be dependent on them or unwilling to be separated from them. Ships that, after sailing, may put into any port of the United Kingdom, must have their provisions and water replenished before they can be allowed again to sail, under a penalty not exceeding 100*l.* No ship is allowed to clear out until properly manned with a full complement of men. The above sanitary precautions are strongly recommended to the captains or masters of all vessels to provide well-assorted medicine chests, water, &c., for their crew and passengers, and the rules of the Board of Health, in case of illness. Notice was issued yesterday at the Custom-house to captains and masters of merchant-ships and steamers proceeding to the northern ports of Spain, Oporto, Lisbon, Cadiz, Gibraltar, and the southern coast of Spain in the Mediterranean, to be particular in providing themselves with clean bills of health previous to sailing from any port in the United Kingdom, as the Governments of Spain and Portugal have imposed a quarantine on British and other vessels, for which it will greatly depend upon the sanitary state of the crew and passengers how long they will be detained.

MORTALITY TABLE.

For the Week ending Saturday, Nov. 11, 1848.

CAUSES OF DEATH.	Total.	Average of Five Autumns.
ALL CAUSES	1,165	1,154
SPECIFIED CAUSES	1,149	1,149
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	414	270
SPORADIC DISEASES:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	37	52
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	131	127
Diseases of the Lungs, and of the other Organs of Respiration	147	222
Diseases of the Heart and Blood-vessels	45	38
Diseases of the Stomach, Liver, and other Organs of Digestion	71	67
Diseases of the Kidneys, &c.	12	12
Childbirth, Diseases of the Uterus, &c.	5	14
Rheumatism, Diseases of the Bones, Joints, &c.	14	8
Diseases of the Skin, Cellular Tissue, &c.	2	2
Old Age	37	64
Violence, Privation, Cold, and Intemperance	21	32

TO CORRESPONDENTS.

"Dr. Belby."—The days are altered: Tuesday, Thursday, and Saturday.

"Chemicus."—The gas is always combined with ammonia in sea water.

"Medicus."—The case we recorded was the eighth in which the method was employed. A sufficient time has not, however, elapsed, to enable us to form a positive opinion as to the real value of the new agent.

"Socius."—Our Correspondent has been misinformed: no new regulations have been recently issued.

"B. J., Camberwell."—The caustic-fixed alkalis completely destroy the action of diastase on starch jelly; it is the same with caustic lime.

"Homœopathist."—We cannot insert the communication; it would provoke a controversy, which would produce no good results.

"A Subscriber."—The work is published by Mr. Highley.

"Dr. Wilson" is thanked for his obliging communication.

"Chirurgus."—We believe so.

"A Candidate."—The salary is merely nominal. The Governors elect, but the interest of the Secretary should, if possible, be secured.

"M. D" will find an article on the subject in the last number of the *Psychological Journal*.

"Beta."—The Lord Chancellor makes the regulations, and appoints the fees.

"A General Practitioner."—Yes; and a petition must be sent to the magistrates at the Quarter Sessions.

"Amicus."—Not in England; but in Prussia druggists must pass two years in study, at an University.

"Senex" suggests that persons who sell deadly poisons to any one wishing to buy them, should be subjected to an imprisonment of three months on conviction, even supposing that the poisons were not used to take away life. Our Correspondent thinks this is the best way of putting a stop to the injurious practice which now obtains.

"A Friend of Justice."—The attack is too personal to be admitted into our columns.

"Discipulus."—We have given full information on the subject in the Student's number lately published.

"Beta."—We shall feel obliged by our Correspondent forwarding the promised papers.

"An Assistant."—A small quantity of strong sulphuric acid, or caustic potash will do.

"Equivalent."—The atomic weight has not been determined.

"A Retired Practitioner."—We cannot give the required information. The matter will be brought before Parliament early next session.

"A Navy Assistant Surgeon" informs us, that he has been in the service for the last five years, and he strongly recommends young medical men not to become candidates for the office of assistant surgeon in the navy. He says "they have little chance of benefiting their minds or their pockets." We hope our correspondent's suggestion will be acted upon. The Government has paid little attention to the wants of the profession, and we advise our young brethren to keep aloof from the naval medical service.

"An Edinburgh M.D."—Not without undergoing an examination.

"Galen."—We have looked over the Reports, and find no such statements.

"Rusticus" "On the best means of Ameliorating the Condition of the Profession," received.

"A Sheep"'s epistle will not suit our columns.

"B. A."—It is one of those cases to which no effective remedy can be applied.

"A Hardworked Union Surgeon, Mansfield," writes in reference to the Sanitary Act:—"You will do the Union Surgeons infinite good, if you will stir them up and denounce the proposals in that infamous Act of Parliament, where they are required to do onerous duties, expose themselves to loss of time and health, and turn *informers* against the property of their best patients,—for nothing!!!"

"Mr. H. H. Pyke, Barrister-at-law," is thanked for his communication.

"Mr. Evan Thomas, Infirmary, Carlisle."—No.

"Mr. William Smith, King-street, Belper,"—Letter received "on the Treatment of the Insane." The agent referred to must have made some mistake.

"Mr. William Gleadah, King William-street, City."—The letter is an advertisement.

"Mr. Lord, Hampstead."—Communication received.

"Omicron."—The work referred to is a good one.

"F. R. S."—Next week.

"An Irish M.D."—(1) Yes. (2) Next week.

The Report of the Medical and Clerical Widows' and Orphans' Annuity Society shall appear next week.

Letters and Communications have also been received from Dr. Belby; Chemicus; Medicus; Socius; B. J., Camberwell; Homœopathist; A Subscriber; Dr. Wilson; Chirurgus; A Candidate; M. D.; Beta; A General Practitioner; Amicus; Senex; A Friend of Justice; Discipulus; Beta; An Assistant; Equivalent; A Retired Practitioner; A Navy Assistant Surgeon; An Edinburgh M.D.; Galen; Rusticus; A Sheep; B. A.; A Hardworked Union Surgeon, Mansfield; Mr. H. H. Pyke, Barrister-at-law; Mr. Evan Thomas, Infirmary, Carlisle; Mr. Wm. Smith, King-street, Belper; Mr. Wm. Gleadah, King William-street, City; Mr. Lord, Hampstead; Omicron; F. R. S.; An Irish M.D.

CLINICAL LECTURE.

Delivered at St. Thomas's Hospital, by CHARLES WALLER, M.D., Obstetric Physician to the Hospital.

ON LEUCORRHŒAL DISCHARGES.

[Continued from Vol. XVIII., page 217.]

GENTLEMEN,—In my former Lecture you will recollect I described to you the two forms of inflammation of the vaginal membrane, acute and chronic, as being the frequent cause of leucorrhœal discharges. The symptoms characterizing the two varieties were pointed out, as well as the appropriate methods of treatment. I now proceed to the consideration of another form of leucorrhœa,—that, namely, which is produced by weakness and relaxation; where the membrane, instead of being turgid from the increased size and fullness of its blood-vessels, is preternaturally pale, and is found thrown into loose folds, having lost its natural tonicity. No resistance is here experienced to the introduction of the finger, neither is it attended with any pain to the patient. This state of parts is always accompanied with, if not produced by, a similarly weakened condition of the constitution generally; it is never of a purely local character. Whether this discharge be the cause or the effect may, in many instances, admit of doubt. It is easy to conceive that long-continued disorders, producing general debility, would also cause this local relaxation; whilst, on the other hand, every one knows that profuse evacuations of any kind must, sooner or later, be productive of general exhaustion. In almost every other instance, an accurate discrimination between cause and effect is highly important. Here, however, it matters but little, inasmuch as your remedies ought to be of a twofold character,—those, namely, which act upon the system generally, as well as those calculated by their local effect to increase the tonicity of the part itself.

So often is this form of vaginal discharge present in persons who are the subjects of dyspepsia, that it has been sometimes designated by the name of "Dyspeptic Leucorrhœa," and nothing is more certain than the utter futility of attempting to repress the discharge without restoring the healthy action of the stomach.

In this disease you will find a host of unpleasant symptoms besides the mere local flow. The patient's countenance presents the aspect of ill health; it is of a pallid and sallow colour, the rosy blush of health having departed from the cheeks and lips; there is flatulence, want of appetite, with feebleness and wasting of the body. A feeling of oppression, if not of actual pain in the head, is often complained of; the mental vigour declines, and the patient is listless as well as languid. In some there is great propensity to sleep; in others, an unnatural degree of watchfulness; there is, occasionally, a darkened circle round the eye, with a puffy state of the lids. The state of the bowels varies: there may be obstinate costiveness; the evacuations, when occurring, being clay-coloured, and very offensive, evidencing a deficiency of the biliary secretion; or there may be an irritable diarrhœa, with slimy stools. The urine is often passed in usual or increased quantities, sometimes of a pale colour and low specific gravity; in other cases, it is loaded with lithates. A variety of symptoms usually congregated under the term "nervous" very generally manifest themselves, *e. g.*, a feeling of constriction about the throat, dyspnœa, palpitation of heart, rumbling in the stomach and bowels, &c. Swelling of the feet and ankles takes place on the approach of evening, which gradually subsides when the recumbent position is observed. There may be complete anorexia, or a perverted appetite. Uneasiness in the region of the uterus is frequently complained of. There is pain and "weakness in the back," with a dragging sensation in the hips and groins, attended with "bearing down." This latter symptom is scarcely ever absent, if the female has borne many children, and will be found to depend upon a certain degree of prolapsus, sometimes trivial, at others more severe, but whenever present it adds to the misery of the sufferer. The discharge is often very profuse, thereby tending to increase the general debility of the system. The catamenia may be altogether suppressed, or, on the contrary, the flow may be more abundant than natural; the colour being lighter, and the fluid more attenuated than in the healthy condition. There is difficulty of breathing on slight exertion, and, occasionally, a short, dry cough; if there be a tendency to phthisis pulmonalis, the fatal termination will be accelerated, if the drain continues; the pulse is feeble and rapid; the tongue pale, or slightly whitened; and, in short, the whole appearance most unpromising. For the cure of this malady two indications naturally present themselves.

1st, and principally. To restore the powers of the system.

2ndly. To suppress the local flow.

To fulfil the first indication, the various features of the individual case must be carefully studied, in order that special attention may be directed to any organ or organs whose functions may have become deranged. You will commonly find that the secretions of the digestive organs generally, gastric, biliary, and intestinal, are at fault. To restore these, therefore, to a state of health should be your first attempt. Before commencing the general plan of treatment, a mild laxative should be administered, that any vitiated intestinal secretion may be removed, together with any hardened fœtal matter that may have accumulated in the bowels; and, as acids are usually present, the laxative should be alkaline. The following draught is a very useful one:—

℞ Potas. sulphat. ʒ ss.; pulv. rhei, gr. xij.; liq. potassæ, ♏ xv.; aq. menth. piper., ℥ iss.; f. haustus pro re natâ sumend.

Having cleared the canal by the aperient draught, and repeating it if necessary, you have recourse to medicines calculated permanently to restore the general tone of the body, beginning with the milder tonics, and gradually increasing their strength. If there be a tendency to nausea, you will find the following infusion of great service, making it a vehicle for the administration of more powerful remedies:—

℞. Flor. anthemid.; cort. aurant., exsicc. a ʒij.; cort. limonis recent ʒi.; aq. fermentis ℥viij. macera per horæ sextam partem et color.

The maceration must not be continued longer than the time specified, (ten minutes,) or the liquid will become intensely bitter, and far less grateful to a delicate stomach, and, consequently, not so likely to be retained. To an ounce of this infusion, an alkali or an acid may be added, according to the condition of the stomach; if there be vomiting, a suitable portion of hydrocyanic acid should be given. As soon as the stomach can bear a more powerful tonic, one of the usual bitter infusions should be substituted for the chamomile, varying them as circumstances may seem to require. Large doses of tinct.-ferri sesquichlorid are of the greatest advantage in many cases, this preparation acting, not only as a general tonic, but also as a local astringent, and thereby checking the vaginal flow. Where the billary secretion is defective in quantity, an occasional small dose of hydrargyrum cum cretâ is required; but great caution is requisite in the use of this mineral, as, in very delicate and weakly subjects, the general irritability is apt to be increased by the use of mercury, even when employed in minute quantities. The diet should be simple and nutritious, and a moderate quantity of generous wine (port is to be preferred) daily taken. The injurious effect which mental anxiety produces upon the digestive function, is well known; hence, the necessity for tranquillity of mind, as well as the avoidance of undue bodily exertion. A quiet drive in an easy carriage, where practicable, is of essential service. Change of air, especially if the patient resides in an unhealthy, damp locality, is a necessary part of the remedial treatment. By the continued use of these means the general health becomes improved, the mental and bodily vigour increase, the leucorrhœal discharge diminishes, the female feels in better spirits, and thus our first indication will be fulfilled.

For the accomplishment of the second indication, viz., "the suppression of the local flow" applications, in the form of injections, must be had recourse to; and it is highly important that these should be employed early in your treatment, in order that the discharge may be arrested as speedily as possible; for in the condition of the system now under our consideration, the continuance of this flow (albeit, it may be the effect, rather than the cause of the debility,) will greatly increase the weakness, and in some measure, at any rate, counteract the effects of your tonic remedies. For this reason the local injection, which should consist of some astringent liquid, should be assiduously employed. I know not any single one which will answer the purpose in every case; those usually employed are solutions of either of the following articles:—alum, sulphate of zinc, sulphate of copper, nitrate of silver, gallic acid; either of these may be dissolved in simple distilled water, or in a strong decoction of oak bark, if a great degree of astringency be required. It will be found necessary to vary these applications, as great benefit is often derived from a change. Frequently sponging the body with very cold water, from the central parts to the hips, is a very useful adjuvant in these cases, together with the use of the *bidet* every night and morning. In some of the milder cases, these cold-water applications will answer your purpose without any injection whatever; and they always tend to improve the tone of the parts on the one hand, and on the other by quickly removing the secretion its accumulation is prevented, and a very common source of irritation thereby avoided.

Utero-vaginal Leucorrhœa.—When you remember, gentlemen, that the uterus and vagina are lined by a continuous membrane, you will readily perceive why, if inflammation attacks one part, and it be not speedily subdued, it should extend to the other, the disease spreading from continuity of surface, or the same cause may be productive of inflammation of the entire membrane; and hence, you will probably find, on your first examination, that the lining of the womb is involved. Leucorrhœa from the uterus takes place under the same conditions of its mucous membrane as have been already described to you when affecting the vaginal membrane; there may, for instance, be inflammation either of the acute or chronic form, or it may proceed from mere weakness. When inflammation of a tolerably active nature is present, symptoms of a marked character occur, which at once direct attention to the uterus, as the locality from whence they proceed; there is heavy, dull, and grinding pain in the back, extending through the pelvic region to the fore part of the body, an uncomfortable feeling of increased weight; and should there be general congestion of the womb, then, in addition to this sensation of weight; there will be "bearing down," its degree proportioned to the severity of the cause producing it—the pain is also more severe. The mucus secreted by the uterine membrane is more viscid than vaginal mucus; but in its passage the former becomes so mixed with the latter that a sufficiently accurate diagnosis cannot be formed by a simple view of the napkin on which it has been received. On examination with the speculum, a quantity of thick, ropy, and very tenacious mucus will be seen protruding through the chink of the os uteri; this is with some difficulty wiped off, and usually comes away in long strings, greatly resembling in appearance the white of a common egg. When this has been removed, the membrane passing through the fissure will be observed to be highly vascular, and the nature of the disease clearly made out. The general health is more disturbed than in simple vaginal leucorrhœa. At the approach of the menstrual discharge (as might be expected from the increased determination of blood to the generative organs at that time), the patient's sufferings are increased and continue so during the entire period of the flow, unless, however, a smart hæmorrhage should occur, which always relieves greatly, it may be for a time, or it may be permanently. Should the female be dyspeptic, there will be nausea or vomiting, according to the degree of gastric irritability.

The probable duration of the complaint may be guessed at (for it is quite impossible to determine

with accuracy) by observing, in the first place, the extent of the inflammation,—whether the entire vagina be involved, and whether, from the symptoms, there is reason to suppose the interior of the uterus to be wholly implicated; secondly, whether the attack be recent, and brought on by any cause which has acted suddenly, such as exposure to a cold and moist atmosphere; or whether the disease is chronic in its form, and has continued for many weeks, or even months; and, thirdly, attention should be directed to the state of the catamenial function. If this flow be wholly suppressed, it indicates a condition of membrane not easily remediable; and here your patient should be cautioned against expecting a rapid cure.

Treatment of Utero-vaginal Leucorrhœa.—The treatment of this variety of leucorrhœa must depend upon the form of inflammation which has caused it, whether it be active or passive; you must therefore make the same distinction as in simple vaginal leucorrhœa; and although the general principles are the same, yet they must be *adapted* and *modified* in each particular case in proportion to the degree and extent of the inflammatory symptoms. When they are severe, antiphlogistic measures must be instituted and continued until they have been subdued. The present relief afforded by this plan will encourage both the medical man and his patient to persevere. Eight, ten, or twelve ounces of blood should be removed, by applying cupping glasses to the lower part of the spinal column, or rather just over the sacrum, and the warm bath used immediately afterwards. Further local depletion may be effected by leeching the vagina. These remedies are to be repeated at longer or shorter intervals, according to the intensity of the symptoms, the relief experienced, and the capability of the constitution to bear them; ever remembering that excessive depletion is never required in the treatment of inflammation of mucous surfaces. Bear in mind, also, that the symptoms ushering in the disease are, in many instances, so slight as to appear too insignificant to require medical relief; and the active stage of the disease has passed away, and it has assumed a chronic form, before you have an opportunity of treating it, the pain in the back, discharge, &c., being considered as "nothing but a weakness." The bowels should be kept soluble, and determination to the skin solicited, by the employment of diaphoretics. The diet should be sparing, especially if there be a feverish tendency, although, in many cases, the constitutional powers require to be supported, even when it may be necessary to deplete locally. A constantly recumbent position is essential, and all sources of irritation, general as well as local, sedulously avoided. When the disease assumes a less active form, antiphlogistic remedies to the same extent are not required; cupping, probably, may be dispensed with, but repeated leeching within the vulva must be substituted. After clearing the bowels by the use of an alkaline laxative, recourse may be had to a mild tonic. The happiest effects sometimes follow the continued use of decoct. sarzæ comp., with an occasional Plummer's pill. You may allow a more generous diet than in the acute form; but take care that it be not over-stimulating.

If the disease be the result of general or local debility, the same plan of treatment should be employed as where the vagina alone is affected; but as this was fully explained to you at the commencement of the lecture, I need not now occupy your time by repetition. In this latter class of cases, should conception take place, the female will be very likely to miscarry, and should the expulsion of the ovum be attended with the loss of much blood, exhaustion to a fearful extent may ensue.

I must not conclude without reminding you of a case lately occupying bed No. 28, in Mary's Ward, in which all the inflammatory symptoms were suddenly and permanently relieved by the loss of a large quantity of blood. This was not a case of simple utero-vaginal leucorrhœa; the substance of the uterus was to a certain extent implicated. I ordered this patient to be cupped over the sacrum. One of the lancets entered a small artery, which bled freely for some hours, and the bleeding was not arrested until the dresser passed a ligature through the integuments, and secured the vessel by ligature. Great exhaustion followed, but there was no return of pain. The function of menstruation, which before was attended with extreme suffering, was afterwards performed regularly and without pain.

LECTURES ON THE ASIATIC CHOLERA.

By GEORGE ROSS, Esq., Surgeon to the Western City Dispensary, and Author of "Papers on Typhus Fever," and "Essays on the Processes of Digestion and Nutrition."

No. V. TREATMENT OF CHOLERA.

[Continued from p. 88.]

I will now give you a few more Tables of treatment, which will be found to elucidate and confirm those already presented. The following table is extracted from Mr. Fergus's Tables of Cholera at Vienna, published in the *Lancet* :—

TABLE OF MORTALITY AT VIENNA.

No. of Cases.	Where treated.	Recoveries.	Deaths.	Rate per Cent. of Deaths to Cases.	Treatment.
37	General Hospital.....	12	25	67·	Ipecacuanha and stimulants.
21	,,	9	12	57·	Ipecacuanha alone.
292	,,	128	164	56·	Stimulants and hot frictions.
58	,,	29	29	50·	Ice and stimulants.
142	,,	99	43	30·	Ice alone.
154	Cholera Hospital, No. 3	80	74	48·	At first stimulants; then generally bleeding, leeches, and ipecacuanha; and finally, a few experiments were made with ice, which proved its efficacy.
68	Dr. Vivenot's Cholera Hospital.....	38	30	48·6	Bleeding, leeches, acids, and ipecacuanha.
21	Military Hospital ...	7	14	66·6	Stimulants.
231	,,	133	98	34·9	Ipecacuanha and moderate warmth. During the reaction, bleeding, leeches, and sinapisms; if typhoid symptoms occurred, musk, camphor, and punch.

The subjoined Table is constructed from Dr. Lynch's Sketch of the Cholera in Paris :—

TABLE OF MORTALITY AT PARIS.

No. of Cases.	Where treated.	Recoveries.	Deaths.	Rate per Ct. of Deaths to Cases.	Treatment.
1920	L'Hotel Dieu ...	759	1161	60·6	External and internal stimulants, varied by bloodletting, croton oil, astringents, acetate of lead, and cautery.
592	La Pitie	277	315	53·	The same: latterly, ipecacuanha, with benefit.
75	Val de Grace (Broussais)..	24	51	68·	At first, bloodletting and antiphlogistic remedies; — these found injurious, recourse was had to stimulants, with what results the Table shows.
161	St. Louis	80	81	50·	Ipecacuanha emetic, then sulphate of quinine, leeches to epigastrium, and ice.

I will now append another Table, in which the various modes of treatment are arranged under one view :—

A GENERAL SYNOPSIS OF TREATMENT AND MORTALITY OF CHOLERA.

Treatment.	Cases.	Deaths.	Rate per Cent.
Venous injection.....	90	78	85·7
STIMULANTS.			
Stimulants—viz., brandy, ammonia, turpentine, cajeput oil, &c.	3055	1792	58·6
Ditto with emetics of ipecacuanha	37	25	67·
Ditto with calomel and opium.....	356	214	60·
Ditto with ice	58	29	50·
Opium	81	47	58·
Calomel and opium.....	196	112	57·14
Calomel	376	147	36·59
Blood-letting, with calomel and opium, and antiphlogistic medicines	285	168	59·
EMETICS.			
Ipecacuanha.....	21	12	57·
Ditto with stimulants, as above ...	37	25	67·
Ditto with bloodletting and sulphate of quinine.....	161	81	50·
Ditto with bloodletting alone	222	104	47·
Ditto with moderate warmth	281	98	34·9
Salt with cold water	607	112	20·
Tartar emetic	21	4	19·
Ice with stimulants as above	58	29	50·
Ice alone	142	43	30·
SALINES.			
Dr. Stevens' combination of salts..	88	67	76·3 !
Greville-street ditto, with cold water	107	15	14·
Miscellaneous	17	8	47·6
Total	6296	3210	51· mean rate p.ct.

General Therapeutical Remarks.—The foregoing Table has been framed to demonstrate the results under the various therapeutic systems; and it is clear, as was shown in the subordinate Tables, that stimulants in every combination were highly prejudicial. Opiates were somewhat less so, but nevertheless augmented the fatality of the disease.

Among the stimulating systems, *venous injection* may be fairly classed; and however plausible the theory may be, of supplying to the blood in the readiest manner the lost salts, it does not appear, even on the supposition that this remedy was tried in the most hopeless cases, that any advantage accrued. The high mortality of 85·7 per cent. tends strongly to discountenance such experiments. The most confident statements have been made of the efficacy of venous injection, founded upon the fact, that in some cases of collapse the pulse rose, and colour and animation returned, giving hopes of eventual recovery. In these cases, however, the apparent benefit was only temporary, and the patients succumbed. Any powerful stimulant might, for a short time, galvanize a patient; but it does not necessarily follow that, therefore, real benefit would ultimately ensue. The intense excitement of the nervous system, when the power is so greatly reduced, would inevitably exhaust the remaining energies, and accelerate death in proportion to the degree of the collapse. The same remarks will apply to stimulants taken into the stomach, though the probable advantage of this mode of exhibition of such powerful agents is not so plausible. What benefit can attend the propulsion of a quantity of thick, grumous, black blood into the capillaries of the internal organs—even supposing no other mischief were produced? Then, again, the large quantities of diffusible stimuli, upon which so much reliance has been placed, actually consume the oxygen of which the blood has so much need! What advantage could there be in making a man drunk with brandy, who is already dying of the universal congestion of cholera? The undue attempt to rouse the nervous system must certainly exhaust its powers; and the principle upon which the largest amount of stimulation has been applied to the lowest amount of vital power, is as false as any paradox the human mind can conceive. Can we, then, be astonished at the high rate of mortality?

It may be assumed, that stimulants might be use-

ful in the early period of the attack, as tending to excite the nervous system, while there is power left to act upon; and to such an opinion I can only reply, that the less stimulation the better for the patient; that though it may do good in the first stages, it will surely do harm in the last; that it is a certain enemy, and a doubtful friend. I should recommend, therefore, a total abstinence from stimulants in genuine cholera. When there is much sensitiveness at the pit of the stomach, evincing congestion of the mucous membrane of that organ, and of the intestines, stimulants would be certainly injurious. As a rule of practice, they should be definitively renounced.

With the view of relieving the cramps and spasms, *opiates* have been largely administered; but the internal congestion which they produce has undoubtedly proved injurious. The use of opiates has been carried too far; it has locked up the biliary secretion; it has choaked the capillaries of the brain with black blood, and overpowered and deadened the nervous sensibility, which ought to be sustained by every effort and appliance, as the only means left to us, in states of collapse, of rallying the declining powers of the patient. By comparing together the different data in the Tables, we shall clearly see, that when either opiates or stimulants were added to other remedies,—for example, ice or ipecacuanha, the rate of mortality was greatly increased.

Great difference of opinion has prevailed also in respect to *emetics*; some conceiving, that the vomiting ought to be immediately checked, and others that it was a remedial effort of nature, and should be encouraged. The Tables show, that the emetic system was far preferable to stimulants and opiates, and that they were useful apparently in direct relation to their *sedative* effects,—a result entirely opposed to first presumptions. Tartar emetic, for example, if we can judge from the limited number of cases I have recorded, was more beneficial than either salt or ipecacuanha. It must not be forgotten, that numerous other cases, treated with tartar emetic, are to be found in the periodicals of the day; but they are not sufficiently exact in all points, especially in reference to comparative mortality, to sanction their admission into my Tables. I have always rejected the records of *good cases* only. When the epidemic first broke out, *mustard* emetics were much employed and highly lauded, but they were soon discarded as wider experience proved their injurious effects. In the stage of collapse they frequently failed to produce vomiting, and their retention in the form of a mustard cataplasm on the delicate lining membrane of the stomach, must necessarily produce great evil. Perhaps, in the very onset of the attack, they might not do much harm; though I am at a loss to conceive, notwithstanding all the eulogies that were originally bestowed on them, what good they can effect. I am disposed to class them with stimulants generally, as having a prejudicial tendency.

Very different therapeutic effects were produced by the different emetics employed. When ipecacuanha and salt were used, the vomiting was generally maintained. Tartar emetic was given and repeated until a tolerance of the drug was acquired, and the vomiting was arrested. Perhaps the act of vomiting is not of much consequence, except as it indicates a certain portion of nervous irritability yet remaining in the system. The total absence of emesis, and the incapability of producing it, are conditions full of peril. On the whole, it would appear to be desirable to sustain the vomiting, provided the patient be not distressed by it, and the means of effecting this should be the simplest possible. I do not think that one or two doses of a salt or ipecacuanha emetic at the commencement of the attack can effect any benefit, except that of merely emptying the stomach of any crude matter that may be oppressing it; and I should, therefore, conceive, that if emetics are to exercise any specific or permanent influence, they should be continued. Salt emetics have been given with the view of obtaining the absorption of some portion of the salt in order to supply the deficiency of that constituent in the blood; but an emetic would not be the best mode of accomplishing this object. Salt emetics, however, were usually followed by large quantities of *cold water*—gallons; and it is to this remedial measure that I believe the greatest benefit is attributable. The cold water was no sooner given than it was rejected, which ensued so soon as it became warm in the stomach; thus, constant vomiting was maintained by the simplest means. The low mortality upon the salt-and-cold-water plan is a clear evidence of its utility.

The few facts I have collected, in reference to the influence of tartar emetic, are insufficient to extort confidence in its remedial efficacy; yet, it is but right to say, that all I know of it is in its favour; and consequently, as it is the very antipodes of stimulation, it affords one of the strongest arguments against the propriety of that practice. Sedatives in health are often tonics, or, if you will, stimulants in disease; and tartar emetic, like digitalis, in certain cases, may exert a conservative influence over the nervous powers of the patient, as well as confer benefit by allaying the excruciating spasms. I do not intend, however, to theorise concerning the action of a remedy about which I know so little in this disease, lest I should mislead. With the evidence before me, I should decidedly recommend salt, in preference to every other emetic of a specific character.

Salt emetics naturally lead us to the consideration of saline remedies generally; and here a great discrepancy occurs. It would appear, that Dr. Steevens' combination of salts was highly injurious, the mortality being as high under his plan as 76·3 per cent. I find, too, that it has been very often condemned by gentlemen who have employed it. On the other hand, the Greville-street combination would seem to be as highly beneficial, 14· per cent. being, under this system, the rate of mortality. At Greville-street, and in the city, where the same combination was employed, large quantities of cold water were consumed by the patients, and hence, probably, some of the benefit attributed to the treatment. The intention in administering saline remedies is to restore to the circulating fluid those salts which it has lost by the excessive purgation, and thus to enable the blood to undergo the necessary oxygenization in the lungs. There can be no doubt that these salts must be restored before the patient's health can be re-established; and the theory has, therefore, all the merit with which fact and necessity can invest it. The danger, however, of administering saline remedies too bountifully is in the bloody diarrhœa to which they are apt to give rise, a symptom which is generally fatal. Caution, therefore, is required even in the administration of this remedy; but if the data furnished by the practice in Greville-street and the City can be relied on,—and I have not the slightest desire, as I have no reason, to impeach them,—it would appear that intestinal hæmorrhage rarely occurred, and that, on the whole, the practice was highly beneficial. The gallons of cold water occasionally drank by the patients, doubtless so far diluted the salts as to render them innocuous to the mucous membrane of the bowels. The Greville-street combination of salts in conjunction with cold water, is, therefore, deserving of liberal trial. A most agreeable and useful mode of administering salines is in the form of an effervescing draught, when it is given in conjunction with carbonic acid, and tends to allay the excessive uneasiness at the stomach.

In analysing the various plans of treatment, we have found the most successful to be associated with large draughts of *cold water*; and when we consider that cold water alone has been found to exercise the most beneficial influence over the disease, we cannot but admit that much of the advantage in every case was, in all probablity, due to this simple remedy. Dr. Shute, of Gloucester, first introduced it; upon whose recommendation several other gentlemen adopted the practice, and verified all that Dr. Shute had declared of its merits. A few writers have expressed their want of confidence in its medicinal powers, but without referring to cases in justification of this scepticism; and I apprehended that their objections to it have arisen rather from a spirit of incredulity, than from actual experience. I regret that I am unable to present any series of facts worthy of examination, to show the mortality under this system; our opinion of it must, therefore, be formed upon the panegyrics others have bestowed upon its efficacy. Dr. Shute states, that under this system the state of collapse is prolonged to two, three, or four days; and others have remarked, that during the re-action, a paroxysm of raging delirium is apt to take place. It is not, therefore, an inoperative system. The cold water would supply to the blood the water it had lost by the intestinal evacuations; and would also take up the urea, determine to the kidneys, and relieve the blood of the presence of this poisonous element. The evidence from recorded facts warrants us in concluding that the system of salines and cold water would prove the most useful. I have already stated that cold water tends to maintain the vomiting, during which process there is still hope for the patient. Dr. Shute, in recommending his plan, wisely says, in effect, that the strength of the stimulant should be proportioned to the vital powers of the patient, and that excessive stimulation must tend to exhaust the diminished nervous tone. We see examples of this aphorism in our mode of recovering persons dying of starvation or of cold, who are in nearly the same situation as persons in the collapse of cholera. Would you give a pint of brandy for a dose to a starved man, or put a chilled limb before a blazing fire?

Another mode of administering cold water is in the form of *ice*, and I have no doubt of its efficacy in relieving the burning heat at the pit of the stomach, and the intolerable thirst. It was employed with success on the last visitation, as the Table shows at Vienna, and on the present occasion, the report inform us that it was used at Berlin and Gallicia with great advantage, being in fact the remedy on which reliance was chiefly placed. I hope it will be used more extensively in England. I have ordered it with decided advantage during the present autumn, in those sporadic cases that so closely resemble the epidemic disease.

I have yet said nothing of *bloodletting*, and all I think that need be said of it is, that Broussais, the great champion of antiphlogistic remedies renounced his faith in it, and his recantation is no encouragement of the practice. It is certainly, as the Table proves, less injurious than stimulation, but it is not beneficial. I need not enter into arguments to disprove its utility as a general rule of practice, nor do I think it necessary to recapitulate the opinions about the relief of congestion, which have been employed to push it into favour. From the facts that now exist, I can only come to the opinion that the employment of bloodletting, where apparently beneficial, rather diminished the fatality of other modes of practice, than exercised any special control over the disease. If we compare bloodletting with stimulation, it was certainly the better practice, but if we compare it with salines and cold water, it was certainly prejudicial.

The *external applications* for the relief and cure of cholera have been as numerous and varied as the internal remedies. Hot brandy, boiling turpentine, cautery, capsicum, mustard poultices, ammonia, laudanum, oils—fixed and volatile, blistering, friction, hot air and cold air, shower-baths, vapour-baths, and warm baths, hot bricks and sand-bags, cold cloths and hot fomentations, ice and hot water, roasting, boiling, freezing, frying, baking, steeping, and flaying,—all have been employed in turn, or all at once; and if patients managed to get well under this persecution, then they were beyond the possibility of killing. My own opinion is, that simple friction with the hand or a woollen cloth, resolutely persevered in, whilst the patient is lying between blankets, is the best external application; perhaps rubbing the patient down with ice, succeeded by brisk friction, would prove advantageous, as it is said to have been found beneficial in Russia and Prussia. The analogy of frost-bite might guide us to this mode of treatment.

English surgeons are very insufficiently acquainted with the therapeutic action of water in its various forms, and have generally too much timidity in employing the colder applications of it, although

the highest amount of benefit might be expected to result from the re-action. When re-action can be induced, the results, as produced by natural actions going on in the system, must be far more satisfactory than when they are artificially forced on by hot temperature. External stimulation would not prove so injurious as internal; but I have not seen any evidence, worthy of confidence, in favour of its utility. The accounts are conflicting; but I should recommend an avoidance of all heroic plans in the advanced stage of cholera.

Among various private communications (for which I now return thanks) that I have received, referring to these Lectures, I have been favoured with one from a gentleman, writing pseudonymously, requesting me to declare my opinion on the use of chloroform in cholera. That gentleman will see that the expression of any opinion by me—in the absence of a sufficient number of well-ascertained facts—respecting any remedy, would be inconsistent with the spirit of these Lectures, and will pardon me if a positive opinion be not declared. We know nothing, with certainty, about the action of chloroform in any disease; we know nothing, or very little more, of the essential pathology of cholera;—where, then, are the elements to form an opinion? Chloroform must be tested empirically; hitherto it has been highly approved; and I hope that it will not meet with the fate of other new remedies. It is stated to arrest the vomiting and cramps which—from what we previously knew of its powers—might be expected; but it is also known to induce internal congestions, especially when care has not been taken to administer it in a state of dilution with atmospheric air; and any danger that may attend it will spring from this cause. However, I do not intend, nor would I encourage others, to theorize upon the action of remedies in so mysterious a disease; but would recommend a trial of it, and should be glad if it could be proved that any remedy had been discovered more efficacious than those we possess. I have myself been placed under the influence of chloroform; and if it were safe to anticipate, from effects produced in a state of health, those under a state of disease, I should not be very sanguine about the utility of this agent. The depression, in my own case, was very great; my face was blanched, and my nervous and muscular systems prostrated throughout the whole day. I do not see how this depression could benefit a case of cholera; but facts must testify to its powers.

It would be well for all persons who may conceive themselves liable to attack, to wear flannel next the skin, by which means the animal heat and electricity will be most effectually preserved.

I have not entered, at any length, upon the *rationale* of treatment of the various remedies, although I know that, generally speaking, no plan of treatment is considered satisfactory that is not fortified, at all points, by an elaborate theory of its action. The reader seldom considers how easily an ingenious man may manufacture these theories, and how very imaginative they too commonly are. There are a thousand ways of explaining the action of any remedy, all equally plausible, though they contradict each other; but it matters not, so that they display cleverness, and keep probability in view. This is a species of medical special pleading; and to many persons ours would be a very dull science, if a science at all, without it. What is there, for example, that calomel cannot accomplish? There is not a single action in the animal economy that it is not said to influence in one way or another. It is almost heretical to deny its universality. It is the mineral heal-all of orthodox practice. Among other diseases, it will theoretically cure cholera, or ought to do it, for fifty reasons. It will stimulate or depress, just as you please; quicken the pulse, or retard it; increase the secretion of bile, unload the congested mucous membrane of the bowels, heal the ulcerated glands on its surface, relieve congestion of the brain, increase molecular activity, excite the absorbents, subdue inflammation, and alter, in every imaginable way, the crasis of the blood. If it can do all these things, it must surely cure cholera; the only fear is, that it may possibly do too much. The same might be said of many other specifics.

The object of this review of the different modes of treatment, is to point out the most useful remedies in the confirmed stages of genuine cholera, and not to bias the judgments of medical men in prescribing for the various forms of disease which either precede or accompany true cholera cases. There can be no doubt that a suspicious case in the onset would be most judiciously encountered by the ordinary remedies that medical science has placed at the command of the practitioner. I do not desire to point out these remedies,—it would be puerile. Every medical man is supposed to be sufficiently qualified to minister to such cases, and would not thank another for supposing him ignorant of the first lessons of medical practice; yet volumes have been written on the virtues of chalk mixture, castor oil, and blue pill. If, however, a suspicious case prove obstinate, insusceptible to the ordinary remedies, and assume more of the decided cholera type, at once abandon the routine prescriptions; they will be useless, and in all probability do harm; it now becomes a matter of life or death upon which the judgment of the medical man, as the human agent, must pronounce the decision.

I cannot praise too much the wise discretion and sound physiology displayed in the Report on Cholera by the College of Physicians. What a contrast it presents, in its judicious and enlightened caution in speaking of this mysterious epidemic, to the dogmatic *ex cathedrâ* proclamations of the non-medical General Board at Gwydyr House!

Patients labouring under cholera should be kept as still as possible, and in the recumbent posture. The action of the heart in the advanced stages is weak and tremulous, and the slightest movement of the body, by increasing the pressure of the circulating fluid on the heart and great vessels, may cause undue agitation of that organ, and even death. A fatal result has been known to occur after an attempt to rise in bed, and death has been accelerated by the removal of patients from their houses to adjacent hospitals.

The Board of Health, in one of their earliest orders, assigned the peril that attends locomotion as a reason for discouraging the formation of local hospitals for the reception of cholera patients; but the premise does not justify the conclusion. The advantages of cholera hospitals far overweigh the perils of conveyance to them; and the facilities which they offer of placing a great number of patients under expensive and laborious methods of treatment, and of giving them the most efficient accommodation in respect to instructed nursing, render them of great public utility. I do not hesitate to say, from a practical knowledge of the disposition, capabilities, and habits of the poor,—the especial victims of cholera,—that such patients cannot be efficiently treated at their own houses. The sacrifice of time on the part of the medical man would be too great, and neither could nor would be devoted; and ignorant, self-willed, and frightened relations are the worst nurses that can be conceived. Are baths necessary? They cannot get them; they have neither the necessary utensil, nor the capabilities for heating a large quantity of water. Blankets, flannels, and the coals to make a fire to warm them, are equally wanting; the consequence is, that nothing that science might conceive right to be done, would be done in the majority of cases; and the patients, for all that the medical man could help, would die of neglect. Again, the same causes,—filth and effluvia, that predisposed to the disease, would still surround the patient, and almost exclude the chances of recovery. If it should be contended that adequate attendance through instructed nurses and medical officers might be provided at the patient's home, then the expense would be very great, and would not be tolerated by rate-payers, who might be informed that better accommodation could be given at less cost. If cholera hospitals should be established in the metropolis, such cases alone ought to be removed to them, as might not be so far advanced as to suffer injurious aggravation by the fatigue of conveyance. Did the Board of Health come to the determination to discourage cholera hospitals, after finding that all the workhouses in the metropolis were so overcrowded, that they could not afford a single inch of accommodation to cholera patients? Was their recommendation a mere compromise of expediency? If, before this inquiry was made, they were convinced of the imprudence of removing cholera patients from their own homes, what excuse was there for spending the public money upon such superfluous investigations? I have no doubt that when the Board of Health found there was no room in the workhouses for the reception of cholera patients, the peril of removing these unfortunates was impressed upon their convictions by some lucky inspiration.

However, not only must there be cholera hospitals, but houses of refuge also for the reception of the healthy, and for securing them from the aggressions of the pestilence that may already have doomed less fortunate members of the family. Houses of refuge have been found highly useful in Edinburgh, and other large towns. They must be established, also, in this metropolis.

ORIGINAL CONTRIBUTIONS.

ON SCARLATINA.

By J. W. TRIPE, M.D., M.R.C.S., and L.A.C., London.

(Continued from page 73.)

A. The conditions necessary for its propagation appear to consist in (a) a state of the patient favourable for its reception, and (b) a certain degree of concentration of the virus. B. Those which modify it are: (a) the state of the system of the recipient; (b) the intensity of the virus; (c) certain general, and (d) local alterations in the atmosphere; (e) the age, and (f) the sex of the individual attacked.

A. The conditions that are necessary for the propagation of scarlatina cannot be so distinctly enumerated as could be wished, inasmuch as the peculiarities of the patient, which temporarily protect him against an attack, are not known with any certainty. The only permanent protection consists in the alteration effected in the skin and in the renal and alimentary mucous membranes, by a previous attack. When I say permanently, I am probably using a term which the history of the disease does not warrant, as, in a few instances, it will attack the same membrane a second time. This arises in consequence of the morbid alterations having been effaced by the tendency existing in all tissues that have been altered by disease to revert to their original state. Certain states of the atmosphere, although they modify the malady very much, do not appear to be absolutely necessary for its propagation, as in all weathers, and at all times, deaths from the disease occur; but that they modify it very much is shown by the difference in the mortality in the different divisions of the year.

That a certain concentration of the virus, and probably also a certain amount and intensity of it, are necessary for its propagation, there can be but little doubt, for if it should be too greatly diluted with air, no infection will occur, the great prevention against it consisting in a due and proper ventilation of the apartment of the patient. The most ready method of presenting a view of the conditions which modify the disease, will be in a tabular form.

B. The conditions which modify scarlatina:—

(a) The state of the system of the recipient.	(α) robust and well fed. (β) debilitated and badly nourished. (γ) depressed from other causes. (δ) the parturient state. (ϵ) diseased by disorganization of the kidney. (ζ) partially protected by a former attack.
(b) The condition of the virus.	(α) differing in intensity. (β) ,, amount.
(c) General alterations in the atmosphere.	(α) barometrical. (β) thermometrical. (γ) hygrometrical. (δ) electrical. (ϵ) changes of wind.

(d) Local alterations in the atmosphere. { (α) from bad ventilation. (β) from effluvia from drains, &c.

(e) Age of the patient.

(f) The sex of the patient.

B. a. α. The influence which a robust state of health exercises over the course of the disease, is rather difficult to determine; but little has been hitherto written on the subject, and my own experience has not been extensive enough to warrant me in drawing any definite conclusions. We may, however, say, that patients who reside in the country, especially in the midland counties, and are well nourished, ordinarily suffer from a more sthenic attack than the debilitated inhabitant of a crowded city. In the former there is not that tendency to the typhoid type which is so fatal in the latter; the robust and healthy do not succumb so readily to the depressing influence of the poison, the reaction is more intense, and the inflammatory symptoms are consequently greater. Many are—as far as my experience goes—more subject to inflammatory swelling of the tonsils, and to aphthous-like ulceration, rather than to sloughing of the mucous membrane of the fauces.

B. a. β. The converse to the above obtains in debilitated and badly fed persons, in whom a decided tendency exists to the typhoid type, the reaction frequently being but very slight, the eruption of a purplish tint, the heat of skin but little above the normal standard, and the pulse quick, small, weak, and powerless. Patients of this description have been those whom I have chiefly been called to attend during the present epidemic, and are not only bad subjects to treat during the eruptive stage of the disease, but also subsequently, as the alterations effected in the kidneys are frequently so considerable that inflammatory dropsy of a bad kind frequently supervenes; abscess, also, forms about the neck and shoulders, and in some cases there was a decided tendency to the formation of abscesses within the joints. I may mention here, although it is somewhat out of place, that a case of abscess of the right elbow-joint is reported in the *Dublin Quarterly Journal*, May, 1847, p. 325, by Mr. Bernard, which occurred after scarlatina. In this case an abscess formed near the mastoid portion of the temporal, and was cured by incision; an abscess next formed in the right elbow-joint, which was also treated by incision, and cured; another formed in the lumbar region, and pointed in the groin beneath Poupart's ligament, and external to the femoral vessels; this was incised, and the patent eventually recovered. In one of my cases distinct fluctuation of the right knee-joint occurred with great pain of the part, after the formation of an abscess on each side of the jaw. This was dispersed by frictions with camphorated mercurial ointment.

Patients included under this category (the debilitated) require very early and free exhibition of stimuli, ammonia and bark, beef-tea, &c., to prevent as far as possible sloughing of the mucous membrane. They also have a great tendency to the simple or uncomplicated malignant form, in which the patient dies apparently from the sedative effect of the virus on the nutritive functions; by the nutritive functions, I mean the power of assimilation, which is possessed and exercised by the blood and tissues. In this form of the disease, the patient appears oppressed from the first; no re-action occurs, the system seems to be weighed down by the intensity of the virus, and the patient sinks to rest without a struggle for existence. These cases do not occur sporadically so frequently as during the height of an epidemic, and have become more common in my neighbourhood during the last few days. This would seem to indicate, that these debilitated and scrophulous individuals are subject to this form of the disease, chiefly when the poison exists in large amount, and with great intensity. Of this, however, I am somewhat doubtful, and think rather, that the same atmospheric causes which induce scarlatina with an epidemic form, exercise a depressing influence on an already depressed system, and thus render the patient more susceptible to the morbid poison.

B. a. γ. If the patient be depressed by grief, watching, anxiety, &c., a similar state of the system is induced as that described in section (β). This may more especially be observed in cases which happen during an epidemic of scarlatina, when one or more of the same family are affected, especially in the mother or other relations who are much engaged in attending on the little patients, and also, perhaps, in much grief from the loss of one or more. Under these circumstances, if the mother has had S. simplex only, or in some cases even if she has had S. anginosa, she will most probably be attacked with a bad cynanche, which may put on a malignant form, and may even cause death. It may be said that this severe attack arises simply from a large quantity of the virus being absorbed, and is in no way connected with grief; but I have usually noticed these severe attacks to occur in those who have watched most, and have appeared to grieve most. It is very certain that these causes, fatigue, watching, and grief, predispose persons to an attack of typhus, and why not to that of scarlatina?

B. a. δ. The parturient state exercises a most unfavourable influence over the course of the disease; any patient who may be attacked whilst in this condition, rarely recovering from it. I have, unfortunately, at various times, had cases of this kind, and have lost all but two; in one of those which were saved, the fœtus was born covered with the eruption, and after passing through the ordinary stages of the disease, it recovered as well as the mother. The other patient, who recovered, went her full time, whilst in all the fatal cases labour came on prematurely.

B. a. ε. As the kidneys are organs which act a prominent part in excreting the poison of scarlatina from the system, any change that in any way interferes with their functions, must have a bad effect on the progress of the disease. This more especially refers to the fatty degeneration of the kidney, in which the secreting renal cells become loaded with a deposit of fat; to the small indurated and mottled state of the kidney, which results from chronic inflammation; and also to the rarer form of renal diseases in which a deposit of scrophulous matter takes place into the gland. When these organs are thus disorganised, we find that the patient is not only more likely to succumb to the attack, but is also more susceptible to it; but as scarlatina is not very common in persons of advanced age, and as renal disease of these forms are not usual in children, except as a result of scarlatina, this complication rarely exists.

B. a. ζ. As before stated, a person who has suffered from scarlatina, either in the skin, or in the mucous membrane of the alimentary canal, or of the kidney, are not ordinarily liable to a second attack in the same membrane; and, therefore, we might consider that this second attack is not likely to be so fatal as the primary. But this will chiefly depend on the part previously implicated; if the skin only, the ulceration or even the sloughing of the membrane of the fauces, tonsils, &c., may be so severe as to destroy life. Let any one read Fothergill's description of the malignant sore throat during an epidemic of scarlatina, and they will be satisfied of the great danger that exists in this second attack. It is a most frightful disease; and if not actively treated, will quickly destroy the patient. If the virus should not have implicated the kidney—it may do so on any future occasion, and the patient may eventually die from the disorganization induced by it. A case, apparently of this description, has been already detailed, and another has recently came under my observation, when a lady, whose family had suffered severely from scarlatina a few months since, was attacked with fever, loss of appetite, thirst, &c., apparently without any particular disease. After a time she became affected with anasarca, which induced an examination of the urine, and a more accurate examination of her previous history. She then stated, that about three weeks after the scarlatina first appeared in her family, she was seized with feverishness, &c., as above described, with slight lumbar pains and paucity of urine. She also stated, that her urine changed in colour, being at first red, subsequently yellowish with a similar coloured sediment, which it contained still. On making a microscopic examination of the urine, blood and mucous corpuscles, broken epithelium, yellow cells aggregated in rows, and numerous fibrinous cylinders were detected. Her disease was evidently an inflammatory affection of the secretory part of the kidney, induced most probably by exposure to the scarlatina virus.

B. b. α. The history of the present and of former epidemics show, that the poison of scarlatina varies in intensity at different periods, and under different circumstances. Thus, in close confined neighbourhoods, scarlatina not only assumes a bad type, but frequently extends itself in a similar form to individuals who are placed under more favourable circumstances. But we are perhaps scarcely justified in attributing this entirely to the intensity of the poison, without considering its amount, or perhaps even to the poison at all, as the virus of scarlatina maligna does not by any means invariably produce a similar type of the disease in the person infected. We frequently find, that an individual who has been exposed to the infection of S. maligna, and has contracted the disease, may have an attack of S. anginosa, or S. simplex, and occasionally of the cynanche only; whilst, on the other hand, the poison from a person affected with S. anginosa, S. simplex, or even with S. sine eruptione (cutis?) may induce an attack of S. maligna. The variations in the result must, therefore, depend on some peculiarity of constitution in the individual attacked, aided probably by some general or local alterations in the atmosphere. We certainly find that a humid and vitiated condition of the atmosphere exercises considerable influence over the progress and type of all contagious fevers, tending to render them more or less typhoid, more especially when aided by an impoverished diet. Some of the worst and most fatal cases of S. which I ever met with, occurred in a street that was badly drained, the cesspools overflowing and tainting the air in all the houses. At the back of some of the houses was a large open cesspool, into which the refuse from a large currier's was poured; its surface was constantly being broken by bubbles of sulphuretted hydrogen, so that it looked as if rain was falling on it—the stench was horrible. All the cases that survived the eruptive stage of the disorder, were attacked with inflammatory dropsy, inflammation of the serous membranes, or with double pneumonia. Of the latter complication I have seen many cases, nearly all of which have proved fatal, the only successful cases were those in which wine was administered freely at an early period.

B. b. β. The amount of the poison received does not seem to have any very great effect on the result, except that a longer time is required for the development of the symptoms. This depends on the multiplication of the virus within the body, by a kind of fermentation, or rather by a species of catalytic action. When the amount and intensity of the poison absorbed are so great as to cause speedy sinking and death, without, as far as can be detected, any alteration in the tissues of the body, death is evidently induced by the direct action of the poison on the blood, and through it on the nutritive functions of the whole fabric. The merit of clearly pointing out this form of death belongs to Dr. C. Williams ("Principles of Med."), who terms it necræmia, (a) death beginning in the blood. He gives, as instances, the mode of death which results from the bite of the most poisonous serpents, or from the poison of the most malignant form of typhus or cholera, which, by its direct influence on the blood, produces a rapid alteration in its vital and physical properties, and total prostration of the powers of the whole system. He further observes, that if the noxious poison is in smaller quantity, or more diluted, the vital powers re-act against it in various ways, which are shown in the shivering, hot, and sweating stages of ague, in the vomiting and diarrhœa of cholera, &c. These "are instances of the operation of the vital reaction attempting the expulsion of the noxious matter, and of that part of the animal fluids that had been

(a) νεκρός dead, αἷμα blood.

corrupted by it." When the quantity of the poison is smaller, the injurious effect of it may be completely prevented when the living powers are vigorous. "A diarrhœa, a profuse sweat, or a free flow of urine, sometimes carry off the commencing disease. The intestines, the skin, and the kidneys, appear to be the proper emunctories through which the morbid matter is expelled."—2nd edition, p. 467.

There is a question connected with this part of the subject, which is of considerable interest, viz., what is the relation that exists between the amount of the virus absorbed, and the extent of the resulting disease? For my own part, I do not think that any necessary relation exists between them; but rather that the extent of the resulting eruption in the skin, or mucous membranes, or in both, is in proportion to the amount of pabulum in the blood for the re-production of the poison, and the greater or less affinity that exists between the tissue and the poison at the time of its reception within the body. It is very certain, if the poison multiplies itself by a catalytic action, that it can only do so at the expense of certain of the constituents of the blood, and not at the expense of any of the elements of the tissues. The appearance of the eruption at one and the same time, on a large extent of surface, shows that the cause producing the eruption must be correspondingly diffused; and as we can scarcely imagine that a sufficiency of the poison is ordinarily absorbed to produce such extensive effects, we only have the alternative of believing, that it must be multiplied within the body. If then the poison has the power which is ordinarily attributed to it, how is it that the results—the eruption in the skin, &c.—produced by the effort of nature to throw it off, varies so considerably as it does unless the amount of the poison so formed, and the affinity of the tissues for it, also vary.

[To be continued.]

REMARKS ON FUNGUS HÆMATODES.

By J. GORDON BAILEY, Esq., Surgeon, London.

The case, on which the present observations are grounded, possesses some points of very great interest; not because the disease is one of unfrequent occurrence, but because it affords an opportunity for expressing opinions on the nature of a malady about which much uncertainty still prevails. And I quite agree with the remark of Mr. Storks, in a Contemporary, that "Cases of cancerous disease, with their ultimate results faithfully recorded, are, in the present state of our knowledge, of importance, as assisting to form the data upon which the profession must ultimately determine the propriety of surgical operations in malignant affections."

Mrs. G———, Kirby-street, Hatton Garden, aged 35, of Lymphatico nervous temperament, mother of six healthy children, noticed a tumor "growing on her back," at the angle of the right scapula, in the early part of the year 1846; it increased to the size of a closed hand without ulcerating. She consulted a highly respectable and talented surgeon connected with one of the metropolitant hospitals, who advised its removal, and she submitted to the operation at once. The wound healed up nicely; and she went to the country, where she remained some months, till she found the disease returning in its original situation, and she accordingly came to town again for advice, when she was induced a second time to have the tumor removed; this was in June, 1847. The wound healed up completely as before. Again the disease returned, and in precisely the same place. Not wishing to go into the hospital, or to submit to a third operation, she placed herself under my care, January 1st, 1848. The disease was of some duration, and began to extend very rapidly. "It has been growing now" she states, "for more than three months, and burst one month after its last appearance." On examination, it seemed to commence at the angle of the right scapula, and to extend laterally downwards to the posterior-superior spinous-process of the ilium; it measured 29 inches in circumference, and its base was nodulated in several places; those eminences appearing partly dark and partly red, while they yielded to the finger a slight feeling of fluctuation. One by one they gradually softened down, till the whole surface was one large dark slough, black in the centre, and red at the margins, where there was an oozing of blood from the part that was gradually separating itself from the dead portion. There was no enlargement of the axillary glands—tumor in the breast, or other external evidence of the disease being scattered. She cannot recollect ever having got a blow directly over the part, but thinks she once "strained" the shoulder of that side. Her family are all healthy; and even in those of them most advanced in life, there has been no evidence of similar disease. She was married at the age of 20, and has been always regular in her uterine functions. She attributes her present misery to the cruelty and neglect of a husband who deserted her some years back. I candidly told the friends of the patient, that I considered the case as utterly hopeless, and it would only hasten the fatal day by resorting to the knife again. She was seen in consultation with me by Mr. Cholmondely, of Marylebone, who had attended her mother's family for years, and he pronounced the same opinion; so that my principal duty consisted, not in affording her any permanent relief, but in ministering to her comfort by the exhibition of opiates to procure rest, and attention to the state of the bowels; tonics to keep up the appetite, and compensate for the increasing weakness which was caused by the loss of blood.

It is unnecessary in a case like this to record the daily changes which took place. Suffice it to say, they were those which usually attend the closing scene of a painful and loathsome disease. Her life was rendered miserable by the fœtid smell which resulted from the frequent separation of sloughs, which latter were always accompanied by faintings that left her for days in an exhausted state. She survived a much longer time than either could be expected from her weakness, or wished for by those who surrounded her: it was truly distressing to hear her daily importunings to give her something that would close her eyes for ever; she thought it cruel for any one to suffer her misery to be protracted.

Post-mortem.—I was fortunate in getting the permission of the friends to make a *post-mortem* examination of the body. This I did about thirty-six hours after death, assisted by my friends Dr. Victor de Méric and Mr. Joseph Luke. The body was not so much emaciated as might have been expected from her long illness; on the contrary, the thorax and abdomen, especially the latter, was covered by a dense layer of fat. The surface, however, was very pale, owing to the frequent attacks of hœmorrhage which occurred before her death. The first part opened was the thorax, and a most careful examination of the lungs and heart could reveal no trace of the disease in those organs. The base of the lungs was slightly congested, but not more so than is usual from gravitation, as in other dependent parts. The liver was diseased, but not from the presence of any malignant deposit; it was the result of cirrhosis in its first stage. The spleen and kidneys were also healthy, and there was no trace of disease in the intestinal tract, which was examined very carefully. The mesenteric glands were not enlarged; the os uteri was slightly affected, having two or three small points of ulceration, without, however, any induration of the cervix, or other pathological change in the body of the uterus or ovaries. The brain was found in a most healthy condition. On dissecting away the diseased mass from its situation, we were not a little surprised to find its seat so limited. The integuments, areolar tissue, and superficial portion of the muscles appeared to be the parts most principally affected, and it did not seem to have in any way interfered with the motion or functions of the spine. There was no paralysis, or other evidence of pressure, the bladder and rectum having all through performed their functions naturally.

Microscopic Examination.—I am indebted to my friend Dr. Brinton, of King's College, for his kindness in examining a portion of the diseased mass. He says "It consists of vast numbers of cells, imbedded in a mass which has an indistinctly fibrous appearance, with here and there distinct fibres. The quantity of this material is sparing, the cells everywhere preponderating, and appear to constitute the whole bulk in particular parts. They offer considerable variation, both in respect of shape and size; generally, however, they are rather larger than pus corpuscles, and contain a refractile nucleus. Some of them present an appearance often met with in cancerous specimens, where the cell occupies the interior of a fibre at about the middle of its length; others are less elongated; some angular in the interior of the tumor. The cohesion of the fibrous and cellular constituents is very great; but near the ulcerated surface the first of these two elements has almost disappeared, and the cells exist alone, with little attachment of any kind, so that numbers of them are detached from the surface by the slightest pressure, and float about in the field of the microscope. The chief peculiarity, then, that is worthy of notice is, that though the consistence of the mass approaches or even equals that of many scirrous tumours, yet the number, size, and uniformity of the cells, together with the little fibrous matter it contained, would rather place it as fungus hæmatodes. It well illustrates the arbitrary and almost useless nature of the distinctions implied by these names, which only make the extremes of an ever-varying scale."

REMARKS.

Perhaps of all the numerous diseases to which we are exposed, there are none so full of painful interest as those of malignant origin; and this results as much from the frequency of their occurrence as the almost intractable course which they take. The subject of malignant diseases is at the present time most interesting, because there obtains such diversity of opinion as to the propriety, or otherwise, of operation, that, in my opinion, every contribution to the science of surgery on this point must attract the attention and consideration of practitioners.

Two questions may now be asked—

1st. Is the rule absolute, that fungus hæmatodes is never local; and that, together with its external manifestation, it is also seated in the internal viscera?

2nd. Admitting that there are on record exceptions to that rule, are we therefore warranted in advising an operation?

With regard to the first, I am happy in being able to bring one additional case before the profession, of great severity, in which, as was remarked in the account of the *post-mortem*, there was not a single trace of malignant deposit found internally—a circumstance thought to be unusual, but which has happened, I can find, in some other cases. Indeed of late years there has been a disinclination, on the part of many surgeons, to operate for the removal of malignant diseases, owing to an opinion, entertained by some, that it is cruel to remove external parts that are attacked by the disease; believing that, of necessity, those situated internally should be affected in a like manner. And this view of the matter has received the authority of a most distinguished teacher of surgery, Mr. Samuel Cooper. He says,—speaking of the operation,—"The result of such proceedings is also, for the most part, unsuccessful, the disease returning in the same situation, or manifesting itself soon afterwards in others. Experience proclaims this discouraging truth so loudly, that many of the best surgeons now decline to undertake any operation in cases of this description; for, if the attempt fails, the patient is put to unnecessary pain, and his life is abridged by the more rapid and deplorable form in which the disease re-appears. At all events, an operation is only justifiable in the early stages, while the disease is entirely local, if it ever be so—a circumstance very much to be doubted." Again he says:—"Even where one of these operations effectually extirpates the distemper in the limb itself, the patient's entire recovery is always rendered exceedingly uncertain by reason of the viscera, and other deep-seated parts, being fre-

quently affected, at the time of the operation, with the same sort of disease; which state of them, though invisible, is often denoted by a sallow complexion, debility, indigestion, emaciation, and hectic." But with respect to those evidences of the disease being seated internally, the learned Professor appears to be in error; for Dr. Budd holds the opinion, that cancerous cachexia is the result of absorption of the cancerous globules into the general circulation; and the present case would go far to support that opinion.

Dr. Carswell—who has founded his pathological divisions of carcinomatous diseases upon the views of French writers—has introduced a beautiful simplicity into this class of affections. The conception of the genus carcinoma, and the two species schirrhoma and cephaloma, which are the squirrhe and tissue encephaloide of the French, is now very clear. How easily we see this cephaloma, or tissue encephaloide, go over into a very natural fungus variety by the appearance of the ulceration, and clearly assume the name of fungus hæmatodes, from the hæmatoid complication! How much more satisfactory would it be to the mind to seize upon this chain of analogies, than to get confused by all Abernethy's sarcomas! It is very unfortunate that the term fungus hæmatodes should have an entirely different signification on the other side of the Channel; in France it may mean aneurism by anastomosis, or accidental erectile tissue. The great amount of vascularity in the encephaloid growths—the hæmorrhage which followed their being laid open under an erroneous notion of their nature—have deceived some surgeons, and led them to confound such encephaloid tumours with erectile ones.

As matters stand now in England it is very desirable that cancer should be looked upon as the one sole genus from which all the different heterologous growths are but species and varieties, although such a high authority as Mr. Wardrop contends that fungus hæmatodes is of a nature quite different from cancer. Now, the principle feature of interest in this case is the total absence of any carcinomatous deposit in any of the viscera. So that it may be distinctly inferred, that the patient laboured, not under the cancerous diathesis, but that her sallow complexion, her exhaustion, &c., were due to a cancerous cachexia, which, as everybody knows, differs widely from the regular diathesis, depending on a peculiar alteration of the vital fluid. Now, it is well known that the scrofulous, or phthisical diathesis, can hardly be arrested; still, it is equally true, that phthisis in certain cases produces but few tubercles, which are eventually absorbed without getting regenerated. Thus, some cancerous patients have been known to get rid of the morbific cause, and the tumors have disappeared of themselves, or were not reproduced after operation. The great secret is to be able to distinguish the cancerous diathesis, which is a counter indication to operations from that state of marasmus, and debility produced by pain and hæmorrhage. Sabatiei and Lacombe have reported cases where they operated four or five times, and succeeded at last in conquering the disease.

Now, is it not extremely probable, from all the circumstances connected with this case, that a third operation might have put a stop to the further manifestation of the disease; the more so, as the knife has now lost all its terrors, and pain no longer enters into the calculation of the surgeon, when he is weighing the *pros* and *cons* of an operation. These remarks and considerations ought to be received with so much the more indulgence by the profession, as this disease evidently requires every possible investigation, and a careful grouping of cases to arrive at last at a definite solution of this very difficult problem.

I have stated, at the beginning, that the case verifies certain opinions, and invalidates others. First, then, it has often been asserted, that where the disease shows a tendency to re-appear on the same spot, it does not invade the viscera, which fact is here exemplified. Again, Mr. Burns states,—"The growth of medullary tumors near the surface of the body is sometimes preceded by a blow on the part; but, in general, the exciting cause is perfectly obscure, the disease appearing to begin spontaneously, though in connexion with some unknown peculiarity, or modification of the constitution, without which no circumstance would be capable of inducing it. When we see a patient sallow and enfeebled in this disease, such change of the complexion, and the debility manifested, are not to be regarded as *causes*, but only as *effects* of the disease on the general health."—*J. Burns on Inflammation, Vol.* 9.

There was in this case, not the shadow of an exciting cause to be discovered; the only circumstance which might have, in some degree, accounted for the manifestation, was dejection of mind, which, however, is very properly rejected now as an exciting cause. Another position is also verified, namely, that the degeneration of the muscular tissue, around or below the tumour, is a pretty sure sign of the firm hold the disease has taken upon the system. Here the erector spinæ was comparatively healthy, and the great energy of the affection seemed to have been exerted on the alteration of the subcutaneous cellular tissue. A case is reported in the *Dublin Medical Press*, July 5, 1848, by Dr. Bellingham, of St. Vincent's Hospital, where the patient, "William Cummins, aged 58, was admitted in January, 1839, with disease of the left testis. He was operated upon on the 11th of February, 1840. A section being made, it presented the true encephaloid disease. He never received any injury to the part. He died in May, 1847, of an acute attack of bronchitis supervening on an old one." This case is extremely interesting, as going to prove the lengthened period to which life may be protracted after an operation for the removal of a cancerous disease; and is but one of many to be found in the records of surgery, affording an additional proof of the necessity of giving the subject the most serious consideration. If (as happened in the present case) the viscera are thought to be healthy, the patient not too far advanced in years, and the tumour unbroken, are we not justified in recommending an operation. Indeed I have little doubt that had the knife been more freely used in this case, and the whole of the diseased mass been removed, the patient would have survived a much longer period, for in other respects her constitution was, comparatively speaking, unimpaired.

The thick lining of adipose matter which was found to cover the limbs seems to prove, that hectic does not necessarily arrest nutrition, but that the powers of life sink long before assimilation has become quite annulled.

PROGRESS OF MEDICAL SCIENCE.

ACADEMY OF SCIENCES.

Meeting of November 22. M. Ponillet in the Chair.

PLUGGING OF THE VAGINA, IN CASES OF HÆMORRHAGE DURING PREGNANCY.

M. Velpeau reported upon two memoirs furnished upon this subject, to the Academy, by Dr. Miguel and Dr. Stein, who both recommended a new mode of plugging to remedy hæmorrhage in cases of placenta prævia.

M. Stein proposed the introduction into the vagina of a sheep's bladder, armed with a canula through which either air or water might be introduced, so as to distend the bladder, and occasion upon the os uteri, or the inferior aspect of the placenta, a sufficient degree of pressure to arrest the flooding.—M. Velpeau was of opinion, that this hæmostatic measure was preferable to the ordinary mode of plugging, and that the use of the bladder for the purpose, although previously recommended by others, had not been prescribed in the same manner, or for precisely the same object.

M. Miguel's plan differed from that of Dr. Stein, inasmuch that the bladder was introduced, not merely into the vagina, but into the uterus itself. The bladder, fixed upon a probe, was either forced through the placenta, or insinuated between that organ and the walls of the uterus. M. Velpeau also approved of this system, and proposed the publication of M. Miguel's memoir in the collection formed by the Academy.

ACADEMY OF MEDICINE.

Meeting of Oct. 31, and *Nov.* 7, 1848. M. Royer Collard in the Chair.

CHLOROFORM.—M. MALGAIGNE'S REPORT.

(Continued.)

After relating Hannah Greener's case, M. M. mentioned that of Arthur Walker, a druggist's assistant, who, in February, 1848, was found dead, his face lying upon a handkerchief, or apron, imbued with chloroform. The *post-mortem* examination showed the brain in a state of congestion, and the pulmonary organs gorged with blood, which had even collected into two apoplectic nodi. Only 3ij. or 3iij. of chloroform had been inhaled; but it was proved that the mouth and nose had been closely applied to the handkerchief, which rested upon a table.

M. Malgaigne then recorded the case of an American lady, Mrs. M. Simmons, who, having inhaled chloroform for the extraction of teeth, expired during the operation. The most interesting point in the case,—which closely resembled those already noticed,—consisted in the presence of a small quantity of air in the sinuses of the dura mater. The blood was in an extremely fluid state. Another similar case—but in which no *post-mortem* examination was made—occurred at Hyderabad. Another was that of Walter Badger, who, on June 30, 1848, applied to Mr. Robinson for the extraction of a tooth. Chloroform was inhaled, and its effects not appearing sufficiently evident after one minute, Mr. Robinson left his patient to procure some more chloroform: when he returned, after about three quarters of a minute, W. Badger was dead. On dissection, the cerebral membranes were found slightly congested; the heart was pale, and its walls unusually thin, and the liver enormously hypertrophied. The case was quoted in the *Medical Times*, and the writer was of opinion that death ought not to be referred to chloroform. With regard to Dr. Anderson's case, who died some five days after inhalation of chloroform, hæmoptysis having occurred in the interval, dissection showed the presence of an aneurismal sac in the neighbourhood of the heart.

M. Gorre's case, was that of a young lady, who, in consequence of a previous accident, was affected with an abscess in the thigh, which required incision; scarcely had the inhalation begun, when the patient expired. On dissection, the vessels of the brain and envelopes were found to contain air mixed with the blood, and also in the carotid and femoral arteries. With regard to this case, M. Malgaigne concluded, from a long chain of arguments, that death could not be referred by any means to the toxic influence of chloroform; and, that numerous analogous instances might be brought forward of sudden death, concomitant or not with operations, but certainly without the interference of any anæsthetic agent, and in which the *post-mortem* examinations had completely failed in accounting for death; and finally, that in M. Gorre's cases the most plausible explanation consisted in the introduction into the blood-vessels of a considerable amount of air.

M. Robert had also the misfortune of losing a patient under the following circumstances:—

D. S——, aged 24, during the insurrection of June, was wounded in the thigh; a musket-ball had caused a comminuted fracture of the femur. Disarticulation at the hip-joint was resolved upon, but the operation was delayed 48 hours, on account of the collapsed state of the subject. Chloroform was inhaled during four minutes; and its effects having been partly dispelled during the amputation, the inhaler was again resorted to, when the respiration became stertorous, and the patient died. The body was not examined. M. Robert believed, that death was referrible to the inhalation. M. M. could not admit this opinion without debate. In the very unfavourable state of the patient, an operation so important, attended even with the most trifling amount of hæmorrhage, could very readily cause death, and chloroform could, therefore, not be ac-

cused of producing an accident which could so fairly be accounted for otherwise.

A case very similar had taken place in the reporter's own practice. M. Malgaigne had been obliged to remove the arm of a wounded man, at the shoulder-joint. Chloroform had been employed. One incision more was necessary for the extracting of the ball, and the inhaler was again put in requisition. The incision was performed, but it was completed upon a dead body, death having suddenly taken place. The state of the patient was so hopeless before operation, that the idea of accusing chloroform of the fatal issue had never occurred to M. M.; and, in analogous circumstances, few surgeons had not had the misfortune of witnessing similar events.

Altogether, therefore, and of course excluding those cases in which death followed inhalation, after an interval of one or more days, eight cases remained of sudden death attributed to chloroform. One of these cases, that mentioned at the Medical Society of Westminster by Dr. Reid, was simply announced to have taken place, and, in the absence of all detail, must be set aside. In M. Robert's, M. Gorre's case, and in that of W. Badger, besides the inhalation, other causes of death existed, so powerful and so evident, that it would be unfair to lay the responsibility upon chloroform. In the Hyderabad case, the cause of death remained doubtful, no dissection having taken place. Thus, three cases only remained in which the use of chloroform appeared to have been the only—the direct and immediate cause of death.

It would be said, that it was surprising so many sudden deaths should have occurred precisely since anæsthetic agents had been introduced into practice; and although their pernicious influence might not, in each case, be susceptible of demonstration, still their general and deleterious efforts were too evident to be doubted. This objection, said M. Malgaigne, might be considered as extremely important by persons foreign to medical science; but for physicians it lost much of its apparent weight. The number of totally unexpected deaths was very much more considerable than it was generally known. In a space of six years, amongst 450 cases of death which occurred in M. Chomel's wards, at La Charité, 7 were totally unexpected, and the most minute anatomical researches failed in pointing out their cause. If these subjects had inhaled ether or chloroform, would not their deaths have most probably been ascribed to these substances? . . On the other hand, how small the proportion of sudden deaths, if compared to the thousands of cases in which ether or chloroform have been administered! Still, three cases remained, and possibly other instances might have escaped the knowledge of the public. But, although these three cases were so few in number,—experiments on animals had demonstrated that chloroform mixed with air occasions death, by its action only,—without asphyxia,—and, probably, by abolishing nervous influence. But thus employed, the toxic action was so slow in animals that it was not probable it would occur in the human subject when chloroform was administered by a surgeon. Experiments further demonstrated that anæsthetic agents, even when combined with a quantity of air, sufficient for the purposes of respiration, whilst sensibility was unaltered, facilitated asphyxia as soon as unconsciousness had been produced. Walker's case seemed to belong to this class. Finally, experiments showed that with inhalers which do not admit air freely, asphyxia and insensibility progressed together, and the danger was so much the more formidable that it was indicated by no outward symptom. Two cases of this description were in the possession of the public; in one, a handkerchief was used,—in the other, Morton's apparatus, which, requiring the nostrils to be closed, of course interfered with respiration. No doubt, that both these operative methods were daily employed, without occasioning asphyxia. But, in the first place, we should take into account the differences of constitution of the subjects, and, in the second, many surgeons had produced incipient asphyxia, sometimes without being aware of the fact, and often considering it as one of the phenomena attending the actions of the hypnotic agents. M. Malgaigne concluded with the following remarks:—1. Chloroform is a most energetic substance, which may be classed with poisons, and should be only used by experienced persons. 2. It is liable to cause irritation of the air passages, and should be employed with reserve in persons suffering from the lungs or heart. 3. Chloroform possesses a special toxic action, which has been profited by, and is carried as far as the production of insensibility, but which may occasion death if improperly prolonged. 4. Certain modes of exhibition increase the perils inherent to chloroform; thus asphyxia may be brought on, if the anæsthetic vapours are not sufficiently mixed with air, or if respiration is not performed with freedom. 5. All these dangers may be obviated if the surgeon, in the first place, ascertains that the respiratory organs and the circulating system are sound, if a sufficient quantity of air is admitted into the lungs, together with the chloroform; and, finally, if the inhalation is suspended immediately upon the production of unconsciousness.

M. Amussat maintained that although a free ingress of air took place into the lungs at the same time with chloroform vapours the colour of the arterial blood became darker as soon as the insensibility was produced. M. A. observes that the effects of ether or chloroform were to be particularly dreaded when patients had lost much blood.

Meeting adjourned at 5 o'clock p.m.

LOCALISATION OF CUTANEOUS DISEASE. BY DR. C. BARON, JUN., PHYSICIAN OF THE HOSPITALS OF PARIS.

The anatomical classification proposed by M. Baron, and of which we will endeavour to give some idea, has the advantage on one hand of assisting the memory of the student, and on the other of leading the practitioner to a rational mode of treatment. Dr. B. forms ten distinct classes according to the anatomical element of cutaneous disease. The first comprises the disorders of the vascular system,—roseola, measles, scarlatina, erythema, &c. Their principal character consists in redness, and in many of them the presence of feverishness shows the participation of the general circulation in the disturbances of the capillary system of the surface. In scarlatina, according to our author, it is the venous capillary net-work which is inflamed, or rather congested; the venous arterial and lymphatic elements are inflamed in erysipelas; a chronic inflammation of the superficial vascular layers constitutes pemphigus. Their preternatural development is observed in nævus, and if the deeper seated vessels are increased in size the disease acquires the nature of erectile tumors.

2. The papillæ are the organs of cutaneous sensation; their diseases will, therefore, be accompanied by increased or diminished local irritability, and the excessive pruritus of urticaria and prurigo, induce Dr. B. to class them amongst disorders of the papillary system. In elephanthiasis sensation is at first deadened, and the papillæ hypertrophied.

3. Affections of the sudoriferous system are generally observed in young subjects. They are attended usually with feverishness, and either consist in augmented secretion, as in miliaria and sudamina, of inflammation of the sudoriferous organs and capillaries of the vicinity, or in the inflammation of their ducts as in herpes.

4. Maladies of the biennogenic system (secretion of epidermis) are habitually chronic and tenacious; almost in all cases the secretion of epidermis acquires an undue degree of activity; simple congestion constitutes pityriasis, inflammation, eczema, chronic inflammation, and slight induration, psoriasis; perversion of secretion, ichthyosis; increased abundance of secretion, and of hardness of epidermis, bunions, and corns.

The fifth class consists of perversion of functions of the chromatogen apparatus. The sixth is one of the most important, comprising the maladies of the follicular system, *i. e.*, the varieties of acne and impetigo. The seventh class refers to diseases of the organs of secretion of hair, amongst which, to our surprise, we acknowledge we find M. B. places lichen. The eighth class, which scarcely deserves that name, and might perhaps be blended in the fourth, is consecrated to diseases of the organs of secretion of nails. The ninth division has more extent and more importance. It is constituted by maladies of the fibro-cellular texture of the dermis, such as ecthyma, rupia, variola, furunculus; and, finally, the tenth class characterised by the lesion of several anatomical elements of the skin in scabies.

The principle of the classification adopted by Dr. B. is undoubtedly a sound one, and we believe that it is open to fewer objections than the very numerous classifications of the same order of maladies; whilst on the other hand it possesses advantages of which they are deprived.—D. MACCARTHY, Physician to the British Embassy.

Poisoned Wounds.—Bites of the Viper.—From a short notice in the *Bulletin Generale de Therapeutique*, 30th Sept., 1848, we learn that viper-bites are not uncommon in the country around Lyons. MM. Gromin and Miguel, whilst noticing this circumstance to the Medical Society of Lyons, took occasion also to direct the attention of the Society to the occasional dangerous character of these bites, recommending at the same time a treatment which, to them, has appeared the most efficacious. The treatment consists in the opening of the wound by incisions (*debridemens*), the bathing it with volatile alkali, cauterising the wound; but, especially, the surrounding the limb between the wound and the heart with a tight bandage, so firm as to arrest the progress of the swelling, which uniformly happens towards the trunk.

There can be no doubt that under this treatment many persons have recovered from the bites of dangerously venomous serpents; but experience has satisfied us that they are not to be altogether trusted. The excision of the bitten part, instantly, ought to precede all other means; and we feel disposed to consider it a trifling with the life of the individual to neglect this powerful remedy.

Good Effects of Chloroform employed locally in Lumbago.—The *Gazette des Hôpitaux* contains the account of a case in which chloroform was employed by M. Moreau in a case of lumbago. A man, fifty-four years of age, was suddenly seized with lumbago, and he was unable to move, in the slightest degree, the vertebral column. The third day after the attack, chloroform was applied in the following manner:—A pledget of lint, of the size of two hands, was placed upon gummed taffeta of a larger size, in order to maintain the cotton fixed upon the skin. From twenty to thirty grammes of chloroform were poured upon the lint, and immediately applied over the most painful spot. In about five minutes the patient felt a sensation of heat of the skin; the respiration became more easy, he could cough without pain, and returned without difficulty to his bed. As a portion of the anæsthetic vapours was reproduced in the bed, the patient fell into a sleep, and, in this condition, was removed into another bed prepared for him. In an hour afterwards the man rose up, and began to dance for joy, in his chamber, for having recovered so rapidly; and he valued the benefits of this new treatment the more, as, in an attack of lumbago which he suffered in 1815, during two months, every mode of treatment to relieve his sufferings was unavailing. In two other cases the success of the application was equally rapid, but the local action was more energetic: not only more redness was produced, but vesicles formed, which were filled with a sero-purulent liquid. Notwithstanding this energetic action of chloroform on the skin, there ought to be no hesitation in having recourse to this remedy in cases of severe lumbago, where the patients are unable to move: only, to prevent its producing a useless sleep, the lint on which it is placed ought to be covered with taffeta gummed with a thin layer of collodion. The employment of this agglutinative material not only shields the patient from the somniferous vapours, but permits, moreover, a bandage to be passed entirely round him.

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THE MEDICAL TIMES.

SATURDAY, NOVEMBER 25, 1848.

CONDITION OF THE RURAL POPULATION OF VILLAGES.

THE PEST-VILLAGE OF HILTON.

There is nothing in this world so difficult to be got at as Truth. The best intentioned people are but too often defeated in their endeavours to discover "the truth." Of this adage, as old as it is true, the actual existing position of the inhabitants of Hilton form a remarkable proof. But so it was in the affair of the Westminster School-boys. The history of this matter, as a specimen of most London rumours, is well worth tracing. No quarter of the metropolis beats Westminster for moral and physical filth; this had been long known; everybody admitted it; declared it to be a scandalous evil, that matters should be allowed to continue in so sad a condition; but, as it was nobody's business, no one thought of any remedy. But, by-and-by, fever appears in the aristocratic school of Westminster, as it might do in any other school: an inquiry is set on foot, as to its possible cause. Soon a discovery is made, by the *status-quo* men, that somebody is moving; is trying to alter the *status quo* in which they so much delight; the Dean, or some one else, had been clearing cesspools out upon a *new plan:* a common forcing pump and hose are magnified into a new and unheard-of engine, causing alarm: a few gallons of a harmless deodorizing fluid are spoken of as a new compound, causing the spread of fever; the affair is mooted, with all its silly exaggerations, falsehoods, and fallacies, in the House of Commons; the members who know least of the matter are sure to speak first; an inquiry is set on foot; a new element appears in the controversy, complicating the matter so pleasantly that it was a wonder the whole affair did not end in an *émeute*, the calling out the Specials, and a Privy Council held thereon. The matter at last comes to an inquiry, and a Gwydyr-House Report closes the contemptible scene of misapprehension, mistake, error, and falsehood. That Report we may consider in a subsequent Number; in the meantime let us return to Hilton, now unenviably distinguished as "the pest-village."

Mr. G. S. Osborne, a Member of the House of Commons, of the highest respectability and unimpeachable veracity, visits, for some reason or other, the quiet village of Hilton. He is startled with the condition of a portion, at least, of its population. He writes a letter to the Editor of the *Times*, who takes the matter up warmly, and forwards the views of Mr. Osborne by giving to his first letter a powerful leader, in support wholly of Mr. Osborne's views. A second visit to Hilton, by Mr. Osborne, follows; and it is with this second visit that we shall briefly take up the question, or questions, —for there are more than one,—rendering justice, we trust, to all parties.

Our readers ought, perhaps, to be first informed of the locality of Hilton. They might almost, we think, substitute the name of any other village in the kingdom. Hilton is described in the "Gazetteer" as a parish in Wheleway Hundred, Union of Blandford, Orne subdivision, county of Dorset. This, we presume, from its proximity to Malton Abbas, is the village named by Mr. Osborne. In 1831, the population was 635; the poor-rates, in 1838, 368*l.* 13*s.* So far says the "Gazetteer."

Mr. Osborne's energetic letter was replied to by the Rev. Mr. Harper, of Malton Abbas,—producing a rejoinder from the *Times*, in another leader or two; and, lastly, a plain and simple statement from the parish officers, showing that all parties, more or less, had, in their inquiry after truth, laboured under a delusion, that Hilton village, though "deplorably filthy in some respects, was no worse than others, and better than some; that, so long as *fever* did not show itself, nobody said a word about it; but when that formidable and alarming disease appeared, this respectable, that is, the wealthy took alarm, blamed the filth, accused the proprietors of cruelty, neglect, and oppression; ascribed the fever to the filth of the place, and the filth to the proprietors and public officers, bringing Hilton, and Lord Portarlington, and a few clergymen, very prominently before the public. But "the matter could not, of course, end here." Powerful articles are written about the duties of property, and regulations are gravely proposed, which, if carried fully out, would sap the foundation of the great sustaining pillar of social compact in Britain,—namely, "that a man should no longer be permitted to do what he likes with his own." In the mean time, we call the attention of our medical brethren to a significant fact:—no medical name appears in the course of these proceedings. Is it that their opinions were thought not worth asking? Or is it that their opinions might not tally with the theory adopted at Gwydyr-House, that typhus originates in neglected drains and sewers?

The public must hold themselves infinitely obliged to Mr. Osborne and his able supporter, the editor of the *Times*, for bringing the village of Hilton thus prominently before them. The present condition of most villages throughout the country, of the manufacturing towns, of the Metropolis itself, is, no doubt, a scandal to the age. And, although we cannot agree with the theory, that a neglected sewer causes typhus fever, an unflushed drain cholera, an ill-constructed cesspool influenza and scarlet fever; yet sure we are that such abominations cause infinite annoyance to the inhabitants, injuriously affect the morals of the place, destroy infant life, give rise to erysipelas and, perhaps, to dysentery. There are evils enough without the addition of any hypothetical ones. Perhaps, after all, the Nuisance Removal Act is the best measure which could, under all circumstances, have been adopted. Yet, even here, there are difficulties to be contended with, of which many of our readers, including Mr. Osborne himself, and his able supporters in this controversy, have not the slightest idea. These evils originate, we believe, partly in the profound practical ignorance of proprietors generally,—using that word in its largest sense,—partly in the anxiety to obtain from property its utmost value. To satisfy Mr. Osborne and his friends, as well as the public, on this point, we shall take the liberty of briefly describing to him a wealthy village in the south of England, recently built, abounding in villas constructed under the immediate superintendence of wealthy tradesmen and others, seemingly regardless of expense, and with a view solely to elegance and comfort. In the village there are few, if any, poor or destitute people; no lordly proprietor, with his mortgages and middle-men, oppresses the place; the ground is chiefly in the hands of the middle class. Retired naval and military officers reside all around, in houses becoming their rank and fortune. Let any one walk or ride through this beautiful-looking village on a summer-day—stop in it for a few hours—survey the wooded common, of great natural beauty, which backs the village, affording fresh air and healthy exercise to all,—and he will conclude that the village must be a model village. And so we shall find it to be —a model of the ignorance and selfishness of its proprietors. The country is widely open; heaths abound; and the soil, a thin light loam placed on the gravel, and this stratum, of considerable thickness, resting on the London clay, affords a ready escape for rain; so that, under all circumstances of weather, the roads are scarcely ever wet or uncomfortable.

But go into this village, and reside in it for a week or a fortnight, and the whole delusion vanishes. It is soon discovered, by those who know how to observe, that, properly speaking, there is no drainage; that when new drains are made, the contractor lays them down for *one purpose*, and the inhabitants use them *for another;* that is, they are laid down as drains for surface-water, and are converted by the inhabitants, soon afterwards into abominable *sewers*, by connecting their cesspools with them as soon as possible. Thus, what was originally intended for a *drain* becomes in time a filthy *drain-sewer*, and this, in time, a chain of stagnant cesspools, undermining the village, and causing odours insufferable in every house. But the mischief does not stop here. No stream to flush these drain-sewers can be got at; so the evil appears irremediable. The inhabitants use the water of wells, formed generally in their gardens, and sunk in the gravel bed on which the village stands. These wells are, almost without exception, in the vicinity of the cesspools, receiving the full benefit of the infiltration. The water soon becomes unfit for use, if not absolutely poisonous. If the well is so placed as to escape the influence of their own cesspool, it cannot escape the odious infiltrations from all the others placed on a higher level. A naval officer, a practical man, and a person of sound judgment, though himself unacquainted with the consequences of such mal-arrangements, described the whole matter to us in a most graphic way. This gentleman rented a house, or villa; the rent was not under 100*l.* per annum. After a residence of a few months, the well-water became unfit for use; it was, in fact, abominable. He applied to a drain-maker, a funny fellow, who had himself probably made, at various times, all the cesspools around,—this person made what he called a *search*, and found *seven* cesspools surrounding the garden and the well of our friend, from all of which, by the direction of the gravel, infiltrations were continually passing into the well on which a wealthy family depended for fresh water!

Now, this state of things extends nearly over the whole village, and numberless evils besides. But what we particularly urge our readers to remark is this: the village we speak of is not an ancient place, built by our ancestors when universal ignorance prevailed; on the contrary, it is of yesterday's growth, got up, we had almost said, wholly within these ten or fifteen years! This is what we mean to insist on, namely, the deep ignorance displayed, by comparatively wealthy persons, of the proper construction of houses. The diffusion of useful knowledge has been greatly spoken of—the spread of knowledge! But if wealthy trades-

men, nay, even professional men, themselves submit to take houses off the hands of builders, whether for themselves or others, not merely unsuitable for civilized man, but sure to prove the *foci* of disease and death, then it does appear to us, that the spread of useful knowledge must be a delusion and a snare. We pledge ourselves to show Mr. Osborne houses, recently erected in the village we speak of, and whole streets in the neighbouring wealthy modern town, at one time called a fashionable watering-place, houses paying 20*l.* of annual rent, yet so constructed as to be totally uninhabitable. Here lies the real evil, for which a remedy must be sought.

The unusual length to which this Article has already extended forbids our entering practically into the remedial measures proposed by Government and by individuals, against the "spread of filth and disease," which, strange to say, seems to proceed *pari passu* with the diffusion of useful knowledge. The first proposal of the Gwydyr-House Committee was to spread the filth more widely; run it into the brooks, and streams, and tidal rivers; pour it into the sea; flush drains and sewers with plenty of fresh water. This was their first proposal. But, so wild a project could not hold, and they readily admit that the Health of Towns Bill is but an experimental measure. Able engineers and surveyors, employed by the City Commissioners, have objected to any contraction of the City sewers; towns and villages, drawing their supplies of fresh water from the running streams and brooks, have beseeched the Government Commissioners to have some compassion on them, and not to poison the rivers from their sources to the sea; above all, the scientific agriculturist points out that, by this diffusion of the refuse of towns, that material will be thrown into the sea which the land requires. It is on that, and other grounds that we venture to recommend the concentration, rather than the diffusion, both of the knowledge of towns and the refuse of towns. Try individual enterprise. The energy of our countrymen is proverbial. One, if not the greater difficulty to be overcome, next to the villanous construction of houses, is the removal of the refuse of towns to the fields. But here science and practical art step in to remove the difficulty, or, at least, to abate the nuisance.

By individual efforts, if we may so say, the public cannot fail to be greatly benefited; the general health, in so far as existing knowledge admits of, improved; the course and causes of epidemics more accurately investigated; certain endemic diseases checked, or wholly removed; rates, already too heavy, not increased; and the general community left to manage the general health, unrestrained by those centralizations of authority and schemes so strongly disliked by Englishmen.

MILITARY SURGERY—STATE OF THE ARMY MEDICAL DEPARTMENT.

The events which have recently taken place in some of the continental kingdoms have been the means of directing special attention to the nature and treatment of gunshot wounds. The changes in the Government of France have been attended with a large amount of human suffering, as well as the destruction of many lives. The cannon, the musket, the bayonet, and the sword have combined to fill graveyards with the slain and hospitals with the wounded. Science, in these perilous times, has not looked on an idle spectator, but has endeavoured in the midst of the convulsions of nations, and the horrors of war, to deduce truths which shall ameliorate the physical condition of mankind.

It is a happy circumstance for our country that the political storms which have burst over continental nations have been averted from us and our surgeons, therefore, have not had the practical opportunities of their neighbours of studying wounds and injuries inflicted by fire-arms. In this department of the profession civilians have looked for additional instruction to the men upon whom the care of the wounded devolved after the disastrous events of February and June, and to our own professional countrymen who have been attached to the British army. Through the medium of the *Medical Times* the profession has been made extensively acquainted with the practice of military surgeons, both British and foreign, and from their recorded experience we are enabled to learn what progress has been made.

The health of troops in barracks, in camps, and in the field, is a matter of the highest importance, and it is one to which civilized governments have professedly directed much attention. The strength of armies depends materially upon the efficiency of medical staffs, for a general may be endowed with the brilliant talents of a Marlborough or a Wellington,—he may plan a campaign and fight an action with the most consummate skill,—yet his chances of ultimate success are greatly diminished if "the medical department" has been neglected. So well assured was the late Emperor Napoleon of this, that in one of his great battles, when informed that the surgical staff was threatened, he summoned his imperial guards, and heading them himself, charged the enemy.

The principal military surgeons of our country have repeatedly asserted that the number of medical officers attached to our armies in time of warfare is too small to meet fully the exigencies of a battle. The loss to science and the country has in consequence been lamentably great. Mr. Guthrie, who has drawn especial attention to this fact, and who, from his great experience, is well capable of giving an opinion, says, that from the scarcity of medical men in the army, and oftentimes from their age, they generally have been totally unequal to the duties required of them. As might be expected, the sick and wounded, when in great numbers, have been neglected, or they have received so small an amount of attention that many have died, or have been rendered unfit for future service.

During the first two-thirds of the Peninsular war, the army medical department was in the most wretched condition; and it is utterly impossible for us to say what sufferings were entailed upon the soldiers, and what expenses upon the country, from this state of things.

The Great Captain, like his Imperial antagonist, saw the necessity of having efficient surgical aid, and, towards the close of the war, the medical department had become so well organised, that it was equal to the charge of another battle, if one had taken place, when the army moved forward from Toulouse. At Waterloo, however, the old state of things existed, and we cannot avoid quoting Mr. Guthrie's graphic description of the confusion which prevailed amongst the medical officers after the battle had been fought. "Among the assistant-surgeons," he says, "I found some who had served at Toulouse. They were doing many things they should not have done. An amateur myself, and no longer their immediate chief, I was not entitled to signify my disapprobation. It was not, however, necessary; for they all, as I looked at their cases and then at them, expressed the regret they felt that I should see them doing what they knew I could not approve. They urged, in extenuation, that they were overwhelmed with work, and were half dead, and could do no more. Their apologies were offered without one word from me, and merely from their own sense of right and wrong. The greatest efforts were made to obviate this state of things. Flemish surgeons were hired; amateur surgeons flocked over from London; and some of the ablest and most efficient officers of the staff were brought from all quarters. They rectified these evils as far as they could, but nothing could recal the past, nor the irretrievable mischief the insufficient medical care had occasioned on the first few days. The result was, that the great battle of Waterloo, with its host of wounded, and its almost wonderful opportunities, added little to surgical science."

In extenuation of the defective condition of the medical staff, it might have been argued that, from the length of the war, it was impossible to supply the required number of surgeons. But surely this excuse cannot now be made after an almost profound peace of three-and-thirty years. Yet, the army in India is deficiently supplied with surgeons; and they complain that their labours have been overwhelming after the battles that have been recently fought there.

We turn with feelings of deep humility for our profession and our country, to the account published in our columns last week, by the illustrious surgeon whose description of Waterloo we have just quoted, of the wounded of the 29th regiment. Prior to the action at Pheroshuhur it was forbidden that hospital beds and baggage should be removed from Moodkee, and the articles absolutely necessary for the surgeon were only allowed to be taken. The regiment, instead of being furnished as it ought to have been with seventy-six doolies, with six bearers to each, had only twenty-four, with scarcely five bearers to each. This was bad enough; but the surgeon tells us that it would be useless to attempt any description of the scene which the field-hospital presented during and after the battle. The doolies and the water were taken away, while the wounded from other regiments crowded into the tent beseeching assistance. When darkness set in, and candles were lighted, in order that the surgeons might continue their arduous work, orders came for the lights to be extinguished. Soon afterwards, surgeons and patients were commanded to move. Those who could departed from the place; others were left to die on the ground. The surgeon and his wounded, in endeavouring to reach the regiment, had two or three narrow escapes of falling into the enemy's hands. In their march they passed over the dead and wounded, the latter earnestly beseeching assistance. Fifteen poor fellows, left in the trenches, were found afterwards with their throats cut. In the confusion of the night every article of hospital equipment was lost, and the wounded dispersed; and the surgeons were thus left without the possibility of rendering further assistance. For three days the wounded were left on the field without help, and it fell to Mr. Taylor's lot to have under his care 182 men till the 26th of the month following that on which the battle was fought.

It is evident, from these facts, that the medical staff in India is utterly inadequate to the wants of the army. The surgeons are incapable of adequately accomplishing all the work which devolves upon them after a battle. And what are the consequences. Lives are sacrificed which might be saved, human suffering is painfully augmented, and science is retarded in its progress. We continually hear that the profession in England is overstocked. Surely out of this overstocked profession there may be

found many ready to enter the service of the Government or East India Company, and thus render the army medical department as efficient as it ought to be. If volunteers should not come forward in sufficient numbers after the authorities have appealed to the profession, then the question will arise, What is the cause? A searching inquiry ought forthwith to be instituted; and if it should be found that army surgeons have been denied honourable distinctions, navy assistants the rank of gentlemen, then it will behove the Government to act justly to the profession, that the men who suffer from the casualties of war may not afterwards be left either to die without help, or to exist a misery to themselves and a burthen to their country.

THE ILL-USED ASSISTANT-SURGEONS OF THE ROYAL NAVY.

The unhappy condition of the Assistant-Surgeons of the Royal Navy is exciting most powerfully the sympathies of the English people. The *Times* continues to direct attention to this subject, and a letter appears in its pages this day (Thursday), evidently from the pen of one who knows, by experience, what it is to be a naval medical officer. The subject is assuming a very serious aspect. There are no surgical candidates for the honours of the gun-room; and those who are now compelled to occupy this place are becoming so disgusted, that there is a prospect of a wholesale secession of Assistant-Surgeons from the Navy. We do not wonder at this, as the most barefaced injustice has been practised towards them. The Order in Council of 1805, which provided for equality of treatment of medical officers, has never been put into execution. The Government has disregarded the recommendation of the Naval and Military Commission, and has declared, in opposition to the Medical Director General, that the assistants are well treated, and, moreover, there has been manifested a shameful unconcern for promoting their mental improvement, which is intimately associated with the advancement of science and the honour of the profession.

The Correspondent of the *Times* speaks of the navy assistants as "desponding, from a conviction that their professional knowledge is gradually subsiding." How melancholy the declaration! and who will not sympathise with men of highly cultivated minds, shut out from honourable society, and prevented studying the truths of a science which has done more for mankind than any other.

We appeal most earnestly to the profession on behalf of these suffering men. It is our duty to come forward and help them; and we hope that, if the Government should be deaf to the appeal of the profession, that the assistants will, to a man, resign their connexion with the Navy.

THE RIGHT OF EXTRA-URBEM LICENTIATES OF THE APOTHECARIES' SOCIETY TO PRACTISE IN LONDON.—IMPORTANT DECISION IN THE COURT OF COMMON PLEAS.

A trial, possessing considerable interest to the members of the profession, recently took place in the Court of Common Pleas. The plaintiff was a surgeon, who sought to recover the amount of a bill due to him for medicine and attendance. The defendant endeavoured, through counsel, to evade the claim, by pleading, that the plaintiff's certificate from the Apothecaries' Company did not authorise him to practise within ten miles of the city of London. The Judge, in his charge, said, that there was a wide difference between an unqualified practitioner and a gentleman who had passed an examination which tested his efficiency. The question, as to the amount paid for the diploma, was one which did not concern the public, but only the Licentiate and the Apothecaries' Company, and the jury was, therefore, advised to return a verdict for the plaintiff, to the full amount of his claim, which they did accordingly.

This is a decision of great importance to the Licentates of the Hall, as they are now entitled to claim in courts of law debts due to them, whether they have paid for the certificate six or ten pounds. To this privilege we consider they have always been justly entitled, as the examination is the same whether the candidate intends practising in London or the country. The Apothecaries Act, by which the Company became a licensing medical body, was intended to benefit the public, by permitting those only to exercise the healing art who had undergone a regular medical education. The ten guinea certificate possessed no more value as evidence of professional skill than the one for which four guineas less were paid; and we cannot imagine how the Judges of our Courts of Law could have permitted dishonest persons to evade the payment of debts due to their medical attendants, merely because these had not complied with a certain provision of the Act of 1815, which, if the Company felt aggrieved, might be enforced at any time.

The College of Physicians have, as well as the Apothecaries' Society, their extra and intra-urbem licentiates; but, till very recently, the provincial physician was required to pass only a very easy examination compared with that to which he who intended settling within seven miles of the metropolis had to submit. The two diplomas, issued by the College, not only differed in price, but in value as tests of professional ability. The town physician, therefore, had cause for complaint when his territory was invaded by the mere provincial. At the Hall, we believe, the question is never asked before examination whether the candidate intends to have a town or country certificate, this matter being arranged with the Secretary after the paper is signed and sealed. The question ought, therefore, never to have been mooted in courts of law, whether a surgeon had paid the larger or smaller sum for his right to practise. If he could prove himself regularly educated he was entitled to that protection from dishonest persons which the law allows.

There is no doubt that the Apothecaries' Company can punish any of their licentiates who practice within ten miles of London, without paying the fee appointed by the Act. They have no need to fear, however, that the Society will exercise this particular privilege. The days of monopoly are drawing to a close, and the Court of Examiners have too much good sense to trouble any who have received their license. The trial in the Common Pleas will greatly affect the income of the Society, as few candidates will now pay ten guineas for privileges which may be obtained for six.

Dock-Yard Surgeons.—The pruning-knife of the Finance Committee is at work, pairing down the salaries of Dock-yard surgeons, who are to receive a few pounds less per annum. Medical talent and experience is to be driven from the Royal Navy. The experiment of the greatest amount of medical attendance that can be obtained for the smallest sum has been tried at the Unions; and, why should physicians and surgeons, who have passed their whole lives in the service of their country, expect more pay for their arduous duties in a Dock-yard, than what an apothecary's apprentice would perform them for?

REVIEWS.

A Practical Treatise of Chemical Analysis, including Tables for Calculations in Analysis. By H. Rose. Translated from the French, and from the Fourth German Edition. With Notes and Additions. By A. Normandy. In two volumes. Vol. 2. Quantitative. London: W. Tegg and Co., 1849. Pp. 587.

Practical Introduction to H. Rose's Treatise on Chemical Analysis, Illustrated by Synoptic Tables and numerous Formulas. By A. Normandy. London: Tegg and Co., 1849.

The first volume of Rose's masterly Treatise on Chemical Analysis, translated by Dr. Normandy, we noticed some months ago, when it first issued from the press, and we are glad that the translator has now given to English chemists the second volume of this important work.

The Berlin philosopher's profound researches in Chemistry have been highly appreciated both in Europe and America, and it was desirable that his "Practical Treatise" should appear in our own tongue. The French had been before us as translators of this work, and Dr. Normandy avails himself of the valuable notes by Peligot, appended to that edition; in fact, throughout the two English volumes there are marked indications that the translator appealed with as much frequency to the French, as to the German edition. This, by no means affects the value of the work, as the French edition is spiritedly and beautifully executed.

An English edition of Rose's Chemistry appeared in 1831, translated by Griffin. The rapid advances which science has subsequently made, would make that work almost obsolete, if it had not become scarce. Hence it became desirable that a new edition should appear, adapted to the advanced state of chemical knowledge. Dr. Normandy has supplied what was wanting; and, in addition to the scientific notes of Peligot, he has added some of his own, which reflect credit upon him.

In the second volume, (quantitative,) every simple body, except oxygen, is treated of in a separate chapter, and in each we have given the quantitative determination of the simple body; then its combinations with oxygen; and then is shown the means of separating it and its combinations from all the substances which may have been previously treated of, with the simple bodies which produce bases by their union with oxygen; and finally those combinations which manifest acid properties are discussed. Thus, in the first chapter, which treats of potassium, the means are pointed out of determining this metal quantitatively. In the second section, which treats of sodium, not only is the plan given of determining soda quantitatively, but the operator is directed how to proceed, in order to separate this alkali from potash, and to arrive at a knowledge of the respective quantity of the two substances. To illustrate our author, we quote at length the chapter on sodium:—"When sodium is contained in the state of oxysalt or of chloride of sodium, in a liquor which contains no other substance from which it has to be separated, its quantity is determined in the same manner as that of potassium. During the ignition of sulphate of soda, no decrepitation need be apprehended. If there be an excess of sulphuric acid, the acid sulphate of soda, is to be treated, like that of potash, by carbonate of ammonia, in order to convert it into the neutral sulphate. Chloride of sodium, like chloride of potassium, must not be exposed to a strong red heat, because, otherwise a small portion might be volatilised, though the salt is less volatile than the chloride of potassium. If soda is in the state of carbonate of soda, the operation by which its quantity is determined is less difficult than for the corresponding carbonate of potash, because carbonate of soda does not attract moisture so rapidly nor so easily as carbonate of potash. It is advisable, however, to heat the carbonate of soda until it fuses in the counterpoised platinum crucible. When soda is combined with acids, which in the free state are soluble in weak alcohol, it cannot be separated, like potash, by means of chloride of platinum, because the double chloride

of sodium and platinum is soluble in aqueous alcohol. When a liquor contains soda and potash at the same time, the two alkalies may be separated, and their proportions determined exactly in the following manner:—Both salts are converted into chlorides; the solution is evaporated to dryness; the residuum is heated in a counterpoised platinum crucible to incipient redness, and weighed; the salt obtained is then to be mixed with three times and three-fourths its weight of chrystallized soda-chloride of platinum, supposing that it consists altogether of chloride of potassium. The mixture is dissolved in a very small quantity of water, and evaporated almost to dryness, at a very gentle heat in a platinum or in a porcelain capsula; it is next to be treated by alcohol, containing about 60 per cent. of alcohol, which dissolves the chloride of sodium, and the excess of soda chloride of platinum. The potash chloride of platinum, which has formed, remains insoluble. It is collected on a weighed filter, and washed with aqueous alcohol; and lastly, it is dried at a very gentle heat, until, after being weighed several times, the weight remains constant. From the potash chloride of platinum thus obtained, the quantity of chloride of potassium contained in the saline mixture under examination is calculated. As to the quantity of chloride of sodium, it may be found by deducting the weight of the chloride of potassium from that of the two metallic chlorides. Chloride of platinum cannot be used so advantageously as the double chloride of sodium and platinum, because the first of these salts is more liable to be decomposed by alcohol. This method, however, cannot be resorted to for the purpose of determining immediately the quantity of the two alkalies, instead of estimating that of the soda by the loss or deduction from the weight. In such cases, chloride of platinum only can be employed for precipitating the potash. After having added it, the solution is cautiously evaporated almost to dryness: alcohol is then poured upon the residuum, and the potash-chloride of platinum produced is separated by filtering. A little muriatic acid is then added to the filtered liquor; it is diluted with water, and the greater portion of the alcohol is driven off by heating it gently. An excess of solution of chloride of platinum is next added, and a current of sulphuretted hydrogen is carefully passed through the liquor. The sulphuret of platinum thus precipitated, is separated by filtering, and rapidly washed with cold water. The filtered liquid must be evaporated slowly to dryness; and after heating the chloride of sodium obtained to incipient redness, it is weighed. The platinum of the excess of chloride of platinum may be precipitated by other means than by sulphuretted hydrogen. After having separated the potash chloride of platinum by filtering, the liquor is evaporated to dryness, and the residuum sufficiently, but not too strongly, ignited, by which means the platinum of the chloride of platinum is reduced. The ignited mass is treated by water, which dissolves the chloride of sodium, and leaves the reduced platinum, which may be collected on a filter, after which the solution of chloride of sodium is evaporated to dryness. If the potash and soda are in the state of sulphates, they must be converted into chlorides before they can be separated by the process just described. According to Serullas, perchloric acid and some perchlorates may be resorted to as an easy method of separating potash from soda. Perchlorate of potash is very sparingly soluble in water, and altogether insoluble in alcohol; whilst perchlorate of soda is very soluble in both these menstrua, which appears also to be the case with most of the combinations of perchloric acid with the bases. If perchloric acid is added to a solution of salts of potash and soda, for the purpose of separating them from each other, the solution must first be carefully evaporated nearly to dryness, and the residuary mass is treated by alcohol, in which the perchlorate of potash formed is insoluble, but which dissolves the perchlorate of soda formed at the same time, and also the acid which was combined with the two alkalies before treatment. When these two alkalies are contained in an aqueous solution in the state of *metallic chlorides*, perchlorate of silver may be used to separate them from each other in the following manner:—An excess of an aqueous solution of perchlorate of silver is added to that of the metallic chlorides. The chloride of silver thus produced is separated by filtering and washed with hot water, in order to dissolve completely the perchlorate of potash formed. The quantity of chloride of silver obtained is then determined, and from it that of the chlorine which has combined with the alkalisable metals. The liquor filtered from the chloride of silver is evaporated to dryness, and the dry mass is treated by strong alcohol, which dissolves the perchlorate of soda and the excess of perchlorate of silver, but leaves the perchlorate of potash untouched, and which is to be washed with alcohol. This insoluble perchlorate of potash is carefully exposed to a red heat, by which means it is converted, under disengagement of oxygen, into chloride of potassium, the weight of which may be determined, and from which the quantity of the potash may be calculated. The alcoholic solution of the perchlorates of soda and of silver is also evaporated to dryness, the dry residuum is ignited, and by washing, the chloride of sodium produced may be separated from the chloride of silver; the filtered liquid containing the chloride of sodium in solution is cautiously evaporated to dryness in order to obtain the weight of the salt. If the potash and soda which it is intended to separate from each other are in the state of sulphates, perchlorate of baryta is added to the solution of the sulphates of alkalies. After separating the sulphate of baryta which will have formed, and washing it with hot water, the filtered liquid is evaporated to dryness, and the perchlorate of potash is separated by alcohol. The alcoholic solution of the perchlorates of soda and of baryta is evaporated to dryness in order to expel the alcohol. Water is next added, and the baryta is precipitated by sulphuric acid. The liquor filtered from the sulphate of baryta is evaporated to dryness, and the sulphate of soda is then treated by carbonate of ammonia before determining its quantity."

We cannot speak too highly of the volumes, qualitative and quantitative; they ought to be in the library of every person engaged in chemical pursuits.

The "Introduction" exhibits Dr. Normandy as an original author, and not as a translator; and a careful inspection of it enables us to say that it will be found a most useful accompaniment to "Rose's Treatise." The author here explains, in a succinct manner, the rationale of the processes upon which the analysis of compounds is based, and an epitome of the reactions of general and particular bodies on other substances, and upon each other. We cannot but notice the process for detecting the genus of salts, as one of the most excellent that we have known suggested. In reference to this subject, he remarks:—

The genus of a salt may generally be determined by a few simple experiments; and, although we have given before a comprehensive course of operations, by means of which the same object may be attained by a systematical analysis of the substance, yet the following Table may be found useful for the purpose of summarily ascertaining to what generic class a given salt may belong:—

A.

Pour some sulphuric acid upon a portion of the salt under examination, and, if the salt thus treated by sulphuric acid produces an effervescence, a gas being thus disengaged, see B. *a*.

(*a*). The salt may be a

Carbonate, Sesquicarbonate, Bicarbonate, Chlorate, Perchlorate, Nitrate, Nitrite, Sulphite. Hyposulphite, } or a { Chloride, Iodide, Bromide, Fluoride, Cyanide, } or a { Sulphuret, Seleniuret.

If the salt thus treated by sulphuric acid does not effervesce, nor disengage any gas at the ordinary temperature, see . . . . . R. *b*.

(*b*). The salt may be an

Arseniate, Borate, Bromate, Phosphate, Phosphite, Hypophosphite, Silicate, Sulphate, Hyposulphate. Iodate, Oxalate, Seleniate, Selenite.

B.

If the gas disengaged from the salt treated by sulphuric acid (A. *a*.) has colour, see . . C. *c*.

(*c*.) The salt may be a

Chlorate, Nitrite, } or an { Iodide, Bromide.

If the gas evolved from the salt treated by sulphuric acid (A. *a*.) is colourless, see . . P. *d*.

(*d*). The salt may be an

Arsenite, Antimoniate, Antimonite, Carbonate. Bicarbonate, Sesquicarbonate, Chromate, Molybdate, Nitrate, Perchlorate, Sulphite, Hyposulphite, Tantalate, Titanate, Tungstate, Vanadate, } or a { Chloride, Cyanide, Fluoride, Sulphuret, Seleniuret.

C.

If a portion of the salt, being thrown upon ignited charcoal, activate the combustion thereof, more or less, see . . . . . D. *e*.

(*e*). The salt may be a

Chlorate, Nitrite, Seleniate.

If a portion of the salt, being thrown upon ignited charcoal, does not activate the combustion thereof, see . . . . . E. *f*.

(*f*). The salt may be an

Iodide, Bromide.

D.

If the salt, being mixed with a combustible substance, such as sulphur, charcoal, sawdust, phosphorus, &c., detonates violently when struck with a hammer, it is a . . . . . Chlorate. *g*.

If the salt, being mixed with combustible substances, as said above (D. *g*.), and then struck with a hammer, does not detonate, and provided it has emitted ruddy fumes of nitrous acid when treated by sulphuric acid, as said before (B. *c*.), it is a . . . . . Nitrite. *h*.

E.

If the salt, being dissolved, its solution, when treated by aqueous chlorine, deposits a brown powder, which powder emits vapours of a violet colour when heated, it is an . . . . . Iodide. *i*.

If the solution of the salt, being treated by aqueous chlorine, assumes a reddish-yellow colour, but forms no precipitate, and exhales a strong odour of bromine, it is a . . . . . Bromide. *j*.

F.

If the gas disengaged from the salt, which has been treated by sulphuric acid (B. *d*.), is in the shape of white pungent fumes, more or less thick, see G. *k*.

(*k*). The salt may be a

Nitrate, Perchlorate, } or { Chloride, Fluoride.

If the gas disengaged from the salt, treated by sulphuric acid (B. *d*.), is invisible in the air, see J. *l*

(*l*). The salt may be a

Carbonate, Bicarbonate, Sesquicarbonate, Sulphite, Hyposulphite, } or { Cyanide, Seleniuret, Sulphuret.

G.

If the white pungent fumes disengaged from the salt, treated by sulphuric acid (B. *d*.), corrode glass, it is a . . . . . Fluoride. *m*.

If the fumes disengaged from the salt treated by sulphuric acid (B. *d*.), have no action upon glass, see . . . . . H. *n*.

(*n*). The salt may be a

Nitrate, or a Perchlorate, or a Chloride.

H.

If the salt previously mixed with peroxide of manganese is treated in the cold by sulphuric acid, and emits then a greenish-yellow gas, having the odour of chlorine, it is a ..... Chloride *o*.

If the salt, being treated in the same manner as just said, does not disengage chlorine, see.... I. *p*.

p. The salt may be a

Nitrate, or a Perchlorate.

I.

If the salt, previously mixed with copper filings and then treated with sulphuric acid, either in the cold or by a gentle heat, disengages ruddy vapours of nitrous acid, it is a Nitrate..... *q.*

If the salt, treated in the same way, does not disengage ruddy fumes of nitrous acid, is is a ..... Perchlorate. *r.*

J.

If the solution of the salt, being tested by solution of salts of lead, of copper, of mercury, of silver, produces a black precipitate, see ..... K. *s.*

(*s*). The salt may be a
Seleniuret,
or a
Sulphuret.

If the salt tested with these metallic solutions produces no black precipitate, see ..... M. *t.*

(*t*). The salt may be a
Carbonate,
Sesquicarbonate,
Bicarbonate,
Sulphite,
Hyposulphite,
} or a Cyanide.

K.

If the salt forms a colourless solution, which, when treated in that state by acid, disengages a gas of a fetid odour (sulphurretted hydrogen), the solution remaining transparent, see . . . . . L. *u.*

(*u*). The salt may be a
Seleniuret,
or a
Sulphuret.

If the salt forms a solution of a reddish-yellow colour, which disengages sulphuretted hydrogen gas, when treated by an acid, a yellowish-white precipitate of sulphur being at the same time produced, it is a . Sulphuret. *v.* (in maximum of sulphur).

L.

If the salt forms a colourless solution, which, when treated by nitrous acid, or chlorine, deposits a yellowish-white powder of sulphur, it is a
Sulphuret (simple), *w.*

If the solution of the salt, being treated by nitric acid, or by chlorine, does not deposit a yellowish-white powder of sulphur, it contains
Seleniurets. *x.*

M.

If the salt, being treated by a strong acid, emits an odour of bitter almonds, and if its solution produces, with nitrate of silver, a white precipitate insoluble in cold nitric acid, soluble in ammonia, it is a
Cyanide. *y.*

Review of Practical Treatise 3

If the salt, when treated by a powerful acid, does not evolve a gas having the odour of bitter almonds, and if its solution is not precipitated by nitrate of silver, or if the precipitate produced is soluble in cold nitric acid, see . . . . . N. *z.*

(*z*). The salt may be a

Carbonate,	Sulphite,
Sesquicarbonate,	Hyposulphite.
Bicarbonate,	

N.

If the salt, when treated by acids, disengages a gas which extinguishes a lighted taper plunged in it, and which forms a white precipitate with lime-water, see . . . . . O. *a'.*

(*a'*). The salt may be a
Carbonate,
Sesquicarbonate.
Bicarbonate.

If the salt, when treated by acids, disengages a gas which has the odour of burning sulphur, (sulphurous acid), which extinguishes a lighted taper plunged therein, but forms no precipitate with lime-water, see . . . . . Q. *b'.*

(*b'*). The salt may be a
Sulphite,
or a
Hyposulphite.

O.

If the solution of the salt produces a white precipitate when treated by a solution of sulphate of magnesia at the ordinary temperature, it is a . . . . . Carbonate. *c.*

If the solution of the salt produces no precipitate when treated by the solution of sulphate of magnesia at the ordinary temperature, see . . . P. *d'.*

(*d'*). The salt may be a
Bicarbonate,
or a
Sesquicarbonate.

P.

If the solution of the salt is precipitated by lime or baryta-water, or by solutions of salts of lead or of copper with effervescence, it is a....Bicarbonate. *e'.*

If the solution of the salt is precipitated by lime and baryta-water, and by solutions of salts of lead, but does not sensibly effervesce in so doing, it is a ..... Sesquicarbonate. *f'.*

Q.

If the solution of the salt effervesces when treated by acids, and disengages sulphurous acid whilst the solution remains clear, it is a ..... Sulphate. *g'.*

If the solution of the salt, when treated by acids, effervesces, and disengages sulphurous acid, but forms at the same time a yellowish-white deposit of sulphur, it is a .....Hyposulphite. *h'.*

R.

If the salt, being treated by sulphuric acid, has emitted coloured fumes, see .....S. *i'.*

(*i'*). The salt may be a
Bromate,
or an
Iodate.

If the salt, being treated by sulphuric acid, does not evolve coloured fumes, see ..... T. *j'.*

(*j'*). The salt may be an

Antimoniate,	Hypophosphite,
Antimonite,	Seleniate,
Arseniate,	Selenite,
Arsenite,	Silicate,
Borate,	Sulphate,
Chromate,	Hyposulphate,
Molybdate,	Tantalate,
Oxalate,	Titanate,
Phosphate,	Tungstate,
Phosphite,	Vanadate.

S.

If the salt, being treated by sulphuric acid, disengages, with the help of heat, reddish-brown vapours, condensing to a liquid of the same colour, the salt is a . . . . . Bromate. *k'.*

If the salt, being treated by sulphuric acid, disengages, with the help of heat, violet vapours, which condense into small shining greyish spangles, it is an . . . . . Iodate. *l'.*

T.

If the salt, having an alkali for a base, fuses easily into a limpid glass, see . . . . . U. *m'.*

(*m'*). The salt may be an

Arseniate,	Phosphate,
Borate,	Silicate.

If the salt, having an alkali for a base, is either infusible or decomposed by heat, or, if fusible, does not produce a limpid transparent glass, see X. *n'.*

(*n'*.) The salt may be an

Arsenite,	Seleniate,
Antimoniate,	Selenite,
Antimonite,	Hyposulphate,
Chromate,	Sulphate,
Molybdate,	Tantalate,
Oxalate,	Titanate,
Phosphite,	Tungstate,
Hypophosphite,	Vanadate.

The author has adopted a few words which are rather un-English in their sounds, which we hope in a future edition to see corrected.

Memoranda on Poisons. By T. H. TANNER, M.D., late House Physician to King's College Hospital. London: H. Renshaw. 12mo. Pp. 63.

We cannot imagine for what purpose this *little* book has been published, for it is not only small in size, but exhibits a very small amount of toxicological information. The most original part of the volume is that where we are informed a solution of iodide of potassium, added to a small quantity of powdered corrosive sublimate turns it of a *bright scarlet*. We are sorry to be compelled to speak unfavourably of Dr. Tanner as an author; but his memoranda will neither promote his reputation as a physician, nor benefit in the least medical students, for whose use, we suppose, the book is especially intended.

Chart of the Public Health Act. 1848. By C. E. Bernard, C.E.

This sheet will prove exceedingly useful to those who are interested in sanitary reform, as it presents, at a glance, the provisions of the Public Health Act. For the sake of reference, it is here printed in sections, which are distinguished by titles in red letters, while the object of each clause is indicated by a large black letter. Thus, if we wish to refer in the chart to "offensive trades," we find these two words in bold red type, while the heading of the clauses, "consent of the board," and "law of nuisances," are printed in black letters. The chart should be placed in the study of every medical practitioner.

HOSPITAL REPORTS.

MANCHESTER INFIRMARY.

RESECTION OF THE SUPERIOR MAXILLARY AND MOLAR BONES.

By JOSEPH JORDAN, Esq., F.R.C.S., Surgeon to the Manchester Royal Infirmary, &c.

Reported by L. C. ROGERSON, Esq.

James Brown, aged 15, was admitted on the 23rd October, 1848, into the Manchester Infirmary, under the care of Mr. Jordan, having a large tumor in the right side of the upper jaw.

The patient was a healthy and somewhat robust-looking boy, and had during the whole of his life, and also at the time of the operation, enjoyed good general health. About six months ago he fell down stairs, and caught his upper jaw against the iron staple of a door; he immediately afterwards discovered a small soft swelling rise on the part, which has since gradually continued to increase in size and hardness, although from the first it has not caused him the slightest pain. It is now about the size of a large walnut, situated in the right antrum, extending upwards towards the orbital plate of the superior maxillary; backwards, to the palatal plate of the palate bone, and projecting through the palatal plate of the superior maxillary.

After a consultation on the case, and the consent of the patient being obtained, on Friday, the 10th of November, Mr. Jordan performed the operation in the following manner:—

The patient being seated in a chair, and his head supported by one of the surgeons, an incision was made with a sharp-pointed bistoury, in a nearly semi-circular direction from the corner of the mouth to the zygomatic arch, and the flap carefully reflected over the eye. The arteries having been secured, and the lining membrane of the mouth divided, Mr. Jordan used a pair of short cutting forceps; but these he quickly changed for a pair of long-handled ones, over which he had more purchase, and with them succeeded more speedily in cutting through the osseous obstructions. Having adjusted the forceps, he first divided the molar bone at its zygomatic process; secondly, at its orbital process; thirdly, at the nasal process of the maxillar, between the nostril and inner side of the orbit; and, fourthly, with a small saw, separated first the thicker portion of the bone, and afterwards the remainder of the two superior maxillary bones with the forceps. Then, by placing his finger and thumb on each side of the tumor, he forcibly depressed it from its situation, as well as from the floor of the orbit, and with a pair of scissors severed it from its remaining fleshy attachment. The tumor was thus removed with little loss of blood, and in a very short time.

The patient was then carried back to his bed, and a loose bandage having been applied, three or four hours were suffered to elapse before the external parts were drawn together. There having been no secondary hæmorrhage in the interval, they were now brought in contact by three sutures, and dressed with adhesive plaister. The patient was left as comfortable as circumstances permitted.

11th. He has passed a good night, having slept eight or nine hours. Pulse, 90. The tongue has a slight yellow fur on the affected side, but is perfectly clean on the other. There is a slight tumefaction of the right side of the face, and inability to open the eyelid. Complains of no pain, with the exception of an occasional one in the head; nor is his general health at all impaired.

12th. He continues the same as on the previous day, but the pain in the head has entirely left him.

13th. This morning he only complained of a little tenderness of the parts. Pulse, 85 or 86. Feels tolerably well.

14th. No perceptible change has taken place since yesterday.

15th. This morning the dressing was removed, and the wound of the cheek found to be in a great measure healed. The tumid appearance of the face has greatly subsided; he is enabled to open the eye-lid, and his vision not affected. Says he feels quite well. Pulse, 70. The parts evince so ready a disposition to heal, and the case altogether is going on so very favourably, that there seems little fear of his speedy recovery.

The tumor was osseous and cartalaginous, and had it been allowed to remain, so rapid was its growth, I have little doubt it would soon have extended over the whole face, and ejected the eye from its orbit.

HOTEL DIEU OF LYONS.

ANASARCA FOLLOWING CHRONIC DIARRHŒA, TREATED WITH SUCCESS BY DIURETICS.

The kind of anasarca of which the following case is a good example of cure, has received from physicians but little attention. The gradual appearance of the disease in diarrhœa or chronic dysentery, its subsequent rapid advance, its rarity, compared with idiopathic hydropsies, and with those which are coincident with diseases of the heart, of the liver or kidnies, or with cancerous affections, mark particularly the nature of this malady. It is known to be the result of chronic lesions of the digestive tube, and, in certain rare circumstances, of alterations of the intestinal glands. The anasarca is constantly preceded by an abundant diarrhœa, which continues a long time and ultimately exhausts the patient. This species of anasarca is nearly always fatal when it exists in conjunction with chronic diarrhœa. Broussais regarded chronic diarrhœa with anasarca *necessarily* fatal when the intestinal affection existed more than three months from the time when the effusions into the cellular first appeared. A consideration of the state of the digestive organs is of great importance in order to our arriving at a correct prognosis. If there is reason to suppose from the duration, and intensity of the intestinal inflammation, and from the nature of the evacuations, that the mucous membrane is ulcerated, the chances of cure are few indeed. If, however, the patient is young, and of good constitution, if the disease is recent, if it appears to have been produced and maintained more by unfavourable hygienic conditions, which are capable of modification, than by the serious nature of the injury, there is reason to hope that the termination will be favourable.

It is in the inferior extremities that the serous infiltration commences, but it quickly attacks the whole subcutaneous cellular tissue, so that the way these effusions develope themselves, presents with those which are connected with an albuminous state of the urine a striking analogy; but the absence of albumen in the urine leaves no doubt as to the nature of the disease. In the treatment, the state of the intestinal tube completely excludes the employment of hydragogues, but gentle aperients may be oftentimes of service, provided they are employed with considerable restrictions. Diuretics, on the other hand, are always indicated; and there may be advantageously joined with them quinine, and the preparations of iron, if the stomach will bear them. The preparations of opium, on account of their tonic and astringent properties, are serviceable at one time as the means of cure, at another as palliatives. But above all, a strict attention to diet must be paid, which ought to be of one particular kind, because the patients ask incessantly for food, and this, when taken, exerts fresh irritation in the digestive tube. The following case will serve, in some measure, to illustrate these remarks:—

A female from the country, 27 years of age, of lymphatic temperament, and with a constitution injured by privations, entered the hospital on the 15th of June last, under the care of M. Braschet. She had been confined sixteen months previously for the second time. For three months she had been affected with a severe diarrhœa, which had been ushered in by pains in the abdomen and tenesmus. For six weeks the inferior extremities had been œdematous. The abdomen was voluminous from gas and an effused fluid. The appetite was little affected, and digestion was accomplished without difficulty, the patient continuing to eat during the whole time of her illness. A most attentive examination failed to discover any other cause of the œdema than the chronic enteritic affection. The pulse was small and compressible; tongue moist, a little red; there were seven or eight dejections in the course of the day. The œdema had extended from the legs to the trunk and superior extremities; the urine was scanty, colourless, and non-albuminous. M. Braschet prescribed alternatively the following remedies:—Tisanes of linseed and of nitrated pellatory of the wall: tisanes of roots of dog's grass and strawberry plant sweetened with syrup of asparagus. Potion, with tincture of digitalis (15 to 20 drops); frictions over the abdomen and the inferior extremities with an ointment composed of lard, 50 grammes, and of powdered digitalis, 5 grammes. From the 1st to the 20th of July, there was also administered the acetate of potash in doses of 40 centigrammes daily, and the extract of lactuca virosa in a dose of 50 centigrammes. Finally, two purgatives were given: 8 pills of Bellosta on the 7th of July, and 50 grammes of castor oil on the 19th. Under the influence of these means, aided by repose, and a diet composed almost exclusively of rice milk and fresh eggs, the œdema of the inferior extremities and of the other parts rapidly diminished. This amelioration coincided with the cessation of the diarrhœa, whilst the urinary secretion became very abundant. On the 24th of July the patient felt herself sufficiently strong to engage in her usual occupation, and consequently left the hospital cured, after remaining only six days under treatment.

MEDICAL MEN AND INSURANCE OFFICES.

[To the Editor of the Medical Times.]

SIR,—Under the above head, I have just observed a rather lengthy epistle in your Journal of the 28th ult., from "A Regular Subscriber," complaining sadly (and, as I think I shall be able to show, most unjustly) of the illiberality of Insurance Offices, in not allowing a fee to medical men in cases to which he alludes.

Being connected with medicine myself, I have heard of a similar complaint from medical men before; but being also an agent, I have had the opportunity of explaining the matter, which has evidently been misunderstood.

When a person in the country wishes to effect an insurance, he applies either to the agent or direct to the office, and is furnished with a printed proposal, which he fills up, and, according to the general rule, names a friend, and also his usual medical attendant, who, if the office entertain the proposal, have each a list of questions forwarded to them, which they have to return filled up. Now, as it is required that the proposer should furnish the Directors with evidence of the life being eligible for insurance, it of course rests with him to remunerate his medical attendant; but if the latter gentleman be so generous as not to charge his patient, he ought not to accuse the Directors of injustice, for, were it not for this protection, they might be fully occupied in replying to proposals which, appearing favourably represented by the proposer, might be nullified by the medical attendant, who would thus reap a pretty good harvest of fees. But, if the medical attendant be also the medical officer appointed by the office, he is required to give his opinion officially; and, in that case, he is paid the usual fee by the agent, whether the proposal be accepted or declined; so that, in the latter event, the office is at the loss of the fee. In short, for a "labourer to receive his hire" from the office, he must be hired by the office; but if a medical man recommend any business to the office, there is a regular commission allowed him. I trust that what I have stated will tend to appease the wrath of "A Regular Subscriber," and convince him of the inutility of his exertions to "force Insurance offices to render justice" to him and his brethren in general, when they are voluntarily doing the very thing he requires.

I am, Sir, yours respectfully,
Chatham, Nov. 17, 1848. PILULA.

LIBERAL PRACTICE.

[To the Editor of the Medical Times.]

SIR,—A correspondent in your Journal of last Saturday indignantly complains of the reduced fees and the low remuneration which some of our medical brethren are content to accept for their professional services; more especially condemning those who voluntarily contract for a small sum to give their aid, in sickness, to the members of clubs and self-supporting dispensaries. I will not enter into the disputed question whether, for the most part, the working classes can afford more for medical attendance than they are accustomed to pay. I would willingly inquire into the origin of liberal practice, but this practice is of too remote a date. I therefore leave this difficulty also to be settled by others. In the present times we need only reflect, that to establish a good practice, and to earn a reputation for skill, it is essential to our success that we should possess extensive opportunities of studying and treating a multitude of cases. With this view a junior physician in town endeavours to attach himself to a hospital, or at least to a dispensary. Such establishments afford cases or subjects on which he has to work out the principles of science learned in the lecture-room. The infirmary was Dr. Hope's *studio*. The extensive exercise of gifts and acquirements tends eventually to more perfectly qualify us for the discharge of our duties to patients. Great practice necessarily gives self-confidence in prescribing, and self-possession and skill in operating. Persons are the more willing to confide their health, or limbs, or life, to those who are well known to have had the mortal parts of thousands under their medical care, than to some one whose practice is so limited as scarcely to be known. There are zealous practitioners, industrious in their habits, and who ardently desire to cultivate the wide domain of their profession, for the sake of practical results, and to obtain facilities for pathological investigations. It is chiefly for this end that many have sought a semi-public situation, such as medical attendant to a Benefit Club, or the office of surgeon to a district, under the Poor-law Union. We ought not to consider these sources of practice in the light of a pecuniary speculation. We should rather look on a parochial surgeon as placed in an important position for the study of disease. He possesses the most favourable opportunities of testing those discoveries which, one after another, are constantly pressing on his attention. In very few county hospitals do the medical officers receive any emolument for their trouble. I know there are exceptions. The physicians of the Oxford Infirmary receive 20*l.* a year—this is all. But, if there is no direct emolument from all these public appointments, there are indirect advantages accruing from them, for they have proved, when the duties are conscientiously discharged, to be the several paths to success in life. But if the motives in medical pursuits are mercenary, then nothing can be expected but toil and disappointment. There may be much labour, much exertion, and many sacrifices required in working gratuitously. Yet there are few who follow it in a right spirit, who do not reap a rich recompense in the approbation of their own mind. There is a delightful consciousness of being instrumental in diminishing the weight of human misery, which, perhaps, cannot wholly be removed. It is remarkable, that every one who has obtained eminence by enlarging the province of healing science, owes his fame to services rendered in some charitable institution, or to good offices amongst his indigent neighbours.

I am, Sir, your most obedient Servant,
J. P.

MR. ROSS'S LECTURES ON THE CHOLERA.

[To the Editor of the Medical Times.]

SIR,—I have read, with much pleasure and interest, the successive Lectures on Cholera that have appeared in your Journal, evincing, as they do, a remarkable literary facility, combined with great powers of generalization and varied research. I am doubtful, however, whether the learned Lecturer's generalizing faculty may not have carried him too

far beyond the evidence, and induced him to announce as a law what ought to be considered as an indication of a latent general principle. In short, Sir, does the evidence warrant a conclusion so positive as is comprised in the word *law?* It is a question of fact and philosophical induction; and Mr. Ross will see that no induction, however sagacious, can avail to the establishment of a law in physics, unless all the facts are explained by the theory. Mr. Ross does not, as it appears to me, attempt to explain all the facts connected with the propagation of epidemic diseases: he leaves certain knotty points, of great importance, however, as open questions, conceiving that they cannot yet be determined; and I apprehend, therefore, that a phrase implying universality and completeness of explanation cannot be admitted.

By the law of gravitation all the facts connected with the movements of the heavenly bodies are explained; and there is nothing in their movements uncertain or anomalous, because, in fact, the law is universal; but the separate facts in the Tables adduced by Mr. Ross are by no means in accordance with the theoretical law, and do not admit of an explanation by it. How, then, does Mr. Ross's deduction deserve the name of a *law?* Can the theory be made of any practical utility?

Mr. Ross will, I am sure, feel that I have no desire unnecessarily to shake calculations that must have cost him so much thought, or to diminish the value of Lectures which, for their rigid spirit of investigation, are admirable examples of what medical dissertations ought to be, but which they too seldom are.

I am, Sir, your most obedient Servant,
F.R.S.

UNIVERSITY OF LONDON.

SECOND EXAMINATION FOR THE DEGREE OF BACHELOR OF MEDICINE.—1848.

EXAMINERS.

Physiology.—Dr. Carpenter, F.R.S.
Surgery.—Sir Stephen L. Hammick, Bart., and Cæsar H. Hawkins, Esq.
Medicine.—Dr. Billing, F.R.S., and Dr. Tweedy, F.R.S.
Midwifery.—Dr. Rigby.
Forensic Medicine.—W. T. Brande, Esq., F.R.S., Dr. Pereira, F.R.S., and Dr. Rigby.

FIRST DIVISION.

	Medical Schools.
Copeman, A.	Charles King's College.
Drury, Jas. Samuel.	Adjoining St. George's Hosp.
Evans, John Owen.	University College.
Gill, W.	Battershell. King's College.
Habershon, S. O.	Guy's Hospital.
Hassall, Arthur Hill.	Rl. Coll. of Surgs. in Ireland.
Hooper, Daniel	Guy's Hospital.
M'Crea, William	St. George's Hospital.
Palmer, Edward	University College.
Payne, Arthur James	King's College.
Savory, William S.	St. Bartholomew's Hospital.
Shelley, Hubert	Guy's Hospital.
Sibson, Francis	University of Edinburgh.
Wilks, Samuel.	Guy's Hospital.
Woodforde, W. T. G.	University College.

SECOND DIVISION.

Jago, F. W. Pearce.	London Hospital.
Lang, Henry	University College.
Pyper, R. Deverell.	Middlesex Hospital.
Ryan, William.	Middlesex & Jervis St. Hosp.
Sankey, W. H. Oct.	St. Bartholomew's Hospital.

BM. SECOND EXAMINATION. PASS EXAMINATION.—1848.

MONDAY, November 6.—Morning, 10 to 1.

PHYSIOLOGY.

Examiner, Dr. Carpenter.

1. What are the sources of the demand for aliment in the human body; and what are the principal conditions by which that demand is regulated?

2. Enumerate the principal classes of alimentary materials; state the purposes to which they are severally subservient in the economy; mention the chief proximate components of bread, meat, potatoes, milk, rice, and arrow-root; and state the quantity of food ordinarily requisite to maintain the human system in vigorous action.

3. Describe the general plan of the circulation of the blood in articulated and molluscous animals; and state the distinctive peculiarities of the circulating apparatus in fishes, reptiles, birds, and mammals.

4. Describe the structure of the liver in insects and crustacea, and point out the relation between the development of that organ and the energy of the respiratory process; describe the composition of bile, and state what is known of its sources, its uses in the economy, and the effects of its accumulation in the blood.

5. Explain the dependence of the respiratory movements upon the nervous system; describe the position of the respiratory ganglia in articulata, mollusca, and vertebrata; give the rationale of the ordinary and extraordinary movements of respiration in man; and mention what nerves are concerned in each.

6. Describe the principal stages of the development of the nervous centres in the human fœtus; and state how far these correspond with the permanent forms of those organs in the lower animals.

COURT OF COMMON PLEAS.

YOUNG V. GIGER.

This was an action brought by the plaintiff, as a surgeon and apothecary, to recover the amount of his bill, in which the verdict was found for the plaintiff. On a former day a rule *nisi* was obtained by Mr. Parry for a nonsuit, on the ground that the plaintiff, as a practitioner in London, had not a certificate to practise within the Apothecaries' Act, and that he therefore could not recover.

Mr. Serjeant BYLES (with him Mr. Wordsworth) now showed cause. They contended, that as the plaintiff had, under the 14th section of the Apothecaries Act (55th George III., cap. cxciv.), obtained a certificate of fitness to practise, he was entitled to recover. The 19th section of the Act provides that apothecaries obtaining such certificates should pay £10 for a license to practise in the metropolis, and £6 for the same license in the country. The 20th section imposes a penalty for practising without such a certificate; and the 21st section provides that without a certificate of fitness to practise an apothecary cannot recover. The learned counsel contended that the plaintiff had a certificate of fitness, which was given in evidence at the trial; and if the plaintiff had not paid the larger payment to entitle him to practise with it in London, that fact should have been specially pleaded. In support of their argument the learned counsel quoted "Chadwick v. Benning," (R. and M. 306: 2 Car. and P. 100, S. C.)

Mr. PARRY, in support of the rule, urged, that the plaintiff had not such a certificate as the statute required to enable him to practice in "the city of London or the suburbs thereof."

The COURT, in giving judgment, said, the rule for a nonsuit must be discharged. Looking at the scope and intention of the Act of Parliament, the 21st section had been complied with. The object of the statute was, to prevent unfit persons from practising, and the Apothecaries' Company were also to receive certain fees. It was clear that a person who went through the proper examination, and showed that he was skilled in medicine, was entitled to a certificate, absolutely and generally, to practise as an apothecary. There were no different gradations of fitness for practising in the one place or the other; but it was in the gentleman's election to practice in either. If he practised in London he must pay 10*l.*, if in the country 6*l.* This was a fiscal regulation, for the benefit of the Apothecaries' Company, which could be enforced by penalty under the 21st section. But it did not appear to the Court to be within either the letter or spirit of the Act to say, that because he had not paid the larger fee he could not recover his debt incurred in London. The Court were of opinion that the certificate was rightly given in evidence under the plea of the general issue, and the rule for a nonsuit must be discharged.

Rule discharged.

GOSSIP OF THE WEEK.

DEATH OF MR. CALLAWAY.—This gentleman expired at Brighton on the 17th instant, in the 58th year of his age, after a few weeks' illness. Mr. Thomas Callaway was deservedly well-known to the public as a most successful practitioner in surgery, and for many years one of the assistant-surgeons of Guy's Hospital—an appointment he had lately resigned. At the time of his decease he was a member of the Council of the Royal College of Surgeons, before the members of which Institution in the year 1841 he delivered the annual oration in favour of the immortal Hunter. The lamented deceased was twice married, and leaves a family and large body of friends to deplore the loss they have sustained in the death of one of the kindest-hearted members of the profession.

OBITUARY.—On the 11th inst., at the Royal Hospital-fields, Dublin, Dr. Renny, late Director-General and Chief of the Army Medical Department in Ireland, in his 92nd year.—At Shrewsbury, on the 13th ult., Robert Waring Darwin, Esq., M.D., in his 83rd year.—On the 14th inst., at Glenloin, Dumbartonshire, the residence of his brother-in-law, deeply regretted by all who knew him, James Low, Esq., R.N., surgeon of Her Majesty's ship San Josef, the flag ship at Plymouth.—On the 18th inst., at Shadwell, David Burn, surgeon, of fever, after eight days' illness, induced by the performance of his arduous and dangerous duties as officer under the "Nuisances Removal and Diseases Prevention Act, 1848," which appointment he had received but a very short time previously, from the Board of Guardians of the Stepney Union.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 17th inst.:—Messrs. Alfred Horatio Daniell, Newport Pagnell, Buckinghamshire; Charles Tysoe Harvey, Manchester; William Walker Scholefield, Manchester; Charles William Morris, Cheltenham; James Williams, Holywell, Flintshire; William Hewetson, Stanhope, Durham; Robert Barnes, Wigton, Cumberland; Alfred Drew Dunstan, Wadebridge, Cornwall; George Francis Cooper, Brentford; and William Lacy Howard, Cape of Good Hope.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practice, on Thursday, 16th November, 1848:—Thomas Dale, Liverpool; George John Hinnell, Bury St. Edmunds; William Sedgwick; Edward Francis Fussell, Warminster, Wilts; William Britton Pearce, Mevagissey, Cornwall; Edward Austen Steddy, Chatham; Abel Crompton, Crompton, near Oldham, Lancashire.

ROYAL SOCIETY.—It is generally understood, that Mr. Thomas Bell, the distinguished naturalist, will be the successor of Dr. Roget, as Secretary to this Institution. Mr. Bell is deservedly well known to the profession by his numerous contributions to the advancement of natural and general science.

"THE FELLOWSHIP."—The Council of the Royal College of Surgeons, have just given notice of their intention to hold courts for the examinations of candidates desirous of competing for this honour. We understand there are at present but few candidates. The appointed days are on Tuesday and Thursday, December 3rd and 5th.

THE TREASURERSHIP OF GUY'S HOSPITAL.—On Wednesday, the 8th inst., at the annual meeting of the General Court of Governors of this Hospital, Bonamy Dobree, Esq., was elected Treasurer in the room of Benjamin Harrison, Esq., who has resigned that office, after having held it for the long period of fifty-one years. Notwithstanding the retirement of Mr. Harrison, we understand that the Institution will still receive the benefit of his services as a Governor, rendered valuable by his long experience.

SANITARY REFORM AT CHELTENHAM.—At the Meeting of the Guardians of the Town of Cheltenham, on Thursday, November 16th, it was unani-

mously agreed, on the recommendation of the Sanitary Committee, to appoint W. Philpot Brookes, Esq., M.D., and Frederick Hyett, Esq., Medical Inspectors of Nuisances for the town, and to fully carry out the Nuisance Removal Bill in the town of Cheltenham.

WOOLWICH, Nov. 17.—The cholera amongst the convicts has now greatly abated, and there is not one single case of danger at present. The number admitted since the commencement of the disease is 57, of whom 20 died, and 32 have been discharged as recovered. There were five discharged as recovered from twelve o'clock yesterday to twelve o'clock to-day,—the greatest number discharged in one day since its appearance amongst them.

CHOLERA IN GLASGOW.—There have been three new cases and one death since last Saturday. A woman, named Mackay, at Kennedy's Land, Springbank, was also reported as having been seized with the disease, and was suffering greatly. The sub inspector of poor in the district reports the house in which this woman is lying to be in a shameful state for want of cleanliness.

CHOLERA.—Accounts from the Hague, of the 11th, state, that 37 new cases of cholera occurred there on that day; 14 died, 20 recovered. Total number attacked by this disease since its commencement, 525; deaths, 275; recoveries, 97; under treat-ment, 153.

THE *Handelsblad* says, that no patient was received into the cholera hospital either on the 11th or the 12th, nor did any death take place there on those days, and one patient has recovered.

ACCORDING to the Report of the Local Medical Commission of Amsterdam, there occurred in that city, up to the 10th of November, 179 cases of cholera, and 9 deaths.

BRECHIN.—CHOLERA. — One case of Asiatic cholera has occurred here, and terminated fatally, after some ten or twelve hours' illness.

GENERAL BOARD OF HEALTH.—The General Board of Health has published, in Tuesday night's *Gazette*, a third notice containing regulations for the treatment of cholera cases. These are chiefly a repetition of the regulations already published, with respect to medical aid being provided by the parochial authorities, the erection of hospitals, places of refuge for the friends of those attacked, and the adoption of other precautionary measures; and it is ordered by the Board, that "these special orders and regulations shall hereafter take effect without further notification, in all places forthwith upon the actual occurrence of cases of cholera." In all cases, however, in which the orders are acted upon, immediate notice of the fact must be sent to the Board of Health, and the medical officers are required to notify, from time to time, the progress of the epidemic in their respective districts.

CUPPING IN CHINA.—They use two wooden cylinders, which, after having some lighted paper burnt in them, are applied to the intended spot, and upon their removal, after a short time, two bumps, or areolæ will be found formed, which are then punctured with needles, and the mouth applied to the spot to draw the blood. A few tchen, or cash, generally pay the doctor for his services.—*Bingham's China*, Vol. II., page 198.

PHYSIOLOGY OF THE SPINAL MARROW.—In a letter to the Earl of Rosse, the President of the Royal Society, the following lamentable statement is made. It will be said hereafter, "In the early part of the nineteenth century, the *Physiology of the Spinal Marrow* was first detected. The discovery was laid before the Royal Society, and rejected."—*Proh pudor!*

CAUTION TO QUACKS.—Matthew Symes, baker and beer-housekeeper, of Burstock, Dorset, has just been committed to Dorchester Gaol to await his trial at the assizes for the offence of manslaughter. Symes had inoculated two of the children of John Hoare, a dairyman, though repeatedly admonished that he was acting illegally in inoculating children, which he appears to have been in the habit of doing. Both the children died; and it was proved on the inquest, by a medical man, that they had died from small-pox, received through inoculation and not naturally. The Coroner, Mr. Cory, called the attention of the jury to the 3rd and 4th Victoria, cap. xxix, which makes inoculation illegal, and a jury of eighteen respectable persons returned a verdict of "Manslaughter" against Symes.

MORTALITY TABLE.

For the Week ending Saturday, Nov. 18, 1848.

CAUSES OF DEATH.	Total.	Average of Five Autumns.
ALL CAUSES	1,188	1,154
SPECIFIED CAUSES	1,185	1,149
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	386	270
SPORADIC DISEASES :		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	49	52
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	123	127
Diseases of the Lungs, and of the other Organs of Respiration	185	222
Diseases of the Heart and Blood-vessels	30	38
Diseases of the Stomach, Liver, and other Organs of Digestion	73	67
Diseases of the Kidneys, &c.	15	12
Childbirth, Diseases of the Uterus, &c.	8	14
Rheumatism, Diseases of the Bones, Joints, &c.	9	8
Diseases of the Skin, Cellular Tissue, &c.	2	2
Old Age	49	64
Violence, Privation, Cold, and Intemperance	36	32

TO CORRESPONDENTS.

"Scotus."—We have not heard of any improvements in the medical examinations at Oxford and Cambridge.

"Integritas."—We do not doubt the truth of our correspondent's statements, but we cannot promise to insert them.

"Galenus."—They are composed entirely of carbonate of lime.

"Medico-Chirurgus."—The remarks on the proposed establishment of a "College of General Practitioners," are under consideration.

A Correspondent has sent us the "Liverpool Mercury," with the following advertisement:—"Private Medical Advice. Dr. M. Wilkinson, No. 3, York-street, Duke-street, Liverpool, member of the Royal College, licensed Practitioner in Medicine, Author of 'The Closet Companion,' and sixteen years in extensive practice, is the only qualified member of the medical profession in Liverpool who devotes his entire attention to the cure of Secret Diseases, therefore the great advantage to the afflicted from a regular medical man confining his practice to a particular branch of his profession, must be apparent to all. Dr. Wilkinson would advise those who require medical assistance, before paying a fee to any advertising doctor, to ask to see his diploma, as without this document, none are entitled to give either advice or medicine. Dr. Wilkinson having been exclusively engaged in the treatment of these diseases for the last fifteen years, and never failed in a single instance in effecting a cure, has by this means obtained the most perfect knowledge, and is able at once to adopt the best and most skilful treatment in all cases. Dr. Wilkinson has constantly been in the habit of stating at the first interview the amount for which a perfect cure will be made, and a card is given to each patient to that effect. In recent cases a perfect cure is effected in one week, or no charge made for medicine after that period. All letters containing a remittance receive immediate attention." Dr. M. Wilkinson must have a good opinion of himself, if we may judge from his advertisement. We admire the Doctor's benevolence in advising those who require medical assistance, to see the advertiser's diploma before paying a fee. The Doctor would evidently have the public believe he is an enemy to quacks, and in his zeal to put them down, he forgets to tell us what Royal College he is a member of, and what license he possesses to entitle to practice medicine.

"A County Practitioner" asks him if the "Medical Directory" will be published this year, and suggests that the Editors should not rely upon the mere statements of persons who furnish the returns, but should examine the lists of the different licensing medical corporations, to ascertain who are really qualified practitioners. The names of persons not found in any one of these ought to be placed in a list of practitioners whose qualifications are not known.

"Beta."—We cannot offer an opinion on the subject.

"A Constant Reader" has been misinformed.

"M. D., West-end."—The subject shall receive our early attention.

"A Medical Pupil."—There are no fees demanded to see the practice of the Parisian hospitals.

"An Edinburgh Graduate."—The London College of Physicians possesses no such power.

"One who has long Suffered."—We do not prescribe through our columns. Any educated medical practitioner will be able to treat the case successfully.

"Dr. Webb's" note shall be answered next week.

"A Licentiate, 1843."—The Company may bring an action against the offender for the additional sum.

"A Subscriber."—Chloride of boron may be produced by the action of dry chlorine on a mixture of charcoal and boracic acid, heated to redness in a porcelain tube.

"Truth-seeker."—In some severe cases the vomiting is slight, in others it is considerable.

"Anglican."—(1) The French use a variety of tisanes; they are generally composed of an aqueous infusion or decoction of substances of no great activity. (2) Tisane aperitive is made of a decoction of the roots of couch grass, dandelion, strawberry, and sorrel, sweetened with liquorice.

"One in Country Practice," writes us as follows in reference to the working of the Vaccination Act:—"Your last number contains letters on the subject of vaccination. I am not surprised at the increase of small-pox, when we consider the bigotry and prejudice of parents of poor children who form by far the greatest number to be vaccinated, and that these parents are so perfectly careless of everything relating to the child's benefit. But the principal cause why the Act does not work well, is the pay of union medical officers at the rate of 1s. 6d per head; the medical man finds it in consequence not worth his while to ride about the country vaccinating, then another visit to see the case as to its success, for the parents will never bring children to the house of the surgeon. If the Poor-law Commissioners would only pay a remunerating sum per case, it would soon be found, that small-pox was not on the increase,—it ever will be, so long as men are only paid 1s. 6d. per case, and particularly in country practice."

"Dr. Bushman's" letter has been received.

"Inquest."—It matters not what kind of subpœna is served. A surgeon giving evidence before a coroner's court touching the death of the person upon whom an inquest is held, is entitled to the usual fee.

"Clerico-Medicus."—Communication received.

"D. P., Wisbeach."—If a claim has not been constantly kept up, he cannot.

"Medicus" writes:—"One can scarcely look into your invaluable Journal, without reading cases of the many hardships endured by medical men. Some are railing against the Poor-law Commissioners, others against the Guardians and the Government, and others, with equal justice and vehemence, against illegal practice. Now, I would ask, are the members of the medical profession true to their calling? Do they act with unity? Do they practise what they are so anxious to see realized? If I were to answer in the affirmative, how false would be the statement! Then why this out-cry against the very parties whom they willingly assist to crush them in their professional career? And as regards illegal practice, how can it be otherwise, when we reflect, that the whole of our medical institutions are governed by the spirit of monopoly? When any application has been made to Parliament for medical reform, a selfish principle has always been predominant. How, then, can we expect good medical reform? There is hope, however, but that hope is wholly and solely in medical unity. With a long pull, and a strong pull, but especially a pull altogether, we shall weather the storm."

"T. C."—They cannot be obtained separately from the "Medical Times."

"Mr. Thomas Buchanan, Hull."—Communication received.

"Kâf."—A private letter has been sent.

"Alpha," to whom Mr. Lord referred last week, has forwarded to us his name and address.

"Dr. Forbes Winslow, Hammersmith."—We are unable, from press of matter, to notice the communication in the present number.

"Dr Burton, Walsall."—The letter shall be inserted next week.

Letters and Communications have also been received from Scotus; Integritas; Galenus; Medico-Chirurgus; A Correspondent; A County Practitioner; Beta; A Constant Reader; M.D., West-end; A Medical Pupil; An Edinburgh Graduate; One who has long Suffered; Dr. Webb; A Licentiate, 1843; A Subscriber; Truth-seker; Anglican; One in Country Practice; Dr. Bushman; Inquest; Clerico-Medicus; D. J., Wisbeach; Medicus; T. C.; Mr. Thomas Buchanan, Hull; Kâf; Alpha; Dr. Forbes Winslow, Hammersmith; Dr. Burton, Walsall.

ORIGINAL LECTURES.

LECTURES
ON
THE RACES OF MEN.

By ROBERT KNOX, M.D., F.R.S.E.
Lecturer on Anatomy, and Corresponding Member of the French Academy of Medicine.
(Continued from p. 70.)

SLAVONIAN RACE.

Introduction.

The Lectures I have now the honour to submit to the subscribers to the *Medical Times*, to my former students, scattered throughout the world, and to the public generally, were first *publicly* delivered *as Lectures* on the Races of Men, about three years ago, to the Philosophical Society of Newcastle; subsequently, and very soon thereafter, to the Philosophical Society of Birmingham, to the Royal Institution at Manchester, the Athenæum of the same thriving and spirited city, and to the members of the Liverpool Mechanics' Institution. I owe it, in justice to myself, and this Journal in which these my more extended notes of lectures are now being published, to point out to my readers some facts which may, in the general turmoil of those individual cares which press heavily on most Saxon communities, have escaped their notice.

1. A portion of the newspaper press of Newcastle and of Manchester did me the honour to *publish at the time* a sketch of most of my Lectures, being the substance, to a certain extent, of those more extended notes I now re-edit from my original MSS. Thus, then, my opinions—right or wrong—on all the great questions involved in the subject of the Races of Men, have been substantially before the public for at least *three years*. The principles then laid down, and which, my students must be aware, I have advocated for a great many years, as a Physiological lecturer, enabled me to foretell the certain outbreak of the Celtic race, sooner or later, in France and in Ireland; the disunion of the Hiberno-Celt in America from the Anglo-Saxon; the downfall of the Prussian and Austrian monarchies, so soon as their central Governments or Bureaucracies became severely pressed by any political cause, as a *necessary result* of the heterogeneity of their population,—or, in other words, as a consequence of the approaching struggle between the Slavonian and Germanic races, composing these ill-assorted, artificial political unions; lastly, the struggle for supreme power, now approaching between *the four dominant races* of Europe and the world, appeared to me an event so certain, that surprise was repeatedly expressed by me at that time that all men did not foresee it. At what precise period, and in what order these great events might happen, I presumed not to say; satisfied, in my own mind, that they were sure to happen, as certainly or nearly so as a stone and feather obey the laws of gravitation. My own opinion was, that a generation would pass over before the great physiological law and the *hostility of race to race* took full effect. My calculations were made on the absolute power and wealth of the then existing dynasties—the enormous wealth of England—the numerical force of the standing armies of Europe—the apparent total extinction of freedom in the minds of the *German* population of Vienna and Austria generally—the fragmentary condition of central or western Germany, and of the Saxon race generally; the Dane, the Swede, the Hanoverian, the Holsteiner, the Hollander, the Saxon properly so called, crushed down by the manner in which these States have been misgoverned; lastly, I take into account the vast armies of Russia and Prussia; the commercial jealousy of England.

But, in the calculation of *time* I was mistaken; the law or principle of race had taken much deeper root than I could have imagined; and, in fewer months than I had conjectured years, the bubble of 1815 exploded; the question of *civil liberty* was raised in Europe; three of the four great European races put this plain question to each other—Why should we suffer the conventional, accidental tyrannies of a few families, to crush down, under the name of *nationalities*, the civil and religious liberties—the happiness, grandeur, civilization, of the natural races of men? Why should a mere elector of Brandenburg be permitted to lord it over northern Germany, by the employment of Slavonian and Sarmatian bayonets? and why should the house of Hapsburgh—a family but of yesterday—be permitted to extinguish the liberties of thirty-three millions of human beings, solely by the stale trick of employing the Slavonian to guard the German, and the German to crush a dark and brutalized one—the Slavonian? This is the whole question, which I foretold must come within the period of a generation: but mark the singular turn of events;—it surges up in thirty months from the date of my first Lecture, electrifying and stupefying mankind.

2. What I have to complain of is this,—and I make the complaint for the first and last time. When I first brought forward these doctrines and this theory of human nature at Newcastle and Manchester, the great and all-absorbing question of *Race, and its influence* over human affairs, had never, in so far as I know, been mooted,—certainly not with reference to human Governments, civilization, arts and literature, religion; and that most important of all human questions, as deeply affecting the future interests of mankind, namely, the character, disposition, physical and moral development, and actual power, as derived from numbers, concentration, and other accidental causes of the dominant races of Europe. It will be found, I think, on reference to the period of my Lectures, that these great questions were wholly misapprehended by the public Press. Even to highly-educated audiences I found it difficult to place the subject in a clear light, in consequence, I believe, of the insular position and character of Englishmen; the erroneous and contracted views we receive in our educational establishments; and certain deep-rooted, but utterly erroneous theories which have taken firm hold of the English mind. The popular literature of the day; the educational works published by authority; the one-sided political magazines, and the daily Press, gave their whole support, up to the moment I speak of, to a Utopian fatalism, based on certain generalizations which have, in the recent history of events, received their final refutation. When I first lectured, three years ago, it was with the greatest difficulty I could persuade any one, that in this island we have two distinct races of men; that it is the same in Ireland; that the French are a nearly purely *Celtic race*, and not Franks or Germans, as some silly historical theory had asserted; that the Slavonians are a powerful and gifted race, preparing to assert their rights against the German and Sarmatian. So little was all this understood, that I was repeatedly asked, Who are the Slavonians? This is the result of modern education, of national schools, and nationalities. Englishmen had been told so often that the Austrian empire included thirty-three millions of persons, living happily and prosperously under the mild and paternal sway of a monarch who was the Father of his People! And then there was Prussia and the Prussians, equally happy, equally prosperous, under a *liberal despotism!* What I complain of, then, for the first and last time, is, that these facts being [as they are, the Press should have so carefully, with one or two honourable exceptions, avoided any mention of Lectures which must have been well known to them; yet selecting and culling from them ideas, and even expressions, to such an extent, that the recent leaders of some distinguished Journals have been mistaken for copies of Lectures delivered by me some three years ago, now re-published without acknowledgment.

As the facts are now before the public, it might seem querulous on my part, and perhaps unnecessary to revert to this again. The works I complain of are ephemeral, no doubt, but exercise a mighty influence over human affairs; and I naturally feel aggrieved that my fair share in predicting recent events, in developing a theory which explains those events satisfactorily, and which opens up to the mind a new view of human nature, should be refused me by those of my countrymen who wield that engine, whose object should be the discovery of truth, and which, with all its faults, has, of all other human inventions, most benefited humanity.

Before entering on the history of the Slavonian race, I shall take the liberty of making a few remarks on the term Slavonian, assigning some reasons for my viewing the Hungarian (Magyar) as a Slavonian race, or at least more closely affiliated to that race than to any other; my reasons for viewing the Slavonian as perfectly distinct from the German or Saxon; and finally, the reasons inducing me to differ from the learned and candid Arnold, who considered the Slavonian and Sarmatian races as identical.

I have seen but few Hungarians, and trust, therefore, rather to the verbal information I received from my distinguished and estimable friend the late M. Edouards, brother of M. Milne Edouards, whose high position in science is also well known. The information I received from M. Edouards led me to consider the Hungarians as chiefly composed of the Slavonian race.

The people called Huns threatened, under the reign of Valens, the empire of Rome. Previous to that period they had been formidable to that of China. This statement we owe to the prince of all historians, M. Gibbon. But there cannot be the least doubt that the roving armies, which proved so dangerous to China and to Rome, were not composed of one, but several races; and that the combined forces of the Hunnish armies owed their real power as much to their union with the Tartar and Mongolic nations scattered over Asia, as to their own members.

Soon after this, we find them on the Volga and on the borders of Persia, migrating *westward*; but no proof exists of their really having been originally an *eastern* race. Already the people called Gothic, whom, I shall endeavour to prove, are simply Slavonians, occupied the banks of the Volga, where no doubt they had been located for countless ages. Their territory extended from the Baltic to the Euxine, including most of the country on the northern banks of the Danube, from its source to the embouchure, a country they still occupy to a great extent. At this period, it is unquestionable that the armies of the Huns were composed chiefly of Mongols and Tartars, two strongly affiliated races. They were not then really Huns, who formed but a small part of their army. The subversion, then, of the Gothic empire by the Huns was probably nothing more than the transfer of power from one section of the race to another; the body of Slavonian warriors, returning to their original country, under a new name, and aided by the wild and savage tribes of Eastern Europe and of Northern Asia. We have witnessed, in our own times, troops of savage Calmuck Tartars, under the Russ, appear once more in civilized Europe, ever ready to crush civilization and liberty.

In the reign of Theodosius, the successor of Valens, the Gothic race or nation had already been incorporated with the Roman empire. The race seems to have occupied the present territories of the Austrian and Turkish empire precisely where we find the modern Slavonian. The Goth were evidently Slavonians. Already, under Theodosius, we find the Roman army, composed in a great measure of Goths and Huns, under Alaric, penetrating into Italy and to the banks of the Save, to rescue the Western Empire from a usurper.

The rapidity with which the new elements of race was introduced into human history at the period I speak of may be judged of by the fact, that the sanguinary battle between Theodosius and Argolestis for the empire of the west, or, in other words, for Rome, Italy, and the greater portion of Western Europe, was decided, on one hand, by an army composed of Gauls or Germans, and, on the other, of a motley force under Theodosius, in which the Slavonian race altogether predominated. Already, then, to use the silly phrases of modern journalists, Eastern Europe was opposed to Western; the meaning of which is simply this, that the Slavonian race, using the word in its widest acceptation, had crossed the

Danube at all points, and was aiming at the possession of Western Europe.

As I endeavour to survey human history, as presented to us by a narrative of successive events, I have been often struck with the similitude between the past and the present. Nine hundred years ago the Slavonian race held Italy; their leader might occasionally be a Roman Emperor, occasionally a Barbaric Chief. The German and Celtic races oppose them, and a struggle ensues for the mastery of discordant, imbecile Italy. It is the same now. A German Prince rules over the great mass of the Slavonian race; he wishes to be thought a German or Austrian, and would fain persuade mankind that the Austrian Emperor is German. But now the truth comes out, and the descendants of the ancient Goth, Hun, Greek, Croat,—all Slavonians, call on him to give up the delusion; to place himself at the head of the Slavonian race; to expel the German from the Slavonian territory, and rescue their brethren from the thraldom of Turkish and Russian and Prussian despots. Nine hundred years have not affected much the position of the race on the face of the globe; their physical character and their *morale* (making allowance for the modification of a kind of civilization) remain of course as they were a thousand years ago. When Theodosius was hard pressed by the German and Celtic races, he looked for assistance to the Slavonian; into the arms of this race the house of Hapsburgh has been forced to throw itself. Their reluctance to do so implies merely the imbecility of the friends of Hapsburgh, who do not see in the Germans their bitterest enemies, and in the Slavonians their best friends.

It is now, as it was nine hundred years ago, *a war of race;* time modifies merely the exterior or the surface; the interior, the great regulating principles, change not. On the contrary, they are often more strengthened, and I doubt not that the Slavonian race are internally more Slavonian than they were five hundred years ago.

If it be still doubtful, then, to what race the present Magyars belong, one thing is certain, that they are not the Huns of Attila—that is, if the Huns led by him resembled himself. But, be this as it may, the present Hungarians are unquestionably of the Slavonic race in great part, as recent events have shown.

Although convinced that the Goths and Slavonians form but one race, I have preferred the term Slavonic to that of Gothic. The history of the origin of the race in Scandinavia appears to me quite fabulous. Their progress was from the banks of the Volga, the Danube, the Caspian and Black Seas, towards Prussia, Flanders, and Scandinavia. Jornanndes, then, I think, simply reversed their history, in so far as regards their origin and course.

Successive hordes of barbarians have occupied Hungary, but mostly, I think, Slavonians. The Magyars appeared in 889. They were considered to be Turks—a vague term, implying no particular race. Nevertheless, they are designated as the immediate ancestors of the modern Hungarians. That these Magyars, who form but a portion of the Hungarians, differ from the remainder, I am willing to admit. The rest are undoubtedly Slavonians.

Attila was not a Slavonian, but a Calmuck Tarter. During his terrible reign, civilization ceased, and the Slavonians extended from Scandinavia and the Alps, deep into Asia. The result of this on Germany I shall afterwards endeavour to explain; but to suppose that his army, composed of 500,000 fighting men, was really composed of *one race*, would be contrary to all common sense. The actions which decided the fate of the savage east, led by Attila, took place in the plain of Chalons.

In describing the character of the Russ, I have preferred the name of Sarmatian to that of Russ, although I believe that the name of Muscovite would better classify the modern Russ, and distinguish him from all other races. That distinguished and candid scholar, Dr. Arnold, has unwittingly, I think, confounded the Sarmatian or Muscovite race with the Slavonian. This mistake is the more singular, that the races present so many physical and moral differences.

Towards the close of his researches, and of his career, Dr. Arnold seems to have become aware that the altered form of human society which followed the destruction of the Roman power, was caused not so much by the decline and fall of the Roman empire, as by the appearance on the stage of the world of new races of men. The passage in which he speaks of this is sufficiently remarkable to merit especial notice.

"And that this element is an important one, cannot be doubted for an instant. Our English race is the German race; for though our Norman fathers had learned to speak a stranger's language, yet in blood, as we know, they were the Saxon's brethren: both alike belong to the Teutonic or German stock.

"Now, the importance of this stock is plain from this, that its intermixture with the Celtic and Roman races at the fall of the Western empire has changed the whole face of Europe. It is doubly remarkable, because the other elements of modern history are derived from the ancient world. If we consider the Roman empire in the fourth century of the Christian era, we shall find in it Christianity, we shall find in it all the intellectual treasures of Greece, all the social and political wisdom of Rome. What was not there, was simply the German race, and the peculiar qualities which characterize it. This one addition was of such power, that it changed the character of the whole mass: the peculiar stamp of the Middle Ages is undoubtedly German; the change manifested in the last three centuries has been owing to the revival of the older elements with greater power, so that the German element has been less manifestly predominant. But that element still preserves its force, and is felt for good or for evil in almost every country of the civilized world.

"We will pause for a moment to observe over how large a portion of the earth this influence is now extended. It affects, more or less, the whole west of Europe, from the head of the Gulf of Bothnia to the most southern promontory of Sicily, from the Oder and the Adriatic to the Hebrides and to Lisbon.

"It is true that the language spoken over a large portion of this space is not predominantly German; but even in France, and Italy, and Spain, the influence of the Franks, Burgundians, Visigoths, Astrogoths, and Lombards, while it has coloured even the language, has, in blood and institutions, left its mark legibly and indelibly.

"Germany, the Low Countries, Switzerland for the most part, Denmark, Norway, and Sweden, and our own islands, are all in language, in blood, and in institutions, German most decidedly.

"But all South America is peopled with Spaniards and Portuguese; all North America, and all Australia, with Englishmen. I say nothing of the prospects and influence of the German race in Africa and in India; it is enough to say that half of Europe, and all America and Australia, are German more or less completely, in race, in language, or in institutions, or in all.

"Modern history, then, differs from ancient history in this, that while it preserves the elements of ancient history undestroyed, it has added others to them; and these, as we have seen, elements of no common power.

"But the German race is not the only one which has been thus added; the Slavonian race is another new element, which has overrun the east of Europe, as the German has overrun the west.

"And when we consider that the Slavonian race wields the mighty empire of Russia, we may believe that its future influence on the condition of Europe, and of the world, may be far greater than that which it exercises now."

The observations just quoted, made by Dr. Arnold, a very few years ago, prove, that on the mind of this distinguished scholar the influence of race in human affairs,—that is of physical causes, had at last forced themselves, in despite of the trammels of book learning and well regulated courses of study.

The perusal of Niebuhr contributed, no doubt, to produce this result; and the elevated transcendental character of the so-called German philosophy; its utter dissemblance to the effete theories of Greece and Rome; the obvious influence of some deep unseen cause, *which could only be physical*, could not but influence Dr. Arnold's reflecting, truth-loving mind.

But if the general principle, as laid down by Dr. Arnold, be correct, and this I, more especially, never doubted, having been led to the same general conclusion nearly thirty years ago, his details seem to me open to great objections. I have ventured to sum up here a few of these. There is nothing in history warranting us to suppose that there ever existed an extended *Roman Race*. The Roman Empire and Republic were a mere military despotism, such as Napoleon endeavoured to establish in Europe; Alexander in Asia; Britain in India.

"The intermixture with the true German or Saxon stock with the Keltir and so called Roman races," to which Dr. Arnold ascribes so important results, is a mere delusion. No such intermixture ever took place. The races are now as distinct as they ever were. The Celtic and Germanic races are, moreover, quite distinct. The German race *never* overran Western Europe.

Out of this intermixture, Dr. Arnold seems to think, arose the present German race or element. This also is a great error. That central and southern Germany shows strong marks of admixture with other races, I admit; but there cannot be a doubt that the admixture has taken place chiefly with the Slavonian. To this admixture—or, to speak more philosophically, to the introduction of the *Slavonic element into modern Germany, I ascribe the origin of modern German philosophy, art, and literature.* I am quite sensible how keenly this opinion will be disputed, and, if possible, contravented, by the northern German, the Pruss; but I do not fear making good my point in the ensuing lecture. If modern German literature and philosophy were of Saxon or pure Germanic origin, why should it differ so widely from the literature of England, Holland, and Scandinavia, where the purest Saxon blood prevails? and if it partook of the Celtic element, why should it be the very antithesis of the Celtic mind?

Again: the northern German—the so-called Pruss—besides a certain admixture with the Slavonian, partakes largely, no doubt, of Sarmatian, or Muscovite blood. Nevertheless, all these races will and must separate; such are the eternal laws of nature. Their total disunion very nearly happened at the Reformation, when Gustavus Adolphus led the German race against the Imperialists; that is, against the Slavonian race, headed by a petty German duke. His death prevented probably the rising of the German race as one against their oppressors, the Muscovite, the Slavonic, and the tyrants who lord it over them.

It is a mistake in Dr. Arnold, which any traveller could rectify, to say, that the Slavonian race "wields the mighty empire of Russia." The true Muscovite and the Slavonian form distinct races of men, differing widely from each other.

The events of the last six months startle merely those who have not thought deeply on all these points. I am still of the opinion that they have been precipitated by the continued misrule of the continental Governments. This roused the terrible spirit of the Gael, and once more bristled the Boulevards with bayonets. Then burst forth the demand for German unity,—the most formidable demand ever made in Europe. It comes from a race—the Saxon race—which, if united, could command it instantaneously. But they are not so; the best blood of their race—the Hollander, the Dane, the Swede, the Saxon, properly so called—being still under despotic Governments. Still the time must come, when the true democrat, the German—the only real democrat in the world, call him by what name you will,—Dane, Swede, Anglo-Saxon, Englishman, Dutchman,—will sweep away the remains of feudalism, of Norman rule, and of Slavonian tyranny, and establish in Central Europe new modes of government, on which must ultimately depend the future happiness and civilization of mankind.

In conclusion, I have sometimes thought that another race besides the primitive ones, which, no doubt, occupied both banks of the Rhine long before the historic period, there may have existed

mother and a distinct race of men, neither Saxon nor Slavonic, but a natural, intermediate race. Were this proved, it would explain away many difficulties in the history of the German mind. Such a race would stand between the Scandinavian, or true Saxon race, and the Slavonian. But, not having travelled through these countries, I hesitate in offering any opinion: Niebuhr felt the difficulty also, but he could not explain it. I shall re-consider the subject, in a future Lecture, with all the attention it merits.

LECTURES ON THE ASIATIC CHOLERA.

By GEORGE ROSS, Esq., Surgeon to the Western City Dispensary, and Author of "Papers on Typhus Fever," and "Essays on the Processes of Digestion and Nutrition."

ON PREVENTIVE AND GENERAL SANITARY MEASURES.

The most important part of the *cure* of cholera is its *prevention*. Many axioms have contained less truth with a greater appearance of it. I have shown, I think, as we have advanced, step by step, in our investigations of this mysterious epidemic, that it is aggravated by local causes, by irregular habits, and unwholesome food. We will omit from consideration at the present moment the probability that half of those who died, were the victims of injudicious medical treatment; and precisely that kind of treatment that the General Board of Health has recently recommended for adoption.

Much has been done of late towards the sanitary improvements of our large towns, by awakening public opinion—by the labours of Committees of the House of Commons—by Commissions and all their machinery of investigation; and perhaps one of the most important results of fifteen years agitation and Legislation, is a little Act amended from a former one for the prevention of nuisances. This unconsidered Act is the most practical measure of the last Parliament: it is sanitary legislation in a nut-shell, and is the more useful, since it is through its means that a medical man is associated, or rather pinned on to the Board of Health. Although this Board is not what the profession could desire, or will support, and this the Board will be quick to discover, yet it may be made a most valuable institution to the country. I would rather approve than blame. It is unwise to hunt down new powers before they have had time to show their efficiency; but we cannot expect much from a non-medical Board, and if we do not get much we shall not be disappointed. It will soon be perceived that a Board of Health is truly a medical Board; that all other sciences ministerial to health must necessarily be subsidiary to medicine, and applied under its instructions; and as this relation to medical science is drawn closer by the operations of the Board, the folly and injustice of placing the exercise of medical functions in the hands of laymen will be so glaringly apparent, that the good sense of the public will rectify the anomaly. The Board, as now constituted, is, on medical matters, entirely irresponsible. Right, it gets no credit; wrong, it suffers no disgrace.

Its acts, however, demand the closest examination, and, if need be, fair and candid criticism, inasmuch as the welfare of the public depends, to a considerable extent, on the bias which this Board, through its orders and proclamations, may give to the public mind. There were certain points, in one of the earlier orders of the Board, respecting the measures to be adopted for the prevention of an attack of cholera, and for the relief of sufferers under the malady, which appeared to err, from too hot a desire, on the part of the Board, to guard the public against particular imprudences, and to lay down exact rules for the governance of every individual. Physiology will not tolerate this meddlesomeness, even though it may appear to be offered with the most philanthropic intentions.

When the Board of Health told the public to refrain, with a religious punctiliousness, from salted meats, and to hold all fruit and vegetables in abhorrence, it did its best, doubtless with the most charitable feelings, to kill of starvation all those unhappy persons whom it was anxious to preserve from cholera. Deprive the poor man of his salt herring and bacon, his turnips and cabbage, and the fruits of the season, and what do you leave him? Bread and beef, it is true, but will you give him the money to buy them? The food these poor persons are required to abstain from is precisely that on which they live, and on which only they can afford to live,—they must, therefore, either pine away on half diet, or obtaining the prescribed aliment, abuse their digestive organs with a description of food to which they are unaccustomed, and thus inevitably bring on indigestion, diarrhœa, febrile disorder, scurvy, and a train of evils that would predispose them to the reception of the epidemic. Every man should eat and drink what experience has informed him is necessary to his health and agrees with his stomach, avoiding only what he knows or believes would be be prejudicial. The College of Physicians has enunciated this simple rule, which is as consonant with common sense as with medical science. Whoever lives for a week upon a very simple diet, however highly nutritious in itself, to which his stomach is unused, will feel its injurious results, by the end of that time, breaking his health. Persons in town who live much at coffee-houses, and content themselves with bread and chops, are frequently the victims of indigestion, and I am told that the proprietors of these houses, where there are regular customers, find it necessary to vary the routine dietary with joints and vegetables, once or twice in the week, as the stomachs of their guests take a disgust at chops and steaks too long continued. This might be expected.

I have made experiments on my own person in reference to the influence of diet, and know that an individual accustomed to a mixed diet, cannot retain his health for many weeks, if he be limited to any particular description of food. I have related these experiments in my papers on digestion and nutrition, published in the *Lancet*; and it is not, therefore, necessary to recapitulate them in this place.

The simple rule for the regulation of diet, is to take such nutritious food as ordinarily agrees with the stomach, and to *mix* the diet rather more than less than usual, care being always had, that indigestible substances are avoided. The quackery of dietetics often does immense harm.

The other two essentials to good health, are pure air and fresh water. Neither of these *desiderata* are enjoyed by the inhabitants of this metropolis of the quality and in the degree which is absolutely necessary for the preservation of their health. The moneyocracy of this great city, whose Bible, in the words of Burke, is their ledger, whose temple is their counting-house, and whose God is Mammon, have neglected the duties of property, and been deaf to the claims and cries of human suffering, to observe with a more concentrated zeal the ritual of an abject, enslaving, and corrupt commercial idolatry. Millions of pounds are given away annually for charitable purposes, for the extension of education, for the repression of vice, for the propagation of religious creeds—nay, for objects not so honourable as these—for breeding dogs for the chase, and horses for the turf, for training puppies and feeding pheasants, for the promotion of the humane and fraternal science of man-killing, and for the pensioning of lazy mendicant refugee patriots; and whilst, in all these various modes, money is lavished with a glorious liberality, almost royal, we permit the poor and helpless to perish on our very thresholds, and under our eyes, of consumption, fever, cholera, and many other diseases, caused and aggravated by evils that a little well-directed charity would readily remove.

But there is no time for these things! Ay, but there is plenty of time to luxuriate in the hospitality of the Mansion House, although it may be some famishing Lazarus, in the adjoining street, claims, unanswered, five minutes' attention to the miserable garret in which your absorbing pursuit of riches has condemned him to pine of disease, and find an early tomb. Want of time begets want of thought, and want of thought want of knowledge; but the end of this detestable isolation of classes, and interception of sympathies is come; the poor will be cared of, and they must, for they are beginning, in this respect, to care for themselves. Several applications have been made to me, of late, by poor persons, to interfere to prevent the continuance of certain nuisances which affect the health of their families; and now that the poor, the intelligent poor, and the reading and thinking artizan, are becoming acquainted with the absolute importance of proper sanitary regulations for the preservation of health and the maintenance of domestic comfort, we may assure ourselves that their emancipation from the thraldom of uncleanly habits, and disgusting domiciliary filth, will soon be achieved.

Air and water are the two great elements of health. Within a few moments' walk of my house is a mass of physical loathsomeness and moral putridity, unsurpassed in any metropolis in Europe. Families are herded and packed together in such a manner in a single house, that it is difficult to conceive how they escape asphyxiation. The air of the rooms is hot, close, and fœtid, being loaded with animal exhalations; the passages are dark and narrow, requiring almost the instinct of a red Indian to explore their devious windings; the privies are, in some instances, immediately under the sitting and sleeping rooms, which, separated only by a loose flooring from the Stygian realms beneath, are filled with the sickening effluvia. The rooms themselves have often only a single small window, situated on the same side as the doorway, so that the farther end of the apartment is in the regions of outer darkness. The architect who constructed these poison-combs has succeeded to perfection in exemplifying his admirable ingenuity in contriving the most effectual arrangement for shuting out the light and air. The washing of the linen of a large family, and sometimes, also, where the poor wife is more than usually industrious, of other families, is conducted in this den, and when the steam from the wash-tub is floating through the apartment, there is the choicest combination of fœtid odours and putrifying elements that could be possibly brewed up and distilled for the contamination of the health of the surrounding vicinage. The houses are built back to back, and the courts end in a *cul-de-sac*, so that there is no possibility of ventilation, and the beams of the cheering vivifying sun never enter. Hence the inhabitants are pale, weak, and emaciated; the children die of marasmus, glandular affections, and low fevers. More than half of those who perish under five years of age are the victims of those malarrangements, and ought not to have died if these localities were only of average cleanliness. The parents are troubled with dyspepsia, gastric fever, hemicrania, and vertigo; they pine away of consumption, and are cut off in the prime of manhood, by typhus fever, erysipelitous inflammations, and dropsy. Air is what they want—pure, wholesome air; and thousands of them, from the hour of their birth to the day of their death, have never known this natural blessing. They are murdered by civilization.

The want of proper ventilation is a great evil in metropolitan life. If this important requisite could be obtained, the power of the various contaminating materials would be so much reduced as to exert but a trifling influence over the health. It is the duty of the Legislature to take care that the houses for the residence of the labouring classes are habitable that is to say, adapted for the maintenance, with ordinary attention on their own part, of their health and domestic comforts. These wretched rookeries are not habitable now;—whilst they exclude the pure air and the light, they let in the rain and the wind, and become nests of filth and nurseries of disease. Too many persons are crowded together in one room; thus the atmosphere becomes contaminated with animal effluvia, is robbed of its natural quantity of oxygen, surcharged with carbonic acid gas, and the walls reek with putrifying exudations. The Government ought to provide that not more than a specific number of persons should live in a specific cubic area, and thus stand between that avaricious lust of gold which would coin blood to drachmas, and the perishing child of indigence, who is the victim of ignorance and helplessness on

the one hand, and a relentless greed on the other. Is the industrious mechanic to be treated worse than a convicted felon? Or is it his privilege to rot of fever in the vigour of his days, because he lives in the land of liberty, is a freeman, and has a perfect right to violate, in his own person all the laws of nature, for which, in the long run, his life pays the penalty, provided he do not infringe by the least tittle the law of the land? Alas! the age is in want of a new Pentateuch!

The most penicious nuisance in this metropolis, and the darkest blot on the character of the Corporation of London, is most undoubtedly the practice of slaughtering cattle in the midst of the city. At the back of Bear-alley, leading out of Farringdon-street, is a range of these foul murder-dens. The worst cattle in Smithfield—the old, diseased, and dying, are driven here to be felled, and the tumult in the neighbourhood, on the days of the grand civic *battues*, is alarming to all wayfarers. The refuse blood and offal flow through a sewer that intersects the street, and the stench rising out of the gulley-holes is on some occasions most loathsome and insufferable. I need not say, that the houses under and adjacent to which the drain runs, are mere poison-combs. What deaths have I not witnessed in consequence of the proximity of these slaughter-houses! Smithfield market is in every way an abomination; and, notwithstanding the gross evils that spring from it, and are connected with it, the Corporation is resolved to maintain it in all its full-blown infamy, for the sake of a paltry four or five thousand pounds a year profit, which it derives from the tolls. A few salesmen, and half a dozen money-takers, through their influence in the Corporation, managed to pervert the instincts of natural justice in that body,—blind it even to its true prospective interests, without even assuring any demonstrable benefit to themselves. But men do not like change; they prefer to cling, like bats, to the old walls, though they may be falling about their ears. Shall this system continue? I wot not.

Country-killed meat is far more delicate in flavour than that killed in London, and is in higher demand among the respectable classes of the community; but the butchers tell us that the poor prefer the high-coloured meat killed in London,—so heightened in colour from the effects of long and exhausting travel,—and, therefore, that it is expedient that the slaughter of cattle in the heart of this populous city should be continued. This is very absurd, and very cruel! Again, they tell us, that, unless the cattle were killed in London, the market could not be regulated; that a great quantity of meat would be spoiled when the demand was slow, and thus increase the price; whereas, by the present system, the cattle can be kept alive, and only put to the knife when they are wanted. Indeed, worthy butchers! do you suppose that the love of gold would so far neglect its interests as to fail to make the necessary arrangements under the new order of things? Could not the genius of trade, that regulates every other branch of commerce, regulate the shambles? Are there no electric telegraphs to enable you to communicate with any country beast or carcase-market in less than five minutes, and are there no railways to bring a supply to London in two or three hours? A suburban butcher might obtain his meat more readily from a country depôt than from Newgate-market. The objections are futile, and utterly inconsistent with the present advanced state of our internal communications. It is the vested interests—the selfishness of particular influential persons—that prevent the realization of so great a sanitary improvement. The gossip—for it is little more—about establishing a market at Islington or King's Cross, is hardly worthy of notice. It never can succeed; and if, by a miracle, it should, it would not remedy the evil. The market is there, but where are the customers? The slaughtering of cattle must be removed altogether from London, and the moral feeling of the public no longer insulted, the health of the industrious mechanic no longer vitiated, nor the trade of this great commercial centre interrupted and embarrassed by the continuance of such a monstrous, disgusting, and health-destroying practice. Humanity cries out against this atrocity, science denounces it, public opinion clamours for its abolition; but a few drovers, butchers, and money-takers, are too strong for the common sense of the English people, and outrage the laws of decency and health with reckless impunity. They cannot prevail much longer: their brutal indifference to human well-being will inevitably produce a reaction in the public mind that they will not be able to resist. We who live in the City must put our shoulders together to pull down this abomination.

Need I refer to the grave-yard nuisance, so ably and perseveringly exposed by my friend George Alfred Walker? His immense exertions to abolish intermural interments have exhibited to this degenerate money-making age a truly Roman heroism and devotedness. When the great labour of his life shall be accomplished, he will be able to exclaim with Coriolanus, "I *alone* did it!" To him be all the honour. In my own parish the churchyard is so small, that if all the inhabitants dying in the parish were buried there, the authorities would be compelled every year to huddle and cram eight bodies into one grave. Supposing that a body does not entirely decompose in less than seven years, then one grave must contain fifty-six bodies! Impossible! The cemeteries have relieved the parish burial-ground, but what must have been the fiendish practices pursued in this burial-ground before cemeteries were established? The sacrilegious violation of tombs, the exhumation of the dead, the destruction of coffins, the mutilation and burning of bodies, the fraud and robbery on the living who purchased for the ashes of their lamented relatives the right to repose in peace, the impious defiance of every moral feeling, natural sensibility, and Christian principle, were daily perpetrated. And yet we live in a Christian country, where every violation of Christ's precepts has been connived at by his ministers, and the very desecration of Christianity itself converted into a trade. I blame the public more than I blame the clergy. They are the hierophants of a system of which the public are the victims. They have been bred up and engrafted into this unholy system, they are biassed by the instinct of self-preservation; and yet I am willing to believe that they are the involuntary ministers of a great and crying iniquity. Abuse of individuals or of classes is not necessary to the redress of a great public wrong. Truth is omnipotent for everything, but she must make her voice heard.

The deficient water-supply is another of those great evils that must be rectified before the sanitary condition of the people can be improved. It is idle to compare the City of London, as it is now, with what it once was, or with other great cities; we should compare it with what it might be under a better management of the resources at our command. The water supply of London is at present a giant monopoly, which has produced to the shareholders an amount of profit that is almost incredible, whilst their customers have been required to pay enormously for the smallest amount of accomodation. There cannot be good drainage without a copious and constant supply of water—a necessity which could be afforded, at high pressure, at a cheaper rate than we now pay for the pitiful intermitting drip that comes in twice or thrice a week, and is hardly enough to cleanse the pipes and cisterns.

At Nottingham, where the water supply is on the high-pressure system, the cost is 1d. per week for each labourer's house; whilst the constant supply affords the means of a perfect cleansing of the houses, streets, and drains, enables the poor to procure an ample quantity of water, at all seasons, for baths and washing, and can be made immediately available, as at Philadelphia, for the extinction of fires, without even the intervention of unwieldy fire-engines. In fact, water could be supplied in this metropolis at a cost not greater than is now paid for lead pipes, cisterns, and ball-cocks. Then, why is it not so? Because the water supply is a monopoly, and it is the spirit of monopoly to make as much profit as possible at the least possible outlay.

The quality of the water in London is also execrable; much of it is derived from the Thames, the great reservoir of the animal superfluities of the metropolis; and, notwithstanding the filtering it in some instances undergoes, it has generally a flat, vapid, nauseous taste, having received an impregnation that no mechanical process can remove. The springs in the lower districts are polluted by the filtration of the sanious, slimy putridity from the burial-grounds and cess-pools, through the gravel and chalk, into the great well-basins. The water supplied to the inhabitants of Lambeth is occasionally nothing better than fluid mud, which it is impossible to use until it has settled two or three days in the cistern, when a fresh supply comes in, and disturbs the deposit that the anxious housewife has so carefully watched since the last issue. The result is, that, except the most abject and indifferent, nobody, who can save rain-water, or can get spring water from a private pump by begging it as a favour, employs it for culinary purposes; so that this dirty water, for which they pay so dearly, is only consumed for what alone it is fit—the commonest domestic uses.

It is hard to conceive how the public could so long have tolerated the supply of such an offensive and injurious fluid, and been content, at the same time, to be taxed so heavily for the benefit of the shareholders of private Companies, when the means were in their own hands, if they would but exert themselves, of removing all these social evils, and of obtaining a more abundant supply of a purer element at less pecuniary cost, and more advantage to their physical health and comfort.

The Corporation of London is about to apply to Parliament for powers to enable it to buy up the Gas Companies, so that, by supplying this article on its own account, the public may obtain it at less expense. This is a highly laudable attempt, and is honourable to the city, which, notwithstanding the vituperation that has occasionally been levelled against it, has shown, on various occasions, great public spirit, and a zealous desire to promote the interests of those who live under its jurisdiction. All I believe that it wants, is the pressure from without, and a just conception of the true interests of all classes to prompt it to do its duty with boldness and efficiency. Why should not the City of London endeavour to get the water supply also into its own hands? I hope that the principle will be extended; and that the City of London will set the example, by giving the *coup de grâce* to the shameful monopolies on the necessities of life and health, which now exist in this city. In all corporate towns, the supply of the great social necessities should be in the hands of the Corporation; and in other towns, in the hands of the rate-payers: in fact, the people should manage these matters for themselves, and thus protect themselves from the grasping avarice of over-grown private companies. (a)

We have now obtained a Board of Health, and, although its first exercise of authority has not afforded much evidence of its discretion, yet there can be no doubt that, if it meddle with sanitary matters only to the extent of its competency, great public benefit will result from its labours. It must not fall into the delusion of considering itself a College of Physicians, but consent to receive the necessary medical instructions from that body, otherwise, all its orders, referring to medical police, will be void of scientific authority, and incur that contempt which no public body can long survive. It is an anomaly in science to see a noble lord, a lawyer, and an architect, writing medical prescriptions for the cure of a deadly disease, whilst the College of Physicians is humbly proclaiming its incertitude of all remedial measures. This is a satire worthy of Rabelais.

The public, however, will not be long content

(a) Since the foregoing has been prepared for the press, I perceive, by a Report of the proceedings of the Common Council, in the *Times* newspaper, that the Corporation intends to apply to Parliament for powers to supply water to the inhabitants of the city. This is a truly worthy step towards a complete sanitary reformation.

with an issue of prescriptions, by virtue of the Queen's warrant; there is no royal cure for cholera, and the public know it; but they will require the Board of Health to bestir itself actively in the removal of the gross evils I have been pointing out, and in this way it will acquire the gratitude of all classes in the community. There can be no doubt that defective sanitary regulations increase the intensity of all epidemic diseases, and that the mortality from cholera, in particular, is greatly aggravated by these causes. The Board of Health should, therefore, adopt immediate measures for carrying out, in an efficient manner, the powers with which it is invested.

A COURSE
OF
LECTURES ON PUBLIC HYGIENE.
DELIVERED AT THE FACULTY OF MEDICINE, PARIS.
BY
M. HIPPOLYTE ROYER COLLARD.

Introductory Lecture.

Gentlemen,—The momentous and critical times we live in demand of every one of us the strictest and most zealous fulfilment of our social obligations, even at the risk and sacrifice of our lives. The paramount duty of every citizen, no matter what his station or his political opinions, is to devote himself wholly to the service of his country, and to contribute, to the best of his power and abilities, his share to the glorious work of regeneration in which France is now engaged.

It is the thorough and intimate sense and conviction of this duty that brings me here before you.

Will the sad state of my health permit me to continue and complete the course of lectures which I am now commencing? I fear not; my feeble strength may fail me long ere my task be done. Yet, even though, which God forbid! I should be compelled to stop at the conclusion of the very first lecture, I trust I shall not have laboured in vain, if I succeed in impressing upon your minds the high importance of a science which, unfortunately, occupies now but a *humble*, though, and more particularly under present circumstances, it *ought* to occupy a *most eminent*, place in our studies.

I must explain myself here frankly and without reservation.

The revolution which is now agitating France is by no means simply of a political character; it is also a revolution in the order of society, and in this it is the legitimate, nay, the *inevitable*, continuation of that great French revolution which emancipated the people, which has made us what we are, and for which our fathers have so gloriously bled on the battle-field and on the scaffold. Into whose hands France is to fall, whether she is to be governed by Kings, or by Directors, Presidents, or Consuls, are now questions of secondary importance: the *political* organisation of the Government is but the outward form, the drapery, of the *social* organisation; the latter constitutes the true problem, the principal and most essential question for France to solve.

To deny or even to disregard this truth, would be shutting one's eyes to the light of day. The true and ultimate aim of our present revolution is to fix—no longer, as has been done hitherto, by books and theories, but by the light of experience—the position in the social scale which ought to be assigned in future to the working-classes, who constitute the most numerous and most active part of society. For ages have these classes been denied the rights of man; and now that they have so suddenly burst forth into political existence, they reveal to our astonished senses the possession of an amount of intelligence and extent of information that are truly surprising; it is to the remarkable sense of order, justice, and discipline, exhibited by the working-classes during these days of peril, that we are indebted for our present salvation,—it is upon this orderly disposition of these classes that rest our best hopes for the future.

I repeat it, Gentlemen,—our present revolution is the signal of the advent of the working-classes to a more elevated position—to a share in the public affairs of the nation.

The year 1789 saw the downfall of the reign of the ancient aristocracy—1848 has seen the end of the exclusive reign of the middle classes in France. The *bourgeoisie*, indeed, has not been conquered, since it refused to combat; and, thanks to Heaven, it has not been maltreated, nor will it be: the strong good sense of the people removes all apprehensions on this score. But the middle classes have abdicated the reign; they have, so to say, surrendered their arms; and the tempest of the revolution has swept away their supremacy. The people—the humble classes—have assumed their position by the side of the *bourgeoisie*, and a fusion of all classes may be said to have taken place.

Such, Gentlemen, is the present state of affairs.

And here arises a grave and most difficult question, which it behoves us to examine calmly and dispassionately, and without allowing our judgment to be biassed by the dark apprehensions and gloomy forebodings that have taken possession of so many minds.

What guarantee, it may be asked, have we for the future? Will there not always exist different grades of society—the great and the humble—the rich and the poor? And are we, then, doomed to see a revolution perpetually hovering over our heads? Is France fated to roll for ever from convulsion to convulsion, from catastrophe to catastrophe?

To these questions I would return this answer: Yes; France is, indeed, threatened with endless calamities, if we commit again the same errors that have hitherto proved so fatal; if, occupied solely with personal and private interests, we neglect to consult the wants and wishes of the humble classes of society; if we leave them to linger on in misery, want, illness, and, worse than all, in *ignorance* and *moral debasement*—those true sources of all evils and all crimes. But if, taught by the past, and actuated by a proper regard for the future, you, gentlemen, will endeavour to place that knowledge which a privileged education has bestowed upon you at the service of humanity; if, daily witnesses, as you are, of the sufferings of the proletarian in those infectious lanes which he inhabits—in those garrets where hunger and cold consume him—in those workshops where he breathes a vitiated air—in those hospitals where local epidemics come to add their formidable agency to that of the disease which brought him there;—if, I say, witnesses of these ills, you will apply yourselves to study their causes, to point out the remedies indicated by science, and to signalize with due energy to the administration of the State the defects and vices of our laws and institutions, and the deplorable consequences that result from them; if, in fine, not content with ameliorating the health of the people, and improving the material condition of the humble and poor, you will endeavour, besides, to enlighten, to instruct, to civilize them, to inculcate in them sentiments of honesty and habits of morality—if such be the glorious objects of your efforts, doubt it not, Gentlemen, but you will speedily see those terrible slaves of gross passions throw off, little by little, the rude shell in which ignorance and misery hold them incrusted,—you will see them grow gradually more and more worthy of liberty, and, at the proper time, you will see them enter peaceably into possession of those social gifts intended by the Supreme Ruler of the world equally for all his children.

Do you not feel impressed, Gentlemen, with the immense advantages which your peculiar position confers upon you, to serve, as it were, as mediators between the present and the future? The physician, from the nature of his profession, comes into contact, and entertains relations with all classes of society. The studies by which you prepare yourselves for your high mission, have taught you already that the wellbeing of man on earth depends in a great measure upon the direction given to the exercise of his physical and moral faculties. Now, which is the department of the medical science that contributes most to enlighten you upon this subject, and to gift you with what I feel tempted to call the faculty of elevating the moral and intellectual standard of the nation at large? I reply, without hesitation, that branch is *hygiene*—the science which teaches individuals and societies the art of living.

The special faculties which belong to man, and which perform so considerable a role in his existence, establish necessarily between him and his fellow-beings a mutual intercourse of affection and intelligence; hence the aggregation of men into more or less numerous groups, such as families, houses, workshops, towns, nations; hence the institutions which regulate society.

For our present purpose we may class these institutions under three heads, viz.:—

a. Industrial Institutions.
b. Political Institutions.
c. Religious Institutions.

Every association of individuals may in a measure be regarded in the light of a single and distinct organism: as every individual has his own hygiene, so has every association of individuals. The science which occupies itself with the health of society at large is termed "Public Hygiene."

The hygienic history of industrial institutions comprises naturally that of all professions, crafts, and trades. All industrial occupations are subjects for hygienic research and examination in a twofold point of view. The hygieist endeavours to ascertain, in the first place, what influence upon the health of the artizan may be exercised by the nature of his occupation; the artificial mode of existence which this occupation may necessitate; the atmosphere in which he lives; the contact with the divers substances which he may have to handle; the quantity and quality of his food; the order in which he takes his meals; the nature and amount of exercise which his occupation demands; the number of hours he is obliged to work every day, &c. &c.

In the second place, the hygieist seeks to ascertain, in what manner and to what extent the public health may be affected by the nature of the work carried on in mills, factories, and other industrial establishments; the various kinds of gas, dust, and refuse water, that emanate from certain factories; the nature of the raw material which is worked, moulded, and fashioned in such factories, and that of the manufactured article sent forth from them into the market for general consumption. In all these questions public hygiene is actually but an extension, a practical application, of individual or private hygiene. The introduction, of any new method whatsoever in any one of the industrial arts, changes at once the hygienic conditions of that art. And how frequent are these changes now-a-days, in the midst of the rapid movement of those industrial arts which, though but the birth of yesterday, are already changing the face of this world,—thanks to the all-powerful aid of the physical and chemical sciences! Thus, for instance, the invention of the galvanoplastic art enables the gilder to dispense with the use of mercury; and, with the discontinuance of the former process of gilding, have disappeared from among the gilders those diseases to which they were formerly subject from the inhalation of the mercurial poison. Nearly all the metals used for practical purposes, and their alloys, contain a certain proportion of arsenic in admixture. The means formerly resorted to to free one of these metals, platinum, from its admixture of arsenic and phosphorus, viz., by volatilization of these latter substances by a high degree of heat, acted necessarily most detrimentally on the health of the labourers employed in the process. M. Wollaston has happily put an end to this most pernicious system, by substituting for it the removal of the extraneous admixture in the humid way. The needle-pointers and dry grinders were formerly subject to a species of pulmonary consumption, called "the grinders' consumption." Few of them reached the age of 40. Science provides them now with masks, made of magnetized steel wire, and the air, passing through this fine network is, as it were, sifted and freed from the particles of steel, the inhalation of which proved formerly so fatal to the health and life of the grinders. We might adduce many similar facts,

all tending to attest the high importance, or, more correctly speaking, the indispensable necessity of hygienic studies, with respect to the exercise of the divers industrial callings.

Another section of public hygiene relates to the political institutions: the form and general principles of a government on the one, the administration, in all its branches and details, on the other hand.

Compare the various forms of government with each other:—absolute monarchy, constitutional monarchy, oligarchy, democracy, serfdom, slavery. How vast the difference in the respective sanitary condition of the people! To comprehend this fully, it suffices to consult the tables of mortality in France, from 1789 to the present time.

Before the revolution of 1789, the number of deaths was 1 in 30; to-day it is 1 in 45. The probable duration of life in Paris is 26 years; the average duration of life about 34 years. Unquestionably, a number of causes have contributed to bring about such results; yet no one will venture to deny, that these causes are more or less intimately connected with that universal revolution and renovation of society, which has made even the humblest classes sharers in the lights and blessings of civilization.

The administrative branch of the Government, presents to the hygieist almost innumerable subjects for inquiry and examination. The sanitary police of a kindgom, a province, a city, a district; the cleansing and lighting of the streets, &c.; the supervision and inspection of marts and markets, the sale of edibles, the adulteration of articles of consumption; interments; the construction of streets, places, dwelling-houses, sewers, canals; the public establishments; hospitals, prisons, workhouses, asylums, lunatic asylums, almshouses, mendicity societies; prostitution; public schools; schools for the deaf and dumb, for the blind, &c., &c.: these all claim the attention of the hygieist. It is upon public hygiene (the Board of Health), that devolves the task to take precautions against the advent of epidemics, or to check their progress; it is public hygiene that organizes everywhere establishments for gratuitous vaccination (a), and opposes thus a most efficient bar to the ravages of that terrible disease, which formerly decimated the nations of Europe—the small-pox. How many services have the hygienic science not rendered to the cause of humanity! And yet, how much more remains to be done!

The third and last section of public hygiene relates to the religious institutions, and the influence exercised by them upon the health of man.

Nothing more natural than that the religious idea,—that powerful idea which seizes on man from his very cradle, attends him through life, even to the grave, should exercise so vast an empire over his physical and moral condition. Now, the same sway and influence which the religious idea exercises over the individual man, the religious institutions exercise over society. I might adduce a number of proofs in support of this assertion. It will here suffice, however, to remind you of the influence which Christianity has exercised upon the state of society, in the countries that have embraced it. It would be shutting one's eyes to evidence to deny that it was the Christian religion which first abolished slavery, raised humanity from its debased condition, established the family tie, covered the world with charitable institutions, and created everywhere, in fact as well as in doctrine, what policy had founded invariably in words only:—liberty, equality, and fraternity.

But it is not with the bright side of religious influences alone, that the hygieist has to occupy himself: he has to study also the abuses to which religion is liable to be perverted by the passions and follies of man.

The hygienic history of marriage, of the celibate, of monastic life, of fasts and mortifications, is intimately connected with this section.

In conclusion, a few words on another point connected with the subject of this lecture—a point of no mean importance, and well deserving the serious meditation of reflecting and enlightened minds.

In the same way as every association of individuals may be considered in the light of a distinct and individual body, having a special hygiene of its own, so again the human race collectively may be looked upon as representing, in some sort, a single individual, who lives, grows, progresses, and passes slowly and successively, in the course of ages, through the different phases of a continued and progressive development.

This idea, expounded and elucidated more particularly by Herder, towards the end of last century, and illustrated and commented upon, in our own time, by several writers of distinction, is, however, by no means new, as the following quotation from Pasqual will prove:—

"It is not alone that every individual achieves daily some further progress in the sciences, but the whole of the human race collectively, in its successive generations, is constantly advancing and increasing in knowledge. The human race, from the time of its creation, may, in this respect, be considered in the light of a single being, living on through the succession of ages, and incessantly acquiring new information and knowledge: the successive generations of the human race may not inaptly be compared to the different ages of the individual man."

The human race, then, like every individual being, has its different ages, its different wants, its different conditions of existence. It passes gradually from the savage, wandering, pastoral life, to the forms and institutions of ancient and modern communities. The hygiene varies greatly with each of these several conditions.

Such, gentlemen, are the outlines of the plan which I have traced out for myself. The perfect accordance of this plan with the fundamental idea enunciated by me at the commencement of this lecture must be obvious to you. I sincerely believe, gentlemen, that that idea is at the present moment the only wise and rational one. My sentiments on this point have been transmitted to me, I may say, with the blood, and from my earliest childhood have I been nurtured and brought up in them. This is not the first time that the name which I bear has been identified with sincere respect for justice and the true rights of the people, with pure and disinterested love of liberty. It is 27 years since that an eloquent minister (M. de Serre) deplored bitterly in the tribune the rapid advance of democracy. "It invades everything," he exclaimed, in accents of grief, "from all sides its advancing waves threaten to overwhelm us." "Yes," replied a deputy, whose sentiments were then shared by all France, (a) "the waves of democracy are gathering round us from all sides in this land more than ever favoured by heaven. Let others repine and storm at the progress of democracy: for me, I rejoice that Providence has deigned to call to the blessings of civilization a greater number of God's creatures."

Let these eloquent words form *our* motto. Gentlemen, do not, I entreat you, believe that I stand here to make an idle and hollow display of republicanism. No! I am not of those that have welcomed with exultation the late stupendous changes. Too many calamities have accompanied them, too many commotions, inseparable, perhaps, from so unforeseen a revolution, have followed and continue still to follow in their wake, not to sadden the heart of the true patriot. But I endeavour to shut my eyes to the dark side of the picture; I would fain regard only the bright side. I see in the present revolution the progressive movement of society. I see in it the approaching emancipation of human nature from the debased and degraded state in which it has so long been held enthralled by the inequalities of the social conditions.

I behold at last the triumph of the cause of philosophy and of the revolution—that cause for which we have always combatted, and which we still continue to defend, because it is, after all, the cause of humanity.

(a) In France, and equally so in the States of Germany.

(a) Royer Collard.

ORIGINAL CONTRIBUTIONS.

DEATH BY DROWNING.—A PARTIAL RETURN OF ANIMATION AFTER A SUBMERSION OF THIRTEEN MINUTES.

By OCTAVIAN ROYLE, M.D.

There are points in reference to the following case which, perhaps, may be considered somewhat interesting to your readers. I will, therefore, give them in detail. On Wednesday afternoon, Sept. 16th, about two o'clock, I received a very urgent summons to attend immediately upon a poor man, who, I was informed, had accidentally fallen into the water from off a vessel in our dock. Upon making an inquiry, as to how long the unfortunate individual had been immersed, the messenger unhesitatingly answered, ten minutes; and this he again repeated upon closer examination. On my arrival at the spot, the body was still under water, from which time an interval of exactly three minutes elapsed ere it was discovered and taken out, making it, upon the whole, a submersion of thirteen minutes. Now, if the statement my informant made was correct, which I am bound to believe it was, from the testimony of others also, is it not astonishing that there should have been any symptoms, either of animal or organic life existing, more especially as the deceased was never seen to rise from the moment he first fell into water. I am aware many are the opinions entertained by medical men as to the time required for death, by drowning, to take place, some authors asserting a much longer period than that specified above as compatible with life, while others, in language as equally expressive, altogether deny the possibility of such a thing. The practised divers of the Archipelago, it appears, generally remain under water about fifty seconds, although Dr. Percival asserts they can, in some instances, remain there, without injury, for a period of five minutes; but as the power of inspiring large quantities of air is, in divers, acquired, life being so tenacious in them cannot be considered any reason why it should be so in any one unaccustomed to the art; in fact, the reverse; nevertheless, in reference to the case in question, I do not for one moment hesitate to assert, without fear of contradiction, that the body had been under water for a period of eight minutes, for I can scarcely imagine any one, even upon mere conjecture, to form so erroneous an idea of time, as to make what might seem to them, under such circumstances, an apparent ten minutes, in reality less than five; therefore, for the sake of argument, including the three minutes timed by me, I will call it an eight minutes submersion; and here, let me ask, is it not, physiologically speaking, miraculous for respiration and circulation, so essential for the continuance of organic life, and both of which are suspended in cases of drowning, and yet for life, consistently under such circumstances, existing: facts, however, are stubborn things. After the usual means had been persevered in for two hours, the "vis vitæ" was so far restored, and the balance between respiration and circulation re-established, that I began to entertain hopes of recovery; and this, indeed, was the impression of other surgeons present; in the lapse of two hours more, however, our expectations were blasted, for the patient died apparently from suffocation, the result of spasm of the muscles about the glottis.

CASE OF STRANGULATED INGUINAL HERNIA WITH OPERATION.

By J. B. DIXON, Esq., M.R.C.S., Norwich.

On Sunday, January 30th, 1848, I was summoned to William Thuiston, a used up agricultural labourer, aged 77, residing at Kirby Bedon, a village three miles from this city; my patient I well knew to be subject to double inguinal hernia; and, as he was represented to be unable to return, the one on the left side which had been "down" since the previous morning, I immediately visited him, accompanied by my friend, Mr. John Crook, surgeon of this city. We found the patient with an

anxious expression of face, vomiting at intervals, pulse 88, the radial artery (a type of the rest) ossified, and rigid in places. The left division of the scrotum tense, red, and exquisitely tender. After using ice-cold water to the part to allay sensibility, we proceeded to the taxis, and persevered for half an hour without success, when both of us, considering that further delay with such a hernia, and such symptoms, would be very dangerous, and that an operation was imperatively necessary, I exposed the sac in the usual way, after tying two small vessels. The hernia was found to be entero-epiplocele, the proportion of the intestine being small compared with that of omentum, which latter was of the size of a ripe egg, very much congested, and with difficulty returned to the abdomen after the division of a very tight stricture. The edges of the incision were united in the usual way, and the parts kept moist with pieces of lint soaked in warm water, a ¼ grain of opium given every eight hours for forty-eight hours, at the end of which time the bowels were readily relieved of a copious motion, by the exhibition of ʒ ss. ol. ricini. The wound was not disturbed until the fifth day, when the sutures and ligatures were removed, and union by the first intention found to have taken place nearly entirely. As soon as the circatrix was sufficiently consolidated, my patient was allowed to resume his truss and customary habits. Now I should not have troubled you with the insertion of so commonplace a case as this, were it not for my deviation from the routine laid down by surgical authorities. During my attempt at reduction by taxis I did not *bleed*, on account of the advanced age and debility of my patient. I feared the powerful impression of *tobacco* on his system for the same reasons; and the warm bath could not have been employed without great delay and the risk of sloughing of parts already in an advanced state of inflammation. Cold and taxis failing, were followed by the prompt application of the knife. My patient objected to removal to our excellent hospital, and had he not done so, I should have felt it my duty to have dissuaded him from so perilous a postponement of the only means of saving his remnant of life. There is one point in the after-treatment of this case, on which I should feel obliged for the opinion of surgeons of greater experience than my own, and that is, the propriety of quieting the whole system and intestinal tube by small doses of opium, (sufficiently large, however, for a sedative effect), for the first forty-eight hours, instead of exciting it by ransacking doses of purgatives, in fidgetty anxiety for motions. It is, I presume, the constriction and interruption of peristaltic action, which cause all danger; and these being effectually removed, why should we re-excite organs already inflamed, by determining blood to them with purgatives?

ON SCARLATINA.

By J. W. TRIPE, M.D., M.R.C.S., and L.A.C., London.

(Continued from page 110.)

From these considerations, we are probably warranted in stating, that a variable quantity of the scarlatina virus having entered the blood, increases, by a kind of catalytic action, at the expense of certain of the constituents of the latter, and that the quantity so produced varies according to the number of particles thus decomposed. Each of the septic and each of the mineral poisons has a distinct and specific action, either on the blood or on the tissues, or on both, or on some particular organ. They differ, however, in this, that the former class of poisons have the power of increasing within the system, whilst the latter has not: the former produce results which do not correspond with the quantity of the poison introduced; whilst the latter cause effects which are ordinarily in proportion to the quantity ingested.

B. c. The influence exercised on the health by changes in the atmosphere, is well worthy of full investigation; but is, unfortunately, a question of great difficulty, and especially so when we attempt to apply the result of statistical inquiries to scarlatina, as it is a disease which is contagious, and frequently prevails epidemically. As before stated, if an individual once suffers from scarlatina in all the membranes susceptible of its action, he is not very liable to a second attack; so that, after the disease has raged epidemically, the same atmospheric changes which might have induced it to put on an epidemic form, cannot have the effect, for want of a sufficient number of individuals to attack. The results, therefore, of atmospheric changes cannot, in all cases, be readily shown; but, by making an extensive series of tables for the years during which it did prevail epidemically, and another series for the years during which it was epidemic, would be the only method of elucidating the subject. But the limits of any medical periodical would not be sufficiently great to allow of the discussion of this subject in so extensive a form, and I shall, therefore, chiefly confine myself to tables formed from the weekly and other reports of the Registrar-General for the present and the two preceding years: where, however, these are totally inadequate, the results afforded by other years will be mentioned. There is one very great objection to statistics of disease being drawn from the reports of the Registrar-General, viz., that these reports only show the mortality from the disease, and not the frequency with which it attacks the living. All tables, therefore, which are drawn up from them, must be considered as indicative of the relative mortality, rather than of the prevalence of any particular disease; at the same time, when a much larger number of deaths occur in a given period, and in a given population, from a certain disease, we may be justified in assuming that the disease was more prevalent at that time. But of this we cannot be certain: for instance, we find pneumonia to be comparatively more fatal in spring than in winter; so that, if a larger number of deaths occurred in the former than in the latter, we ought not to state that the disease was then more prevalent than in the winter. To illustrate my meaning more clearly, and also to show that this mode of reasoning has been some time since adopted, I may refer to the *British and Foreign Quarterly Review*, vol. xxiv. p. 92—114. Dr. Casper here shows, that, if we judge of the unhealthiness of seasons by the prevalence of sickness, the summer is the most unhealthy, and the winter the most healthy; whilst, if we judge by the relative amount of mortality, the summer is the most healthy: Dr. Casper, therefore, draws the inference, that, when there is the smallest number of deaths, there is the greatest amount of illness in a given population. Some of the results which he has deduced from his inquiries are as follows:—

"1. In Berlin, whilst the month of January is the least, December is the most favourable to health.

"2. The greatest number of deaths occur in spring, and the smallest number in summer.

"3. Extremes of temperature are dangerous to life.

"4. A high barometrical pressure tends to increase, whilst a low barometrical pressure tends to decrease the rate of mortality.

"5. The influence of atmospheric pressure on human life varies in different seasons.

"6. No condition of the air is so dangerous to life as dry cold. On the contrary, humid cold has the greatest tendency to support life.

"12. The influence of weather and season upon health varies with the different periods of life.

"13. This influence is most marked in the ages of infancy and puberty, but it is least marked in the first septennial period of existence.

"14. From the 20th year upwards, the winter is the most dangerous and summer the most favourable season to life and health; and, the older the individual, the more striking is the difference."

The average mortality from scarlatina for the different quarters of the year vary so considerably, that no doubt can reasonably be entertained regarding the influence of atmospheric changes over the disease. The average for the winter quarter is 27; for the spring quarter, 24; for the summer, 37; for the winter, 44. This difference is evidently too great, and is too uniform to depend on anything else than changes in the weather. That this variation in the mortality is caused by these changes will be rendered more evident by examining the following Tables of the deaths in the metropolis from scarlatina during the years 1841, 2, 3, 6, and 7. I have chosen these years because the disease was not epidemic during them, as the disease, once having become epidemic, ceases to be so much under the control of the weather.

Table B. c. 1.

FOR THE METROPOLIS.

Deaths from Scarlatina, four weeks in each month.

	1841.	1842.	1843.	1846.	1847.	Total.	Monthly Mean.
Jan. ...	72	28	102	69	62	340	68·0
Feb. ...	46	37	83	86	65	317	63·4
March	37	41	93	57	47	275	55·0
April ...	35	33	87	55	42	256	51·2
May ...	23	49	82	62	73	291	58·2
June ...	48	95	120	56	43	262	52·4
July ...	57	105	131	68	62	423	84·6
Aug. ...	56	121	166	56	82	481	96·2
Sept. ...	60	135	207	61	145	608	121·6
Oct. ...	51	170	213	113	216	763	152·6
Nov. ...	65	176	258	106	253	838	167·6
Dec. ...	56	143	196	82	185	652	130·4

On examining this table, we cannot but be struck with the uniform increase in the number of deaths after the month of April, as the summer advanced, and especially with the great difference between the mortality for November and January, the former being as high as 838, whilst the latter was as low as 340, being less than one-half. The following Table will put it in a stronger light:—

	Monthly Mean.
November . . .	167·6
December . . .	130·4
January	68·0
February	63·4
April	51·2

B. c. *a.* Scarcely any season could have been chosen that is better suited to display the effects of barometrical changes on the health than the present, as the oscillations during the quarters ending Dec. 31, 1847, March 31, June 30, and Sept. 30, of the present year, have been greater than in any corresponding length of time during the present century. The Registrar-General draws special attention to the subject, and observes, in his report for the quarter ending March 30, 1848, that "the barometer readings have been remarkable for great and frequent oscillations and very low readings, exhibiting a difference, in these particulars, from any period since the year 1800, (records previous to this date I have not examined.)" "The mean reading of the barometer for February and March was 29·51 in., being less than the mean value of any consecutive two months in this century, with the solitary exception of the same two months in the year 1846, when the mean barometer reading was somewhat below that of the present." (Report, June 30.) "The mean reading in February was 29·517 in.; in March, 29·505 in.; and in April, 29·589 in. There is no similar instance in this century of the mean reading of the barometer for any three consecutive months being so small as this." An accurate examination, therefore, of this period will be necessary.

As before stated, Dr. Casper considers that a high barometrical pressure tends to increase, whilst a low barometrical pressure tends to decrease, the rate of mortality. The data on which his statements are founded may be thus briefly stated: when the average height of the barometer exceeded 29·86 in., the monthly deaths in Berlin were 630·5; whilst, when it was below this point, the deaths for the same period were only 625·5. The average for thirteen months, in which the barometer was 29·98 in., was as high as 646 per month; whilst, in the same number of months, during which the barometer was below 29·72 in., the mortality was only 621 per month. But the influence of oscillations in the barometrical pressure are shown to vary with the season, thus:—

"In Winter, 108·0 deaths to 100·0

Spring, 86·3 ,, to 100·0
Summer, 101·3 ,, to 100·0
Autumn, 112·6 ,, to 100·0."
(Op. Cit. p. 99, 100.)

The average height of the barometer (from fifteen years) during the three first months of the year,—the winter quarter,—is about 29·792 in., and may, therefore, be taken as the standard of comparison for this quarter. During the corresponding months for the years 1844-8, the average of two years was above, whilst that of three was below this standard. The mortality from scarlatina, and mean height of the barometer, were as follows:—

Table B. c. *a.* 1.
FOR THE METROPOLIS.

1st Quarter.	Mean Barometer Height.	Deaths from Scarlatina.
	In.	
1847	29·846	196
1845	29·788	421
1846	29·721	221
1844	29·701	536
1848	29.616	615

From the above table we see, that the year in which the least mortality occurred was that in which the barometer was highest; and, on the contrary, the two years in which it was lowest were those in which scarlatina assumed an epidemic form. In the year 1847, although the average height was 29·846 in., yet we see that the deaths from scarlatina did not exceed 15·07 per week; and, as the disease had not prevailed in an epidemic form since 1844, this small mortality could not have been in any way connected with any paucity of persons who were liable to its invasion.

The results obtained by Dr. Casper, as before stated, were the opposite to these, but his included all forms of disease.

The following Table was constructed to show, not only the highest, lowest, and mean height of the barometer, but also mean, highest, and lowest variation in the corresponding quarters for 1846, 47, and 48:—

Table B. c. *a.* 2.
BAROMETER.

Quarters ending March 30	Mean for the Quarter.		Weekly Variations.	Weekly Mean.	Deaths from Scarlatina.
	Highest.	Lowest.			
—	In.	In.	In.	In.	
1846	29·939	29·529	·410	29·721	221
1847	30·064	29·155	·447	29·846	196
1848	29·991	29·184	·807	29·616	615
	Daily Means.	Daily Means.	Highest.	Highest.	
	In.	In.	In.	In.	
1846	30·511	29·009	·743	30·249	
1847	30·477	29·015	·740	30·277	
1848	30·370	28·652	1·352	30·142	
			Lowest.	Lowest.	
			In.	In.	
1846			·202	29·162	
1847			·205	29·218	
1848			·331	29·089	

All the calculations in this Table are made from the observations at Greenwich, the first column being appropriated to the mean for the quarter of the highest daily average during each week, and the highest mean reading for one day; the second to the mean for the quarter of the lowest daily average in each week, and the lowest mean reading for one day; the third shows the mean of the weekly variations for the quarter, the difference between the highest and lowest daily mean, and the amount of the smallest variation in any one week; the fourth column indicates the mean reading for the quarter, the highest and the lowest weekly means.

It will be seen that the highest daily mean for this quarter in the three years occurred in 1846, when it reached as high as 30·511 in., the highest in 1848 being 30·370 in., whilst the lowest in 1846 was 29·009 in., in 1848 28·652 in. The variation between the highest and lowest daily means in 1846 amounted to 1·502 in., in 1847 to 1·462 in., in 1848 to 1·718 in.; whilst the highest variation in one week in 1846 was ·743 in., in 1848 was 1·352 in. From an examination of these data it seems that a high barometrical pressure in the winter quarter was not accompanied by a high mortality from scarlatina, whilst considerable and frequent variations have a decided influence in producing an increased mortality.

If we pursue the same plan in considering the next quarter, and take the average at 29·820 in. we shall find that one only out of these years was above, whilst four were below this average.

(To be continued.)

PROGRESS OF MEDICAL SCIENCE.

ACADEMY OF MEDICINE.

Meeting of Nov. 13, 1848. M. Royer Collard in the Chair.

CHOLERA IN AMSTERDAM.

A letter from that city was read, stating that up to November 3, 174 cases of cholera had been observed, 61 of which had proved fatal.

CHLOROFORM.

(Adjourned Debate.)

The most important communication was that of M. T. Guérin, who, after three years absence from the Academy, re-appeared in his seat, and attacked M. Malgaigne's report and its conclusions.

After some general remarks on the importance of the question now brought before the meeting, M. Guérin said, that the general tendency of the report was to exonerate chloroform from all blame of having occasioned death, except in cases in which improper inhalers had been used, or in which its action had been continued for too long a time. Observation, experience, and induction, when brought to bear upon the report, led to a precisely contrary conclusion.

With regard to general observation, it was necessary, in order to appreciate the action of any cause, to have previously established a sort of criterion of analytical formula, which might serve as a standard of comparison: this the reporter had omitted: for instance, in order to show that chloroform had not occasioned death in the Boulogne case,—in those of Hannah Greene,—of W. Badger and others,—M. Malgaigne asserted that the data hitherto acquired on the action of chloroform were in opposition with these unfortunate results. What were these data? The reporter had not enumerated nor established them in any way. Independently of this first omission, M. Guérin thought that another had been committed in not taking sufficiently into account the circumstances peculiar to each case, which might in a great measure explain the different action of the same cause in each patient.

As to experience,—that is to say, the collection of the results brought about by experiment in the human organism or in animals, the report had been signally defective. The fortuitous and necessarily rare fatal results of chloroform upon the human subject might be produced at will upon animals; and the Commission had not even attempted to do so. It would have been interesting to ascertain if chloroform acted upon the nervous system, directly or by an influence reflected from the centres of innervation; what action it exercised upon the composition of the blood. This might have been sought for in the human subject. Animals presented to the experimentalist a still broader field. Chloroform might have been exhibited in every shape, form, and condition; inhaled, applied, injected: after abstinence, loss of blood, or the contrary circumstances, &c. M. Guérin found in the report no trace of any such research. M. Guérin had himself instituted a series of experiments with Dr. Lebert, some of the results of which he might even now mention to the Academy. Chloroformisation was possible, but with widely different effects, according as it was introduced by the skin, the lungs, or the vascular system. When chloroform was placed under the skin of the abdomen, prolonged inebriation followed, and a more complete degree of *insensibility* in the inferior than in the superior *extremities*. When it was absorbed through the lungs, M. Guérin regretted that the Commission had not thought proper to establish the symptomatic differences between the various cases, relative to the respiratory movements and the pulsations of the heart and arteries. In all cases, on dissection M. Guérin, had recognised the presence of pulmonary emphysema, and in none the existence of any particles of air in the blood. Aperial deformation of the corpuscles had also been noticed by M. Guérin; not only had not the Commission instituted any experiments of its own, but it had even neglected the researches of others, and the Academy might draw its own conclusions upon the value of inductions which were supported neither by experiment nor by observation.

The philosophy of the report consisted in discovering in each case of death, during the exhibition of chloroform, causes of dissolution, of so urgent and so evident a nature (to the reporter), that he preferred attributing the fatal results to these causes than to chloroform. Now, these causes were never found wanting: if the patient had shown fear, he was said to have died of terror; if the subject had been a long time fasting, death was referred to inanition; if the case was one of an aged individual, he might, perhaps, be asserted to have died of old age. Finally, the report and its conclusions did not seem to M. Guérin, to be in accordance with experience, observation, nor a critical spirit worthy of the Academy. He would propose to substitute to these conclusions the following:—

1. That chloroform, a most energetic agent, was susceptible, in experienced hands, of rendering signal service, but exhibited in expressive doses, or for too long a time, or by improper methods, it might become a direct cause of death.

2. That circumstances, peculiar conditions existed, not yet altogether pointed out with precision, but of which certain instances demonstrated peremptorily the possibility, which increased the toxic properties of chloroform, and which necessitated the greatest caution in its use.

3. That in M. Gorre's case, it was the opinion of the Academy that chloroform had probably occasioned death, although that agent had been employed in a dose and in a manner which experiment had almost universally shown to be innocuous; and that the rapidity, and exceptional intensity of the intoxication, had been in that instance favoured by individual circumstances, which the surgeon could not possibly forsee.

After a short answer of M. Malgaigne, the meeting was adjourned at half-past five o'clock.

SUGAR IN THE LIVER.

At the last meeting of the Institute a sample of alcohol was presented by M. Bernard and M. Bareswill, which those physiologists had obtained from the fermentation of sugar extracted from the liver. A series of numerous experiments has demonstrated, that sugar existing in no other organ, not diseased, that circumstance distinguished, chemically, the hepatic texture. Even in animals entirely deprived of saccharine or amylaceous nutriment, sugar was abundantly found in the liver: hence MM. Bareswill and Bernard concluded that the presence of sugar in the liver was a physiological fact, perfectly independent of the nature of the food.

TREATMENT OF INTESTINAL OBSTRUCTIONS. BY DR. HOMOLLE.

(Union Médicale.)

Case 1.—Mr. E., a gunsmith, aged fifty-eight, had, for several years, been affected with an inguinal hernia on the right side, easily reducible, and habitually maintained with a truss. On the 28th of February, 1848, after unusual exercise, M. E. complained of violent pain in the abdomen; and remarked, that no effort of cough or of expulsion succeeded in causing the rupture to re-appear. The bowels were constipated, and sickness and vomiting present. On examination, Dr. Homolle found the pulse at 78, the face congested, the thirst intense, and the vomiting continual. The right iliac region was swollen, and tender on pressure. During three days this condition of the patient continued without

improvement, notwithstanding the exhibition of laxative enemata and medicines, baths, &c. Dr. Homolle then prescribed the following powders:—℞. Strychniæ, 2-5ths of a grain; calcined magnesia, ʒi.; sugar, ℈j.: divide into twenty powders, one to be taken every hour. Borborygmi were noticed after the third powder, and a copious evacuation followed the eighth. The patient gradually recovered from that moment.

Case 2.—L., an apothecary's assistant, aged forty-eight, required Dr. Homolle's services, on the 13th of March, for intolerable abdominal pain, which he referred to indigestion: at the same time an inguinal hernia, existing on the left side, returned into the abdomen. During the three following days habitual sickness and vomiting were observed, and the bowels were obstinately confined. The strychnine powders were exhibited; and they were discontinued after the fourth, on account of the sickness which they seemed to produce. The next day they were resumed: fourteen were taken, when the bowels were at last relieved. Four days afterwards the patient was quite well, and the hernia had re-appeared in its accustomed seat.

Case 3.—A lady, suffering from dyspepsia, requested the attendance of Dr. Homolle, who recommended an emetic. During the three days which followed, vomiting was continual, and the bowels obstinately constipated. Purgatives, ice, baths, &c., were exhibited without any advantage; finally, the strychnine powders were resorted to, and, after fourteen powders, the bowels were relieved.

In these cases the rational signs of intestinal obstruction were present; viz., constipation, eructations, continual sickness and vomiting, circumscribed swelling of the abdomen, extreme pain, coinciding, in the two first instances, with the spontaneous reduction of previously existing ruptures, &c. The relief obtained from the exhibition of the strychnia can only be accounted for by admitting that the medicine increased the energy of the peristaltic contractions of the intestine, and gave it the power of overcoming the obstruction. We trust that these cases will be read with some interest, and that physicians may be induced to try this method in cases of intussusception, against which the efforts of art are so frequently unavailing.—D. M'Carthy, Physician to the British Embassy.

PROGRESS OF GERMAN MEDICAL SCIENCE.

By Dr. BUSHNAN.

On Malaria.

(Concluded.)

Among the many theories that have been brought forward in endeavouring to account for the production of Malaria, the novel and ingenious one of the late Dr. Fletcher must not be forgotten. He considers it not as an exhalation from animal and vegetable matter in a state of decomposition, but the result of a secretion from the living animal in a state of disease, consequent upon the locality in which it exists. He considered that the clearing of a country is beneficial to the inhabitants, owing to the source of the disease in the vegetable being removed. If this theory, however, is correct, malaria ought, perhaps, to be most prevalent in places where there exists the largest quantity of vegetables, which does not seem to be the fact. But, taking another view of this theory, as to deceased vegetables, which, in a certain state, are known to produce insects innumerable; and, connecting this with what follows, it may receive increased importance and demand further consideration.

It has been supposed that epidemic diseases are caused by minute animalculæ existing in the atmosphere under peculiar circumstances, and capable, by application to the living membranes and other parts, of acting as a virus on the human body. Nor is this a new speculation. It dates as far back as Lucretius. The spread of contagion has a close analogy with fermentation, and it has been proved that this is the decomposition of organic fluids by minute vegetables of the lowest class, (*Cagnard, Latour, and others*). Putrefaction is a destruction of organic matter effected by infusoria, and not a mere decomposition into elements. One contagious disease, the muscardine of the silk-worm, is known to depend upon the development of a vegetable parasite.

An attempt has been made to trace many diseases that assume an epidemic character to insect origin; and it must be confessed many facts tend to establish this view of the case. In many of the morbid secretions, minute insects have been detected. In the pus expectorated by patients labouring under consumption, a minute insect —*polystoma sanguicola*—has been discovered. Cataract is supposed to be produced by a minute insect (*Owen*); and scrofula to be caused by the minute ova of parasitic animals, taken up by the absorbents, and deposited in particular textures of the body. The peculiar history of cholera greatly strengthens the presumption, that it has an insect origin, and that it and malaria are in some degree connected. This disease first appeared in the Delta of the Ganges, and within seventeen years spread itself round almost the circumference of the habitable globe. Hitherto no physical, chemical, or electrical condition of the atmosphere has afforded a probable solution of the phenomena of the disease. The striking feature of cholera was the frequent suddenness of its appearance and disappearance in given localities. No gaseous, mineral, or vegetable matter diffused in the air would create so strange a disorder. Occasionally it appeared to travel slowly, then again it would suddenly develope itself at a considerable distance from the place where it was supposed to have originated. No condition of the earth's atmosphere satisfactorily explains the cause of this migratory disease, while the sudden appearance and rapid multiplication of insect swarms at certain times, and in situations favourable to their propagation, are facts familiar to naturalists. The diffusion of such swarms, sometimes by continuous flight for great distances, sometimes by tardy, broken, and divided progress, is equally familiar to observation, however scanty our knowledge of the animal instincts by which these movements are governed. The same analogy extends to the disappearance of these swarms, either suddenly, by further flight, or atmospheric changes on the spot, or more gradually, by completion of the term of existence, or want of food, or any physical causes tending to destroy their ova, or retard the development and the successive metamorphoses they are destined to undergo.—(*Dr. Holland.*)

In many respects, indeed, the erratic and ambiguous course of the cholera is well represented by the flight, settlement, and propagation of the insect swarms which inflict blight upon vegetable life. Their appearance at different and distant periods, without obvious cause for such irregularity—their direction to certain plants only—their settlement upon these in clusters and detatched localities—the frequent suddenness of their change of place and final disappearance—are all circumstances of curious analogy, as is also the abrupt limitation of some of these swarms, showing itself in definite lines of direction, along which their work of destruction is carried on. These lines—though to our observation seemingly arbitrary—are doubtless connected with the instincts of life under this form, and with the relation of such instincts to the surrounding media. The cholera has been often defined in its course by similar lines of direction, sometimes stretching over considerable tracts of land or sea, more frequently obvious in particular localities, but in neither case receiving explanation from any physical conditions of the globe, from currents of air, or local circumstances of soil and climate. The cholera often spreads itself in the face of a prevailing wind, where no obvious communication was present,—a circumstance difficult, if, indeed, possible, to be explained, with reference to animal life, as the cause of the phenomenon. No mere organic matter could be so transferred, nor is vegetable life better provided with the means of overcoming this obstacle.

It has been supposed by many that the development of malaria is more dependent upon the electrical condition of the atmosphere than upon any physical state of the soil, from which the poison is said to proceed. This view of the question is supported by numerous facts. The evidence, however, is not sufficiently strong to warrant us in coming to any positive conclusions upon the subject. Since the chemical philosopher has vainly endeavoured to detect any essential difference between the air in the immediate neighbourhood of marshes, where a pestilential poison is known to be generated in large quantities, and the air of places remarkabie for its purity, the electrician has stepped forward for the purpose of demonstrating the existence of a peculiar electrical state of the atmosphere under these circumstances. There certainly appears to be a strange relationship, not altogether of an accidental character, between the prevalence of epidemic diseases and certain electrical phenomena. It is well known that intermittent fever is often developed, and assumes an epidemic form among sailors who have been exposed to a thunder storm. Eruptions of Vesuvius and Etna have been accompanied by severe epidemic diseases in their vicinity. An attempt has been made to trace a connexion between the appearance of comets and the prevalence of pestilential affections. In 15 (A.D.) a comet was seen at Rome, and a pestilence raged in Asia. In 40, another was visible, and Rome was afflicted with the plague. In 67, during the reign of Nero, a large comet appeared, and a pestilence carried off 30,000 persons. Tacitus says, that the houses were full of dead bodies. Simultaneously with the plague of London, a large flaming comet was visible. It is an established fact, that the most unhealthy periods have been those in which large comets have appeared.

As an exposure to malaria gives rise to a variety of essentially different affections, it has been a question with medical men, whether it consists of one or many kinds. We have no satisfactory evidence to establish the fact, that there is a plurality of malarious poisons. Many circumstances, no doubt, act in modifying the nature or properties of malaria. Chemical analysis has detected as numerous and striking differences in the elementary constitution of plants as there are in their actions on the living body; and it may not be irrational to conclude that the nature of the poison, which the decomposition of vegetable products originates, may be regulated by the original chemical constitution of the plant producing it; and, again, the decomposition of narcotic plants may possibly assist in modifying the qualities of malaria. The effect, however, of marsh miasmata must be greatly dependent on the constitution and susceptibilities of the person exposed to its influence.

But, after all, the most important branch of this subject relates to the most effectual mode of correcting the bad qualities of marshy soils where malaria is generated; and, if this cannot be accomplished, to discover how the inhabitants of these districts are best to be protected from those affections to which malaria is known to give rise. All swampy districts should be drained; and if this is impracticable, owing to the low situation of the land, they should be immerged. Beecher has related several cases, in which this plan was successfully adopted; where marshes are laid deeply under water he considers that the great quantity of fluid opposes the decomposition of animal and vegetable substances, and the air, consequently, preserves its purity.

Empedocles is said to have delivered the Salantini from the dangerous exhalations to which they were subjected, by conducting into their marshes the neighbouring rivers, which cleansed them of their stagnant water; and malaria was no longer generated, and the affections which the impure air gave rise to, also ceased. Rivers should be prevented from overflowing, by erecting proper embankments. The draining of any unhealthy district should not be performed until the end of autumn or winter, or quite the beginning of spring—*in summer never*. Persons employed in such avocations should be well clothed, and have proper nourishment. A small allowance of fermented liquors and spirits is often effective in preserving the body from the noxious influences of malaria, and a piece of gauze over the face is said to be of service. In towns and villages everything should be done to preserve cleanliness, and to promote ventilation and dryness. Above all

things, sunk drains should be constructed and kept properly cleared and washed down, so that no putrifying matter, whether animal or vegetable, for both alike breed insects, remain on the surface to poison the atmosphere. It is the attention to this fact alone that renders many of the most densely populated English towns amongst the most healthy. There are in England several districts in which agues formerly prevailed to a very great extent, and there they are now perfectly unknown, owing to the beneficial effects of proper draining; and even in Portsmouth, which is built partly upon the marshy island of Portsea, we learn that this exemption has been in an eminent degree remarkable, since it was paved and drained in 1769.

The ancients appear to have known the effect of trees in intercepting the progress of malaria. They surrounded their temples with groves on account of their protecting influence. Pope Benoit XIV. ordered a wood to be cut down which separated Velletri from the Pontine Marshes, and in consequence, for many following years, there raged throughout the whole country, and in places never before attacked, a most severe and fatal fever. The same effects were produced from a similar circumstance in the environs of Campo Salino. It is stated by Lancisi, that a forest which extended from the heights of Frascati and of Albano almost to the Tiber, having been felled, this barrier between the Pontine Marshes and the southern parts of Rome being removed, the Campagna di Roma became uninhabitable. In the West Indies it is quite wonderful how near to the leeward of the most pestiferous marshes the planter, provided he is protected by trees, will venture, and that with safety, to place his habitation. Near St. Stephano, on Mount Argentel, a convent is situated, which was noted for the salubrity of its air; but, since the forests which surrounded it have been cleared, it has become unhealthy. And the reason seems to be this:—in clearing land, much vegetable matter is destroyed, and the sun, having free access to it, decomposition goes on very rapidly, and insects are bred in myriads from the putrifying substances. A village has been remarkable for the health of its inhabitants until a wood has been removed; and it is supposed to have been some indistinct acquaintance with these facts that caused woods to be held so sacred, and to be so venerated in ancient times.

But space will not allow me further to follow the author through his interesting account of some of the most important facts and theories connected with the appearance of malaria, and its long and terrible train of diseases. The subject is one of primary interest, not only to the medical man, but to every philanthropist, and, in the present day of sanitary reform, merits the most urgent attention.—*Nuremberg Miscellany, edited by H. J. Whitling. Fr. Campe, Nuremberg. A periodical strongly recommended to the reader.*)

IRELAND.

(From our Dublin Correspondent.)

In accordance with my promise to inform you of everything of medical interest occurring on this side of the Channel, I think it better to commence my communications this week, although, as yet, there is little to report. The bustle connected with the commencement of the winter session in the Dublin schools and hospitals has produced nothing novel or important, and the Medical Societies have not, as yet, commenced their meetings. Yet, I am happy to tell you, that, from the communications which I have had with various parties of high literary and professional character, there is every prospect that the department which, as you tell me, you intend to allocate for Irish Medical Intelligence, will not be the least interesting in your Periodical, as I have received promises of assistance, in carrying it on, from some of our best men, both in Dublin and in the provinces.

DUBLIN APOTHECARIES' SOCIETY.

The Medical Corporations here have not, latterly, taken any step of importance, with the exception of the Dublin Apothecaries' Company, who have this day advertised their intention of awarding a prize of five guineas to the most expert and successful competitor in the analysis of the subject selected for the year. The students eligible to become candidates must have completed at least three years' apprenticeship; and the object of offering the prize is said to be, "to improve the knowledge of their candidates in pharmaceutic and pathological analysis." The subject for the year 1849 is to be, "The Urine in Health and in Disease, and Urinary Calculi;" and the time fixed for the examination is the first Monday in May. It is to be hoped that the institution of this prize may have the effect intended; for certainly the general practitioner, above all others, requires to be well acquainted with urinary analysis.

ST. VINCENT'S HOSPITAL.

OPERATION FOR THE REMOVAL OF A MALIGNANT TUMOR—LOCAL APPLICATION OF CHLOROFORM.

There were two operations on Friday morning at St. Vincent's Hospital. The first was the removal of a fungoid tumor from the fore-arm, by Doctor O'Ferrall; the second, an amputation above the knee, by Doctor Bellingham. The former was a case of peculiar interest, arising from the question of amputation, to which the patient was opposed, and also on account of the difficulty of determining, before operation, the nature and depth of the attachments of the morbid growth. The patient was a small old woman. The germ of the tumor had existed many years, but had grown with rapidity, and become the seat of pain. It was placed on the right fore-arm, in front, and extended from within an inch of the wrist to a point about six inches higher up, towards the bend of the arm. Its elevation above the surface was about two inches, and its circumference measured eleven and a half inches. The woman could use the fingers freely, and refused, therefore to part with the hand. There was no tumor or enlarged lymphatics in the axilla or arm. Some insisted on amputation, believing that the mass was firmly adherent to the tendons, and dipped in between the muscles, so as to render extirpation impracticable. Doctor O'Ferrall was of opinion that its attachment was limited to the fascia; but was prepared, if it proved otherwise, to proceed to amputation. The tumor was then circumscribed by an incision through the skin, and the fascia freely divided on its ulnar edge. It was then found that the tumor and fascia came away together by a careful dissection, leaving the tendons shining and coloured, as in the healthy state. In a few minutes, the morbid growth was satisfactorily removed, presenting on its under surface deep grooves, in which the tendons, protected by the fascia, had played. Microscopic examination afforded the usual appearances of malignant growth.

The exposed surface was the seat of severe pain, which resisted the internal administration of muriate of morphia in full dose. This induced Dr. O'Ferrall to try the effects of chloroform, locally applied, as done by M. Roux. The chloroform was very pure—sp. gr., 1490,—and was laid freely on with a camel's-hair pencil. A brisk warmth and smarting was produced, and quickly followed by relief from pain.

THE VALUE OF COLLODION.

The value of solution of gun-cotton was tested in another case, now in St. Vincent's Hospital,—a compound dislocation of the ankle, with the usual fracture of the fibula. The tibia protruded through a long transverse wound at the inner ankle. The bone was easily reduced; but retraction of the divided integument kept the edges of the wound about an inch apart. After careful and gentle manipulation, aided by suitable position, Dr. O'Ferrall succeeded in bringing the posterior commissure of the wound together, and sealed it with the solution. Another point was then made to touch, and was sealed like the former. Eventually, the entire wound was thus sealed up, although synovia mixed with blood had been freely oozing before. It is now the 6th day;—there is no inflammatory symptom, and the patient rests very well. The event of this case will be interesting in a practical point of view.

ROYAL IRISH ACADEMY.

The Academy (Royal Irish) commenced its sittings for the season on the evening of Monday, the 13th of November. The President (Rev. Dr. Loyd) gave a very practical dissertation on certain fallacies that magnetical observations are liable to. He described these fallacies as depending on three classes of causes:—First. On variations in the force of tension in the thread supporting the magnet, proceeding from the hygrometric state of the atmosphere, and other causes. Second. On variations in the declination of the magnet, produced by the proximity of other magnets, or of masses of metal by which the magnet may be attracted. And third. On alterations in the position of the telescope, by means of which the declination is observed. He pointed out, at length, the means of correcting the possible errors that might be introduced through these sources of fallacy into magnetical observations. After the conclusion of the President's paper, Sir Robert Kane exhibited some very interesting maps, which he has had constructed, for the purpose of showing, at a glance, the relative productive values of the soils spread over the several districts of a country. These maps are drawn on the plan of ordinary geological charts, but in which the various columns are used to represent a scale of comparative fertility. The productive power of the different districts is estimated by the very accurate valuation made by Mr. Griffiths, under the direction of the Government. Sir Robert mentioned, that his object in having these maps constructed, was for the purpose of instituting a comparison between the productive power of various soils, as determined by experience, and the chemical composition, as ascertained by analysis. In the larboratory of the Irish Economic Museum, of which Sir Robert Kane is Director, there are at present proceeding a very extensive series of analysis of Irish soils; but they are not yet sufficiently complete for the purposes of the comparison contemplated. There is one circumstance, however, that must strike every one in examining Sir Robert's maps, namely, that the richest soils are in the immediate vicinities of large towns, or of great public thoroughfares along the coast, by the sides of canals, rivers, main roads, &c. A discussion ensued upon the reading of Sir Robert's paper, in which Professors Oldham and Apjohn took part. On this occasion, the old proverb became verified, each of the learned gentlemen imagining that sufficient importance was not attached to his pet science. The Professor of Geology thought that geological maps are quite sufficient for every purpose, inasmuch as the alluvial deposit is always identical in composition with the subsoil, and that, therefore, each soil possesses an intrinsic value, quite independent of the efforts of man. The Professor of Chemistry could see nothing in the facts pointed out by Sir Robert Kane, but that, in the great lines of communication, such a modification of chemical composition was produced in the soil, as influenced the natural fertility. But the general sense of the Academy appeared to be, that Sir Robert was justified in commencing a new line of investigation, for that neither the chemical composition of the surface soil, the geological condition of the substrata, elevation, temperature, drainage, nor any other circumstance hitherto taken into account, were sufficient to explain all the phenomena.

DUBLIN SANITARY ASSOCIATION.

The Dublin Sanitary Association have issued a series of monitory papers. The first of which contains general advice to the poorer classes, in anticipation of the advent of cholera. The second purports to consist of suggestions for the construction of dietaries for the use of boards of guardians; and the third is an address to the industrious and labouring classes, as to the selection and preparation of food. It may be necessary to observe that the table of nutritive equivalents, contained in the second document, is founded, like the similar ones of Bouissingault and others, on the relative quantities of nitrogen contained in the various articles of food; but the Association con-

siders that any table founded on this element alone must be necessarily defective, as the mineral constituents of aliment, the alkalies, sulphur, iron, &c., are of just as much importance. This will explain their statement, that although 20 ounces of wheaten flour per diem may be considered the nutritive equivalent for a man of 10 stone weight, yet he would require 40 ounces to keep him in health; because 20 ounces contain the requisite amount of nitrogen, but they do not possess half the quantity of sulphur and alkalies daily thrown off in his excretions. I may here mention, that the Dublin Sanitary Association has hitherto acted very differently from most other analogous Societies. It has had no hobby of its own, and is perhaps, on that account, getting on the better. Its objects have, as yet, been purely practical. Admitting that accumulated filth, deficient drainage, imperfect supply of water, and bad ventilation are evils, it has studied to remove them, not by flying off at once to new legislation, but by endeavouring to ascertain at first what can be done under existing laws. By stirring up the various boards and public offices, it has forced these to do their duty. It has put the Town Council, the Paving Commissioners, the parochial officers of health, and the police, all upon their mettle; a new court has been established, specifically, for adjudicating on cases under the Nuisances Removal Act, and by these means sixty or seventy nuisances are being abated weekly. At the same time, the real difficulties which lie practically in the way of sanitary reform are becoming known, and materials are accumulating which, I have little doubt, will lead to the construction of a much more efficient Public Health Bill than that enacted last Session for England.

Chloroform in Toothache.—Mr. Tomes, in his *Lectures on Dental Physiology and Surgery*, recommends chloroform to be applied on a little cotton wool to the tooth in order to remove the pain. The best form for application is made by dissolving a little gum mastic in the chloroform, whereby the fluid is thickened; and, when put into the tooth with cotton wool, will remain there a long time, and keep up its sedative influence; whereas, if the chloroform be used alone, it will be soon washed away by the saliva, and its effect lost.

Application of Laudanum in Orchitis.—M. Voillemier envelopes the inflamed testicle in a compress dipped in pure laudanum, and covers it with oil silk; at the end of three or four hours, the excruciating pains cease, and the inflammation is said to diminish rapidly.

New Operation for Lipoma.—M. Bonnet, quoted in the monthly Journal, from the *Rev. Med. Chir.*, recommends the subcutaneous incision of the tumor in various parts of its substance, subsequently squeezing out the fatty matter into the surrounding cellular texture; by which means the dissipation of the tumor is procured, after a longer or shorter time, by absorption. A small wound being made in the skin, a tenotome, blunt at the point, and corresponding in length to the diameter of the tumor, is passed into the opening and beneath the base of the tumor, through which it is then to be passed by cutting towards the integuments. After this the tumor is to be thoroughly broken up by numerous cuts, in every direction, through its substance. It is then manipulated and kneaded, so as to evacuate the fatty matter. The operation may require repetition more than once; but it gives little or no pain, nor has it been followed by any unpleasant effects. In three cases in which this operation was performed, the resolution of the tumor has taken place in from two to three months, there being only left a slight induration, productive of no inconvenience. In the one case it did not succeed; this was that of a lady, aged sixty-two years, in whom the tumor was the size of the palm, and never could be reduced to less than half the original size. This method is invariably applicable to tumors which do not exceed the size of the fist. The patient is not obliged to keep his bed; and the complete absence from pain and subsequent inflammation, constitute a great recommendation of this operation, as compared with extirpation.

Carbonate of Ammonia in Squamous Affections of the Skin.—M. Cazenave has obtained considerable benefit from the internal employment of this remedy, in the form of syrup, in doses of from 6 to 30 grains daily, in psoriasis, and other scaly diseases of the skin. It produces complete anorexia, general debility, rapid emaciation, occasional diarrhœa, and some febrile excitement of the pulse; the countenance becomes paler. Some patients were obliged to discontinue the use of the drug, on account of the severity of these symptoms.

Caustic Potash an antidote to the Poison of Cantharides.—Dr. Mulock, of Dublin, states in the *Dublin Quarterly Journal of Medical Sciences*, that in three cases of stranguary, caused by blistering with cantharides, he found the solution of caustic potash a perfect remedy. Two of the cases were head affections, where opium was inadmissible. Thirty drops, given in half a wine glass of water every hour, gave relief before the third dose was exhibited. What led him to the use of this preparation was its known effects in relieving the stings of wasps or bees, when applied to the skin.

Spontaneous Evolution of the Fœtus.—Dr. N. W. Cole, of Burlington, N.J., relates, in the *New Jersey Medical Reporter*, that, on the evening of the 10th of October, he received a message to visit a female in labour of her eleventh child, and to bring with him his instruments. Upon his arrival he found one child born, and another presenting, with the shoulder and its right arm protruding. Several unsuccessful attempts to turn were made. The labour pains had entirely ceased, from the time of the birth of the first child. The waters evacuated, and the uterus was closely and rigidly contracted around its body, so much so, that, after repeated efforts, all idea of turning, without using more force than would be justifiable, was abandoned. While preparing the necessary instruments for taking the child away, the mother's pains returned, and the child was observed to be lower down. Its body seemed to descend, and its shoulder ascend. In less than five minutes from the return of the pains, it had made a complete somersault. The feet and breech came down, and the head followed without any difficulty. It was healthy, and of the average size.

Excessive Itching occurring during successive Pregnancies, and producing repeated Abortions.—M. Masliéurat Lagemard relates, in the *Gazette Médicale*, quoted by the *Dublin Medical Press*, a very remarkable case of this character. The subject of it was a female of small stature, and of a nervous temperament, having a fair and beautiful skin, without any appearance of eruption. She became pregnant for the first time at the age of twenty-one, and everything went on regularly until the sixth month, at which period a smart itching came in the skin over the whole body. This, by degrees, became more severe, and towards the eighth month it became insupportable, particularly in the palms of the hands, and over the abdomen, obliging her to scratch herself furiously, and finally this brought on the expulsion of a dead child. Throughout all this, the skin remained fair, transparent, and without the least appearance of any eruption; immediately the child was expelled, the itching ceased, as if by enchantment. Some time after this she again became pregnant; and again, about the sixth month, the itchiness of the skin began, and, by degrees, acquired an extreme intensity, occasioning the expulsion of a dead child in the middle of the eighth month. She was scarcely delivered, when the itchiness ceased. In the third pregnancy nothing particular occurred for eight months and a half, when the itchiness began, but had not arrived at its usual degree of intensity at the ninth month, when her accouchement took place favourably. The fourth pregnancy resembled the first, and she brought forth a dead child at seven and a half months. The fifth pregnancy resembled the third, and she again was delivered of a healthy child. The sixth, seventh, and eighth, did not differ much from the two first in their character or consequences. In all these pregnancies the itchiness had occupied the whole surface of the body long before it invaded the palms of the hands; and it was only after the palms became affected that it acquired its greatest intensity. In the two instances where she went to her full time the palms had remained exempt from the itchiness.

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THE MEDICAL TIMES.

SATURDAY, DECEMBER 2, 1848.

ON PLANS PROPOSED FOR INCREASING THE AMOUNT OF NATIONAL FOOD.

TOWARDS the close of the last century the future prosperity of Britain was despaired of by many bold and thinking men. Scarcity of food, that first of all evils, prevailed over the civilized world. The colonies gave no hope of supplies; commerce was paralyzed, and the minds of millions became despondent.

At that moment a true patriot appeared; this was Sir John Sinclair, of Ulbster. He addressed the nation through the House of Commons. He called the attention of men to the lamentable state of the fields; to the universal neglect of sound agriculture. He forced the nation to admit that all improvement had been utterly neglected; that progress, in fact, had ceased. He showed them that all rational experimenting had ceased; that agriculture looked neither to theory nor practice, but to a routine, scandalous to the country, and destructive of its best interests; that the growth of the potato was everywhere misunderstood; the right use of manures unknown; drains and roads not thought of; the fisheries despised; finally, he proved, that where the farmer raised from an acre two bushels, he ought to raise four; and on that pasture land where the uneducated boor fed his miserable ox and worthless garion animals of noble breeds, of great weight and strength, might be raised and fed; thus doubling, in every sense, the national wealth.

The speech of Sir John Sinclair had the desired effect; the nation, as if roused from a lethargy, soon recovered all its energies; and, from that moment to the present day, improvements of all sorts, having a reference to the most important national questions—"an increase in the supply of food"—have never ceased. Useful plants and superior breeds of animals have been sought for in all regions, and imported from time to time into England and into Europe.

Yet, if we consider the matter carefully, it is evident that men ought not to cease in this race for improvement, and that the thanks of mankind are, in an especial manner, due to those who introduce into the sufficiently scanty list of domestic animals, and of animals used as food, a new and useful species. No one knows whence came the domestic ox, or horse, or sheep, or pig. Were they in a wild state the same as we have them now? or possessing originally a different form, perhaps even specifically distinct, has the influence of domestication so prevailed as to render the very source whence they sprung,—their progenitors in fact,—no longer recognizable? There are no wild sheep, properly speaking, nor any wild horses, nor cattle. No one ventures to say so. And when, by any

accident, they escape for a short while from the dominion of man, as on the vast plains of South America, the African or Australian deserts, or the illimitable, treeless steppes of Asia, there to increase their stock, enjoying full liberty for years, and wandering unrestrained, yet do they never become wild in the strict sense of the term, returning easily to their former habits as domestic slaves; not averse to the contact of man; to serve him and to abide with him; neither courting nor despising his protection and aid. Now, contrast this with "*the wilde*" properly so called; the untameable! How impossible does it seem to propose to tame the lion or the rhinoceros; yet, as regards the latter animal, this has been proposed. We have ourselves seen the swift antelope, called spring bok, the beauteous reeback, and the young ostrich, so far domesticated as to go out to feed in the morning and return in the evening. But this is not domestication; the fallow deer itself is not strictly domesticated. The partridge and the pheasant are well protected, but they do not thereby assume the habits of barn-door fowls. A domestic wild cat, of the true breed, we never yet heard of.

There is, in some parts of England and in Scotland, a breed of white oxen, usually considered as the remains of a primitive breed of cattle, from which all others may be the lineal descendants. A theory like this is without facts to support it. These cattle have a wild look, and certain habits, partaking more of the wild than the domestic animal; nevertheless, it is certain that they may be domesticated, when brought up with other cattle.

As nothing can be more important, next to the improvement of the existing breeds of domestic animals, than the adding to the stock others, if not more valuable, at least equally so, a question naturally arises, why have so few efforts been made to effect so desirable an object? This question may be answered, we think, in various ways.

There is first the question of acclimatation to be considered; and, secondly, that of utility. In a civilised country, to this important consideration everything must yield. Lastly, there is the question of nature or kind.

A truly philanthropic nobleman in the north of Britain endeavoured, a few years ago, to reintroduce (for it had once been an inhabitant of our northern forest, the *Sylva Caledoniæ*) the *Caper Cailzie*, not as a domestic bird,—for, like the grouse, it is untameable,—but merely as an addition to the game of the country; but we have not heard of the attempt having proved successful. The same nobleman made strenuous efforts to naturalize the *Alpaca* and *Vicunha* in the wide mountains of his extensive domains: but this attempt has failed. The beaver was once a native of this island,—at least, of its northern rivers: it would be curious to know if its re-introduction were practicable. But here steps in the question of utility. Beavers' skins are valuable, no doubt; but the living beaver might destroy, or at least injure, the forests. The American bison is a useful enough animal, but in no way is he comparable to the Durham ox.

Proposals have been made at various times, 1st. To add to our stock of really domestic animals, by the domestication of others hitherto untried. 2nd. To introduce into the island certain races of animals which, though they admit not of domestication, would yet be serviceable to the nation. Let us briefly consider these two questions.

When those expensive toys, called Zoological Gardens, were first introduced into Britain, it seemed reasonable to expect that a public benefit might accrue in the direction we now speak of. They had been long known in France; but in neither country have they been productive, in so far as we know, of any profitable or useful result. The *Jardin des Plantes* may have somewhat benefited science: in Britain these establishments have neither benefited science nor the public. Accordingly, they have failed everywhere, excepting in the metropolis; whilst, even there, resort has been had to fireworks, and concerts, and panoramic exhibitions to sustain the appetite for mere variety, which characterises the unthinking, sight-seeing, illiterate loungers of the capital. The utilitarian rarely visits such exhibitions. A true Durham ox, or a thorough-bred Leicester, seem to him much more rational objects of admiration.

But there are naturalists, and others—enlarged and liberal-minded men—who feel still disposed to urge the advantages of adding to our stock of domestic animals, and of animals useful as food to man—of introducing new and useful species into every civilised country. Foremost, perhaps, amongst these, is M. Isidore Geoffrey (St. Hilaire), son and successor of the illustrious speculator of that name—he who caused Baron Cuvier so much uneasiness—the real author of that theory of development and progress, which, clothed in a popular dress, and lowered in its tone to the capacity of all, roused the geologists of Britain—the transcendental theory, we mean, which upset the "*Siècle de Cuvier*," startled the mathematicians and geologists of Cambridge and of Oxford, tempting even the great Master of Trinity to try a logical *carte e tierce* with a shadow. The son of this distinguished man makes the following proposals to the Academy of France. He proposes to apply zoology to useful purposes. To such a proposal we are bound to give all attention. Science, not applied, or not applicable, is of no value in Britain.

It would appear, that some years ago M. Geoffroy called public attention to the utility and the possibility of introducing into France several new species of animals, with a view to public utility.

With an analytical and systematic spirit, characteristic of his race and nation, he examines first into the sources whence have come our present breeds of domestic animals. Of thirty-five species we have in Europe, thirty-three belong originally to the ancient world, and four are of American origin. The Canadian goose is of North American origin, but he admits that this bird is rare in France; the turkey is from the temperate and warm regions of America; the others are from the warm regions of South America. Of those from the old world, a very few are originally European. To be brief, M. Geoffroy arrives at this conclusion—that the greater number, by far, of our domestic animals, so essential to the well-being, nay, to the very existence, of society, as it is now constituted, are exotic, and of a southern origin.

Such questions as these, which affect the food of millions, are national questions. The introduction, for example, of a superior class of sheep into a country, has enhanced enormously the value of every acre, increased the amount of food, and affected the general character of society at large. And yet, every practical man knows, that there is a limit to this; and the great object of all experimentalists should be to ascertain the range of utility in such attempts. The merino of Spain was found not to answer in Britain; and the hills of Perthshire arise too steep from the valley to suit the more delicate constitution of the cheviot and south-down.

It is a curious fact that animals, natives of a cold climate, are acclimatized with greater difficulty in France than those imported from a much warmer region. This suggests practical consideration. To the Argonauts has been traced the introduction into Europe of the pheasant; to Alexander's conquest of India, the peacock; and to the Roman conquests of Northern Africa, the pintado, or Guinea fowl. A hardy plant to replace the potato would at this moment prove an inestimable blessing. The ox, called in India the "Yak," might possibly be introduced into Northern America with great advantage; the camel into southern Africa; his absence, indeed, in the southern section of the African continent, is sufficiently remarkable.

The increasing the national food is, beyond all doubt, the most important of questions. Vast lakes and rivers, now nearly untenanted by the finny brood, might be stocked with the finer sorts of fish; larger breeds of cattle substituted for smaller ones. As it is with plants, so it ought to be with animals. Select what is best; most profitable. The question is urgent in Britain, and was lately so over the greater part of Europe. Scarcity of food lowers the tone of civilization; famine destroys it altogether. With unshackled commerce it is probable that such calamities may in a great measure cease; but, until that desirable event take place, too much attention cannot be given to the improvement of the domestic animals we possess.

Guessing at the future by the past, we do not feel disposed to believe that the Indian rhinoceros shall ever be a substitute for the ox and the horse in the labours of the agriculturist; as they, it is said, followed the ram in India. The records of the Egyptian tombs give to these domestic animals, and the uses to which they were applied, a vast antiquity. But let the experiment be made by all means in those countries where he can be easily fed. The rhinoceros is decidedly a superior power to the steam-plough. Those who first saw the elephant could scarcely have believed that its colossal frame would obey the nod of a master. But so it is, the elephant is easily tamed—shall we say domesticated, and led about as a dog or an ox. Man cannot create new species; the varieties he produces are temporary, and maintained with difficulty; but new species may arise with a new order of things. With that we have nothing to do: the present alone is ours. Ingenious chemists have favoured us with a calculation of the number of years yet to come when man, and sheep and oxen, must of necessity be the only living animals on the earth; cabbages the only plants. We have every reason to be thankful that the period they have fixed on is a very lengthened one, so much so, that even the most timid need not tremble. At that time, says the chemist, (Mulder,) man will become extinct; "the *wilde*," we presume, will have gone out some time before. Man, civilized man, ever wars against the *untameable—the wild*. The beauteous bustard has been nearly extinguished in Britain; the beaver, the *Caper Cailzie*. As he progresses in South Africa, for example, and in America, in India, and in Europe, wild animals retire before him, or are destroyed. Savage man himself, who refuses domestication, shares the same fate. After all, chemists may be right; the day may come when the science of botany can boast of no professors, and the earth come to be occupied by man and oxen, sheep and cabbages. The forests having been destroyed, the atmosphere will no longer be purified; and man, ceasing to breathe, will become extinct. We used to be of opinion that political theorists, like Malthus, were the boldest of theorists: latterly, however, che-

mists and physicists decidedly beat them in —extravagance.

MEDICAL EDUCATION IN ENGLAND AND THE UNITED STATES.

An important element in Medical Reform, a subject which at present engrosses the attention of the profession in Europe and America, is Medical Education. The great object contemplated in altering the laws relating to medicine in England is to improve the condition of those who legally practise it, and this cannot be accomplished without especial regard being paid to their mental culture. To erect barriers against the encroachments of illegal practitioners, without adopting the best means of fitting the "legitimists" for the discharge of their duties, is only establishing a monopoly far more injurious than universal suffrage in the practice of medicine. Our schools and colleges have been founded not so much for the purpose of advancing the temporal interests of a certain order of men in society as for benefiting the whole body politic; and corporations were invested with the power of granting diplomas for the twofold purpose of honouring worthy individuals and of protecting the public.

Chartered medical institutions are the offsprings of public necessity, and their birth has generally been a happy indication of the advancement of science and civilization. The College of Physicians of England, the most ancient, the most aristocratic, and the most useless of our medical corporations, was founded at a time when the nation was just emerging from a state of barbarism. The glories of the feudal system had grown dim—the fierce contests between the houses of York and Lancaster had terminated,—and with the gates of the temple of Janus closed, commerce, and liberty, and learning began to lift up their heads.

There is no doubt that the founding of Linacre's College gave an impulse to English medicine, which will exert a beneficial influence upon the profession to the most remote ages. It rescued from the hands of the Church the power of licensing medical practitioners; it curbed, to some extent, the licentiousness of quacks, while it united the men who had acquired a well-merited reputation for their general and professional acquirements. Since then, medical education has been gradually making its way, both amongst the members of the College of Physicians and a class of practitioners once subordinate to them, but now a distinct and honourable branch of the profession.

It would be improper here to refer at length to the struggles which took place between the physicians and the apothecaries, and to show how, step by step, the latter, from being mere compounders of prescriptions, and performers of surgical operations under the direction of the former, the yoke was at length broken, and the present order of general practitioners established. It is sufficient for us to state, that this order gradually increased in numbers, respectability, and learning, till it obtained sufficient power to procure a legislative enactment, which has done much to advance the cause of medical education.

We have made these remarks, in order that we might advert to the present position and future prospects of the medical profession in the United States of America, a country allied to us by blood, by language, and by literature. When the first emigrants departed from our shores, in order to found a colony on the great western continent, they carried with them many of the institutions of their fatherland; and, amongst some of the earliest settlers, we find men who had studied and practised the healing art. Some were men of education, possessing the doctor's degree, while others had obtained but a small amount of professional knowledge. These had neither the time nor the means of founding a medical college, and hence, for a lengthened period, the colony was supplied either with surgeons from the mother-country, or ignorant men assumed the name and functions of medical practitioners.

When the colony became an independent republic, an effort was early made to raise the character of the profession. Colleges were established, and invested with authority to grant diplomas, but they possessed little power to *compel* individuals to obtain those documents before they engaged in medical practice. The Republic did but imitate the mother-country, which, at this time, possessed colleges and chartered institutions in abundance, having diplomas for sale, without the power of compelling any one to purchase. The evil, with us, has, to a certain extent, been rectified, while, in America, it exists at the present time in all its magnitude. We have before us a Report of the Committee of Education of the American Medical Association, which affords us important information. This Institution, composed of the most illustrious medical practitioners in the States, has only recently sprung into existence. It reminds us of the Associated General Practitioners of England, and their labours, prior to 1815, to procure a sound measure of reform, and of the National Association, formed in 1844, for the same purpose. The object which the Transatlantic and British Medical Associations have in view is one,—the promotion of the best interests of our profession.

While there is much room for improvement amongst us we are yet considerably in advance of our American professional brethren. The state of medical education amongst them is very low; and, without a radical change in the system of instructing students, a host of young men will be continually sent forth utterly incompetent to practise the medical and surgical art. In the States the system prevails of teaching demonstrative science by description, and the art of recognizing and healing diseases without exhibiting the practice of either. Here the student has not the advantage of attending the practice of a public hospital. Our system is defective enough, for pupils are only permitted to see the patients of an hospital, but not to handle them. In the States the students are manufactured into surgeons without having entered the wards of an hospital. In England the term of instruction includes many months; in America but very few. We are glad to find, however, that the corporate institutions of that country are beginning to insist upon a longer course. The University of Pennsylvania, the College of Physicians, and Surgeons of New York, the Franklin Medical College of Philadelphia, the Buffalo Medical College, and the University of Louisville, have taken the lead in this matter.

While the system of instruction with our transatlantic brethren is so defective, the corporate medical establishments are chargeable with vending their diplomas without regard to the professional acquirements of the candidates. Degrees have been repeatedly conferred upon individuals who have despised the curricula of Colleges and the advantages of education; and, from the facilities thus afforded of entering the profession, the Association informs us, the supply of surgeons is too great for the wants of the people.

In order that our readers may understand the professional acquirements of some of the graduates, we will give them specimens, furnished by candidates for the office of naval surgeons. The Board of Examiners, in order to test the knowledge of those who come before it, proposes certain questions. Not long since, a candidate defined a lotion to be "a kind of application;" and, an evaporating lotion, "one which does not evaporate." Another confessed his ignorance of the freezing and boiling points of water, and contended that knowledge upon such subjects was useless. One candidate determined castor-oil to be "the oil of castor, an animal;" and another located the solar plexus in the sole of the foot. Of course, the Navy Board rejected these learned gentlemen, though Universities had conferred upon them the title of Doctor of Medicine.

This low state of medical education may be ascribed in a great measure to the want of legislative protection, in nearly every State no restrictions existing against the practice of ignorant persons. In 1842, a Committee of the Munroe Medical Society, New York, was appointed for the purpose of reporting upon the laws relating to medicine, in the several States of the Union. The Society collected information from twenty-two of the twenty-six then existing States. Of these, the legislatures of eight had never passed any law upon the subject; in ten, all previously existing enactments had been abolished; in four, prohibitory laws were in force; but, since then, New York has opened the practice of medicine to all those who choose to engage in it.

Such is the lamentable condition of the medical profession and of Medical Education in the States; and at present there is but little prospect of improvement. The profession there looks, however, to England for example and encouragement. Let it not look in vain. The American Association has appointed twelve of their number as delegates to the British and Provincial Medical and Surgical Associations; and we trust that, before they shall depart from this country, the great question of Medical Reform will be satisfactorily adjusted. This will depend much upon our unity and perseverance; and, while it is desirable that Medical Reform should be speedily accomplished, for the benefits it will confer upon ourselves, it is also to be earnestly sought, because of the influence it will exert upon that country whose language, literature, and institutions are derived from our own.

THE NUISANCES REMOVAL ACT AND POOR-LAW MEDICAL OFFICERS.

The Act of 11 and 12 Victoria, cap. 123, called "The Removal of Nuisances and Diseases Prevention Act," is considered by Union medical officers anything but a boon to them, whatever it may be to the public. The general impression is, that many of its provisions are so framed that additional labour may be extracted from parochial surgeons, without their receiving increased remuneration. On reading the various clauses of this Act, we feel inclined to put a more favourable construction upon them, though many are so ambiguously worded as to leave us in doubt as to their true meaning. The opinion prevails, that *this Act does not provide for payment, to a reasonable extent, of those medical men employed to give effect to its provisions.* We propose, therefore, to examine, as briefly as possible, the subject.

It appears clear that the Act is mandatory on Boards of Guardians, and it is at their peril if they "delay," or refuse to take the steps required, after it has been called into operation. One of the first things required of Guardians is to appoint health officers, and it is indispensable that one of them be a medical practitioner.

The Act neither makes it discretionary with nor obligatory on Boards of Guardians, to interfere in the remuneration of the health officers so employed, for on this most important matter there is a complete silence. It appears, also, that Poor-law guardians have not, in this matter, their powers defined with any degree of clearness, nor can we discover that the Poor-law Board is invested with any authority beyond that of applying to the Court for a mandamus, in the case of the guardians, or summary dismissal from office, in case of the medical practitioner refusing to obey orders, and such other powers as they possess, as the "Poor-law Board," under the Poor-law Amendment Act. It is certain, however, that the Union medical officers must obey, or be dismissed, as the law does not protect them in this matter. It being thus evident that the Government can compel the Union medical officer to engage in certain duties, if he cannot obtain reward, it leads to the inference that this "Nuisances Removal Act" is itself the greatest nuisance the profession has been exposed to for a long time. It would be an invasion of private rights, to compel civil officers, contracting with a public body, to perform stipulated and specially defined duties, at a fixed remuneration, to undertake other altogether different engagements, without remuneration. It would also be repugnant to common law, common sense, and common honesty; and we should pause before we admit it as true. We are disposed to think, that, under the provisions of this Act, means are provided by which medical officers of health, employed by Boards of Guardians, Town Councils, &c., can *recover all reasonable expenses* incurred in performing duties which the Act assigns to them. We give the following abstract of some of its provisions:—

Sect. 1 is prefatory, and explains the nature of this Act—to what it applies—the necessity for a *medical certificate as a primary and indispensable step* towards effecting the purposes of the Act; defines the things and circumstances from which nuisances to public health may be considered as arising and likely to arise; details certain legal steps to be taken; and, finally, nominates certain parties who are, under different circumstances and in different localities, to assume the initiative, as well as those who are to carry the provisions of the Act into complete operation.

Sect. 2 has reference to the same points as applicable to the laws of Scotland; the *medical officers of which country also will do well to look to themselves*, and, perhaps, they will have reason to bless the institution of their Sheriff and Baillie Courts.

Sects. 3 and 4 relate to the question of remuneration of the medical officers *employed*, and provide absolutely, though by an awkward and cumbersome machinery, for the recovery of the "health officers'" costs, or, in other words, his reasonable expenses, and by these sections power is given to "Town Councils, Trustees, Commissioners, Boards of Guardians, *Officers of Health*," &c., to recover such costs, and reasonable expenses, in any "County Court," or "Civil Bill Court;" or, "*if they shall think fit*" to recover such costs, and reasonable expenses, "before two justices in England and Ireland," or in Scotland, "before the sheriff," &c., "from the owner or occupier of the premises, in respect of which such order is made." "A distress warrant may be issued if the money is not paid within seven days after demand," for which purpose facilities are given for proceedings to recover *out of the jurisdiction of the justices who grant the warrants in the first instance*.

Sect. 4 provides for cases in which, if the the costs are not recovered (after proper means have been used) from the owner, &c., they may be paid by the "Treasurer of such Guardians," or "Parochial Board," upon an order in writing, specifying the sum to be paid, under the hands and seals of two justices, *who are hereby required to make such order* upon proper application in this behalf, (or out of certain other public funds, in certain cases,); and clause 2, of this section, permits "distress on the goods of such *Treasurer*, or *Overseers*, or *Officers*, or *Persons*, who neglect, or refuse to pay the sum specified," &c., "for the space of 21 days after the date of such order."

Here, then, health officers, *in common* with guardians, &c., have the power distinctly given to them, to recover their costs or reasonable expenses, in a summary and inexpensive way.

The sections following, up to Sect. 12, do not materially affect surgeons, though they contain matter worthy of a careful perusal; and, therefore, we pass to sect. 12, which discloses a power given to the Poor-law Board, which appears to exceed that of any board or public body in England. This is the power of "compelling" (*by what means is not clearly made out*) officers who are *contractors for special purposes, under a special Act of Parliament, to obey* ANOTHER BODY, *not even in existence at the time these contracts were made, and to which other body nothing in these contracts can apply*. A power, too, which, whilst so extensive in its invasion of medical interests, seems to be utterly good for nothing, in enforcing the *quid pro quo*, or remuneration for extra labours. Sect. 14 is important as showing, that if Poor-law Surgeons *must* take the obnoxious steps they *may* take to recover, under sects. 3 and 4, *it is not their fault*, but the fault of the Boards of Guardians; because its first clause gives power to these to appoint "health officers" and clause 2 gives the *power* (but not the *will*) *to Guardans to defray the expenses incurred by them in the superintendence and execution of such directions and regulations, out of the funds of the respective unions, parishes, or combinations*.

Boards of Guardians *may* then *remunerate the Union medical officers fairly, under the provisions of this Act*, by charging their fees as a part of the necessary expenses, upon the owners, occupiers, and other guilty parties against whom the provisions of the Act are enforced; and we believe that the *Poor-law Board will freely sanction such a proceeding*. But past experience leads us to fear that Guardians, whilst availing themselves of their power to "compel" Medical services, will not enforce the medical officer's remuneration upon offending parties. In such cases, and they will be abundant, the Union surgeon, *where he is made a "Health Officer,"* will have to depend upon the provisions of the Act in his behalf; and, notwithstanding the personally obnoxious character of the means at his disposal, he will have boldly to charge his fees upon *his employers*, whether Guardians, Commissioners, trustees, or others, or upon the owners and occupiers of premises coming under the provisions of the Act; and, trusting to the mandatory clause upon the two justices, endeavour to get orders for payment and warrants of distress against all neglectors or recusants.

It is true, by so doing, he will be as much subject to public odium as *medical men generally are when they endeavour to maintain their rights*; but, trusting to public justice and the support of his brethren, he must stand up for the protection of his own rights. What else is he to do?

It further appears that there is *nothing in the Act to prevent the medical man, employed as a health officer, from proceeding, as for work and labour done, by the orders of the Board of Guardians*. Yet, these orders, to be effectual, must be *resolutions of "the Board," entered in the ordinary minute book; and thus registered there is legal claim against the Board* at common law.

An authoritative legal opinion ought to be had on this Act, and the Union medical officer, *privileges* under it. At the present moment the gentlemen of the Convention are the most proper persons to move in the matter, and by so doing they will confer a real benefit upon their constituents.

REVIEWS.

On Femoral Rupture; its Anatomy, Pathology, and Surgery; with a new Mode of Operating applicable to Cases of Strangulated Hernia generally. With Plates. By JOHN GAY, Surgeon to the Royal Free Hospital, &c. London: Highley. 1848.

(Second Notice.)

No surgical disease merits from the medical man, whether physician or surgeon, a greater share of attention than does the important subject on which Mr. Gay has written a very excellent work. To its pathology and treatment, the illustrious Scarpa devoted much attention. Hesselback's monograph is especially excellent; and the writings of our English surgeon, Sir Astley Cooper, are known to all. The work now before us may be said to have emanated from the school of Cooper, and to bear the stamp of his researches.

There are surgeons in good practice, who have been so fortunate as never to have met with any case of strangulated hernia which they failed to reduce by the taxis. But it is too well known, that operations—and those hazardous ones, too,—are frequently demanded in cases of rupture, both inguinal and femoral; so that a correct knowledge of the structures connected with these formidable diseases has ever been held essential to the education of the sound and practical surgeon.

The systematic descriptions of Jules Cloquet left but little to be gleaned by future anatomists in respect of the healthy anatomy of the groin, whether above or below Poupart's ligament. Mr. Gay reconsiders the structures with great care.

The early anatomists were far from being happy, and far from being accurate, in their nomenclature. The ramus of the pelvis, which they called horizontal, is not so; thus the descriptive anatomist is forced to explain to his students that *horizontal* does not mean horizontal in the strict sense of the term, and so with a hundred other structures. But changes of nomenclature are dangerous in an art like this, and so most innovations in the technical language of anatomy have been successfully resisted. Albinus himself, whose reputation for extreme accuracy as a descriptive anatomist is proverbial, did not know correctly the true angle of *inclination* of the pelvis. The human skeleton, to be rightly understood, requires being looked at in a great variety of ways; its *signification* touches the deepest considerations in philosophy.

The anatomy of the living body differs in some respects from that of the dead; not essentially—but so as to deceive the unwary. There is no difficulty in pointing out the tuberosity of the pubes and the angle; the posterior inferior spine of the *os ilium* and spine of the ischion in the osseous pelvis; but much difficulty may be experienced in detecting the precise position of these processes in the living body. The student cannot, therefore, familiarize himself too much with an exact idea of the osseous pelvis, derived from frequent handling. The mere sight will not avail him in such examinations.

After discussing very carefully and learnedly the various views which have been taken of the anatomy of the parts connected with femoral hernia, Mr. Gay next inquires into the causes or presumed seat of stricture in strangulated femoral hernia.

In the dissection of at least two cases of strangulated femoral hernia in the *male* adult, the neck of the sac was distinctly and exclusively the seat of stricture and the cause of the strangulation of the intestine. Both had died seemingly without the actual disease having been discovered during life; and the dissection of these cases left a strong impression on our mind of the danger incurred by returning an unopened hernial sac with its contents unopened into the abdominal cavity.

When the neck of the hernial sac becomes thickened, hardened, inflamed, and contracted, so as to resemble the tight neck of a bottle or bag, embracing and confining the bowels, then it seems to us correct language to say, that the stricture preventing the return of the bowel by the taxis is in the neck of the sac. But we cannot apply the same language altogether to the surrounding healthy structures.

They prevent, it is true, the return of the bowel by the taxis; and some part requires to be incised or divided, so as to enable the surgeon to put back the intestine into the abdomen, through an opening large enough to allow of their first escape, but no longer, unless widened, of sufficient calibre to admit of their return. The question, then, which here arises is, not altogether what causes the stricture, but what part may most safely be divided, so as to allow the bowel to return.

The older surgeons, and some moderns, who follow the good old practice, simply divided a good portion of Poupart's ligament. They knew well that this was quite sufficient to widen the aperture, and allow of the return of the bowel. This was, of course, especially dangerous in the male; but crural hernia is rare in the male, and frequent in the female.

Minute descriptive anatomy, however, showed that by incising the ligament of Gimbernat, space might be obtained for the reduction of the strangulated bowel. But it was soon discovered that the obturatrix artery, or a large branch of it, might be so placed, around the margin of Gimbernat's ligament, and connected to its margin by close cellular tissue, as to afford the surgeon no space for dividing the margin of this ligament without thereby opening the vessel, and endangering greatly the life of the patient. Hence came the proposals by some German surgeons, simply to dilate the opening, by others to divide the crescentic duplicature of Burns, and by others to look for the seat of stricture in the margins of the saphenic opening, or of an aperture in the cribriform fascia.

The septum crurale was, we think, first described by the French anatomists; and the relations of the iliac and transversalis fascia to each other, and to the surrounding parts, most clearly understood by them. To them also we owe the first clear description of the crural canal, and of its superior and inferior apertures.

That Foramina may occasionally exist in the septum crurale we mean not to deny; but we do not recollect meeting with such an appearance. It is sometimes extremely thin, so that its giving way altogether under strong pressure is not at all unlikely, and in this case a hernial sac would have one covering less than usual.

Petit's method of operating was revived by Mr. Key in 1829; its main object was to reduce the bowels without opening the sac. The proposal did not meet with much favour at first; Mr. Gay assures us that it is now favourably received.

Whilst M. Boyer and the surgeons of his day assumed as a fact, that the operation for strangulated hernia, if early performed, was an extremely successful operation; it appears, on good statistics being obtained, that M. Boyer and his friends must have been in error, or that the French practice in the hands of his successors had greatly altered.

The fatality in such operations, wherever they have been performed, is very great; 34 in 80 cases operated on; 4 in 9; 11 out of 19. At Wartzburgh 3 out of every 7. In Guy's Hospital, 10 deaths for 9 recoveries. Mr. Luke's operations seem to have been more successful. On all these important points in the history of this formidable surgical disease, Mr. Gay's work may be consulted with great advantage.

It is Mr. Gay's opinion, that the mode of operating now recommended "possesses such great advantages over the commonly adopted method, that it only requires to be thoroughly known and understood to receive the sanction of the profession.

"1. The external incision is just large enough to admit easily the forefinger.

"2. Healthy structures are alone interfered with.

"3. The wound heals by the first intention.

"4. A truss may be worn three days after the operation.

"5. The pain is inconsiderable, and the danger most materially lessened."

The principle is applicable to other forms of hernia. We leave the matter in the hands of surgeons engaged in extensive hospital practice, recommending them strongly, carefully to preserve the statistics of their operations; without which operative surgery can scarcely hope to make any sure progress.

Surgical Anatomy. By JOHN MACLISE, Surgeon. Imperial folio. Fasciculus 1. London: John Churchill. 1848.

This fasciculus is one of the cheapest we have ever known issued from the Medical Press. For the sum of five shillings, we have four beautiful plates, containing eight figures, with the blood-vessels, &c., coloured after nature. The work, if carried out, as the author proposes, will be of great value to the student engaged in dissecting, and to the surgeon at a distance from the means of keeping up his anatomical knowledge. The drawings are of such a size as to allow of the various parts referred to in the text to be distinctly recognised.

The present fasciculus is, upon the whole, so well executed, that we are indisposed to find fault with the author for some peculiarities in his composition, which we hope to see corrected in the future numbers.

If the subjects are as judiciously selected for illustration, and as well executed as those now before us, the work, when completed, will be of great value to the members of the profession, and will stand unequalled for its cheapness.

Clinical Midwifery; comprising the Histories of four hundred and forty-five Cases of difficult Preternatural, and Complicated Labour. By ROBERT LEE, M.D., F.R.S. 2nd Edition. 8vo. Pp. 228.

Dr. Lee's work, though of small size, contains a large amount of valuable information to the obstetric practitioner. It is emphatically a practical work, containing, as it does, the histories of so many cases in midwifery, which occured under the author's own observation. The accoucheur will here find recorded some of the most serious difficulties he will have to encounter, and the best manner of overcoming them. The student and junior practitioner will find this work of great value, and we would strongly recommend them to place it without delay in their libraries.

Medical Jurisprudence. By ALFRED S. TAYLOR, F.R.S., &c. Third Edition. London: John Churchill. 1849.

This work has acquired a well-merited reputation amongst the members of the medical and legal professions. In the present edition the author has showed himself not unmindful of the progress of science, as eight new chapters have been added, and in various parts of the volume we observe marked improvements over the former editions.

The section on infanticide contains some most important observations, which should be attentively read by the members of the profession, as the crime of child murder appears to be steadily on the increase.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—Nov. 14, 1848.

J. M. ARNOTT, Esq. F.R.S., PRESIDENT.

The first meeting of the Society of the Session was held this evening. A large number of fellows were present in the library.

On the Employment of Nitrate of Potass in Acute Rheumatism; with Suggestions for the Use of Saline Solutions as External Applications in Local Rheumatic Inflammation. By W. R. BASHAM, M.D., Physician to the West Minister Hospital.

The author takes, as the basis of his essay, the following facts: 1st, that in acute rheumatism, as in other inflammatory diseases, the most important changes in the composition of the blood are the increased quantity of fibrine, and the deficiency of the saline ingredients; 2nd, that where this state of the blood exists there is a special disposition to the deposit of fibrine, and the formation of adventitious tissues; while in diseases in which the fibrine is deficient, and the salts in excess in the blood, the blood does not coagulate, and hæmorrhages of a passive character occur; and 3rd, that although, as his own experiments have satisfied him, saline solutions have not the power of dissolving coagulated fibrine, yet certain salts in solution, mixed with the blood at the moment of its escape from the body, possess the property of suspending or retarding the separation of the fibrine. He next inquires whether any therapeutic principle can be derived from these facts, and proposes the question, whether saline remedies, largely employed, may not suppress the tendency to the fibrinous exudation, or retard it, so as to give time for other remedies to diminish the proportion of fibrine present in the blood. With reference to this question, he alludes to the observations of several physicians on the use of nitrate of potash in acute rheumatism, and details his own experience of its effects. He gives one, two, or three ounces of nitrate of potass, largely diluted, (in two quarts of water,) in the twenty-four hours. In the majority of cases no obvious effect is produced on the force or frequency of the pulse, the digestive functions, or the quantity of urine exuded. But the urine always acquires a high specific gravity, and nitrate of potass may be detected in it. The swelling, heat, and pain of the joints affected with rheumatism are relieved in a most marked degree, even when no other remedies are employed at the same time. There is a certain amount of exemption from cardiac complication; and cardiac inflammation, when present, is more amenable to remedies. In a case which the author relates, he examined the blood of the patient before the commencement of the saline treatment, and again after this treatment had been continued for some days. In the first instance it was buffed and cupped, the fibrine was in excess, and the salts were deficient. After the administration of the nitre there was no buffy coat, the propotion of fibrine had diminished, and that of the salts greatly increased. The author presumes, therefore, that while the internal use of the nitrate of potass assisted to restore the proportion of the saline constituents, the other treatment employed tended to lessen the excess of fibrine. Some remarks of Mr. Gulliver have led the author to investigate the effects of the external application of saline matters to parts affected with rheumatism. His experiments have been principally made with nitrate of potass. In chronic rheumatism he has used the iodine of potassium, and in gout the bibasic phosphate of soda. He applies the saline substance by means of the spongio-piline, a portion of which, large enough to envelope the part affected, having been moistened with water, the salt employed is sprinkled in powder freely on the spongy surface: it is then applied to the part, and secured with a roller. In numberless instances, by this simple treatment, he has witnessed the most palpable and instant relief to the local inflammation. Constitutional remedies were employed at the same time, but the relief was proved to be due to the saline applications, by the fact, that where several joints were affected, only those were relieved to which the salt was applied. At the end of the paper the author gives an abstract of seventy-nine cases of acute rheumatism, showing the results of treatment, and other particulars.

On the Advantages of Solutions of Caoutchouc and Gutta Percha in Protecting the Skin against the Contagion of Animal Poisons. By WILLIAM ACTON, Esq.

The author states, that he has been engaged in performing various experiments with solutions of gun cotton, gutta percha, and caoutchouc, with a view of testing their property of protecting the surface from the influence, by contact, of contagious poisons; and the following are the conclusions at which he arrived:—1. That a solution of gun cotton, when dry, corrugates the skin too much to be available for the purposes required.—2. That gutta percha alone is devoid of elasticity and sufficient adhesive quality, whilst the solution of caoutchouc wants body and is too sticky; but that—3. The compound solution of caoutchouc and gutta percha possesses the requisite qualities to fulfil the purpose required. It is prepared by adding a drachm of gutta percha to an ounce of benzole, (the volatile principle of coal naphtha,) and ten grains of India rubber to the same quantity of benzole, each being dissolved at a gentle heat, and then mixed in equal proportions. The Author has employed this compound in painting the surface surrounding a chancre with the solution, and found that the acrid secretion had no effect upon it when dried, and warm or cold water may be applied with impunity. He considers that it may be employed advantageously in many and various ways, as in protecting the hands during post-mortem examinations, in preserving the cheek from excoriation in gonorrhœal ophthalmia, and in covering the parts contiguous to a sore where water-dressing is the application, &c. A letter from Mr. Quekett to the author states the results of that gentleman's examination of these several solutions under

the microscope. A dried film of the compound is described by him to be perfectly elastic and free from perforations, though in many parts less than the 1-500th of an inch in thickness.

The debates on the papers read before this excellent Society will, in future, be reported in the columns of the *Medical Times*.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.—Oct. 28, 1848.

John Northon Thompson, Esq., was elected President; Isaac Massey, Esq., M.D., and Augustus Darby, Esq., Vice-Presidents; Dr. W. Phillimore Stiff, Honorary Secretary.

Dr. W. Gill, the retiring President, read the following address:—

"Gentlemen,—At the commencement of another session, I have great pleasure in seeing gathered around me so many of my professional friends. May we not hope that this auspicious beginning is a proof of a continued interest in our society, and that we may prognosticate many useful meetings. For myself, I can truly say that our periodical assembling is anticipated with pleasure, and that I frequently return home with a renewed interest in our common profession. If our meetings had no other object than cultivating a spirit of unity and friendship, we should be repaid. That it has produced this effect is evident from the *esprit de corps* which exists amongst us, contrasting agreeably with the dissensions which occasionally obtain elsewhere. But our discussions on medical subjects have a tendency to advance our knowledge; and by the principle of association, the most costly and valuable medical works of the present and the past become available at a very slight cost individually. During the past season there was a falling off in the number of papers read; the epidemics of influenza and other diseases diminished probably the leisure moments of many of the members; yet those read were of an interesting character. Mr. Sibson delivered an essay on the movements of the chest indicated by a chest measurer, and available as a means of diagnosis in diseases of the chest. Without doubt, the instrument is an adjuvant to the physical means which we possess, enabling us to discriminate more precisely thoracic diseases. I have seen it applied in several pulmonic affections with unerring results. Mr. Sibson detailed to the Society his views on the mechanism of respiration, of which the following is a summary:—

In the Mammalia, the addition of a large and efficient diaphragm, modifies the form and varies the movements of the ribs and actions of muscles in various parts. The ribs articulate with a dorsal arch; they vary in length; those hinging on the centre of the dorsal arch are the longest, while those on the superior curve gradually shorten from below upwards; those on the inferior curve shorten from above downwards.

By virtue of this arrangement, the ribs, articulating with the superior curve, when they are raised, approach each other anteriorly. These ribs have each a cartilage articulating with the sternum, that is analogous to the sternal rib of birds; they comprise the thoracic set. The ribs that hinge on the inferior curve of the dorsal arch, when raised, recede from each other; they have floating cartilages, and are the diaphragmatic set. Intermediate are the longest ribs connected with the dorsal arch; their cartilages are usually linked together, and articulate with the lower edge of the sternum; they, when raised, usually recede slightly from each other. All the ribs recede from each other behind. The anterior portions of the ribs move forwards and upwards, and carry with them the costal cartilages and the sternum. The posterior portions of the ribs move backwards, push back the vertebræ, and deepen the dorsal arch. The scaleni invariably act during the whole time of an inspiration; and, in man and the porpoise, they expand the portion of lung in the neck, assisted in man by the pleural scalenus, a muscle first described by Mr. Sibson. He states, that in addition to the ordinary scaleni, there is usually a special scalenus to expand the summit of each lung. This pleural scalenus arises from the transverse process of the seventh cervical vertebra, becomes tendinous and aponeurotic, and is inserted by a funnel-like tendinous web into the whole circuit of the first rib. The pleural scalenus somewhat resembles the infundibuliform scalenus of the porpoise, that enlarges the lung in the neck. The scaleni do not draw the cervical vertebræ to either side, but they draw them, during inspiration, forwards and downwards.

The external intercostals between the THORACIC set of ribs are throughout inspiratory; those portions between their cartilages are expiratory; between the DIAPHRAGMATIC set of ribs they are inspiratory behind, expiratory to the side and in front; and between their cartilages they are inspiratory; between the INTERMEDIATE set of ribs they are for the most part slightly inspiratory between the ribs, and expiratory in front between the cartilages.

The internal intercostals of the *thoracic ribs* are expiratory behind and inspiratory in front, if the ribs approach there, and are inspiratory between their costal cartilages. Between the *diaphragmatic* and *intermediate* sets of ribs, and between their cartilages, they are throughout expiratory. The levatores costarum draw the posterior portion of the lower ribs backwards; in man, the greater portion of the fasciculi of the serratus magnus are expiratory, as also are those of the serratus posticus inferior. In addition to these, Mr. Sibson observed the following muscles to be INSPIRATORY:—

On a moderate inspiration—
The levator anguli scapulæ
The serratus posticus superior.
On a deep inspiration—
The superior fibres of the trapezius,
The sterno-cleido mastoid.

The sterno hyoid and erythroid, with the genio-hyoid and digastricus;
The pectoralis minor;
The lower fibres of the pectoralis major.

The following muscles he observed to be EXPIRATORY, in addition to those previously named.

The latissimus dorsi draws down the scapula in coughing; the lower fibres of the trapezius, the pectoralis major and the rhomboidei combine with the latissimus dorsi, and the serratus magnus to draw the scapula forcibly downwards and forwards on the ribs. The recti and the external and internal oblique draw downwards the sternum and the ribs; the external oblique draw the posterior portion of the ribs forward; the internal oblique their anterior portions backwards.

The transversales and the triangulares combine together to form one muscle, the CONSTRICTOR OF THE CHEST AND ABDOMEN, arising from the sternum, xyphoid cartilage and linea alba, and inserted into all the ribs but the first.

The sacro-lumbalis and longissimus dorsi are also expiratory.

The subject of erysipelas was discussed by Mr. Higginbottom, who is of opinion that this disease is chiefly local in its origin, and hence is frequently cured by mere local remedies, especially by the strong solution of nitrate of silver.

Dr. Hutchinson detailed the phenomena of drowning, and corroborated the views held by Sir B. Brodie, as to the proximate cause of death:—secondary cerebral congestion occurred when all danger seemed to have subsided. The effect of electro-magnetism was decided in the early treatment.

Dr. Thomas Wilson read an excellent paper "on the application of the exito-motory doctrine explanatory of the physiology of the detrusive functions, viz., parturition, defæcation, and micturition." I hope Dr. Wilson may be induced to publish his experience on this subject.

The next paper of importance was one by Mr. Joseph Thompson, on puerperal convulsions. Mr. Thompson proved satisfactorily, logically, that the true cause of this disease arises originally from irritation of the true spinal system, and that the complication of cerebral symptoms are the consequences, not the antecedents, of this affection.

The following is an analysis of the physiological points in his paper. He observed, that, when the epileptic form of puerperal convulsions is fully developed, it is attended by a total abolition of consciousness, and indeed of the whole of the psychical functions, as well as a fearfully convulsed state of the whole muscular system. Sphagiasmus, laryngismus, and odaxismus, may all be present, though not necessarily so. However much the cerebrum may suffer, the muscular phenomena which are produced depend in no wise upon it, but solely and entirely upon an affection of the true spinal system. Among the premonitory symptoms are violent splitting headache, giddiness, confusion, slight delirium, ringing noises in the ears, deafness, temporary loss of sensation, rigors, constant drowsiness, partial or total failure of sight, full slow pulse, stammering, increased sensibility of uterus, rapid contraction and dilatation of the iris. The countenance is flushed, the eyes injected, a tumid state of the hands and face has been noticed, or there may be fixed pain felt in some part of the spine without any pain in the head. In other cases there is violent pain in the stomach, with insupportable sickness. Some of these symptoms will always be witnessed, and, upon the *accession* of a convulsion, a flux of blood takes place to the head and superior extremities, the conjunctivæ become redder, the face and neck swollen and congested, the jugular veins distended, and consciousness obliterated. There may also be twitching of the muscles of the face, rolling of the eyeballs, restlessness, and irritability. Sphagiasmus may now be said to be present; and if not relieved from these symptoms, laryngismus will shortly come on,—the larynx will be partly or entirely closed, and the most frightful convulsions, with or without odaxismus, will ensue, and the encephalon will be congested to a most dangerous degree. During the attack, the face is tumified, of a leaden hue, and greatly distorted; the eyes are rolled about in various directions, the tongue thrust from the mouth, and the jaw repeatedly closed by spasms. A quantity of froth is projected from the mouth, which is generally drawn to one side,—the muscles are thrown into violent action, and the limbs are jerked in all directions. The respiration is at first irregular, and, being forced through the closed teeth and the foam at the mouth, has a peculiar hissing sound. The pulse is quick, and at the beginning full and hard, but afterwards small and imperceptible. The urine and fæces are often passed involuntarily. The convulsive movements now gradually subside, and the terrible paroxysm is terminated for a time.

After describing the variable condition of the patient, and the causes of the disease, he proceeded to explain the pathology. The accurate experiments of Flourens have established the great physiological principle, that no physical irritation of the cerebrum or cerebellum, or of the purely cerebral nerves, or, indeed, of any part of the nervous system, except the spinal marrow and muscular nerves, can produce muscular action. By cerebral symptoms are meant those depending on the condition of the cerebrum; and of spinal symptoms, those depending on the state of the true spinal system, whether contained within the cavity of the cranium or otherwise. It has been proved that no injury, and, it might have been added, disease of the cerebrum, can cause convulsions, so long as they are confined to the cerebrum; and, when they do occur, it is a proof that the spinal system is affected. Confusion, slight delirium, ringing noise in the ears, deafness, temporary loss of sensation, constant drowsiness, partial or total failure of sight, loss of consciousness, &c., may therefore be considered symptoms depending upon the state of the cerebrum. On the other hand, stammering, rolling of the eyeballs, rapid contraction and dilatation of iris, twitching of muscles of face—all the muscular phenomena, &c., may be looked upon as of spinal origin. Having discussed the scientific question, of the connexion of the sympathetic nerve with the cerebro-spinal systems, reference was made to the fact of the parts contained in the pelvis, more particularly the rectum, being supplied with nerves from the lower part of the medulla spinalis, and of the stomach and thoracic viscera being supplied by the par vagum, thus establishing a connexion between the different mucous surfaces, the whole of the viscera, thoracic and abdominal, and the cere-

bro-spinal system. It will at once be apparent how a distended and irritated state of the uterus and bladder, a loaded and irritated condition of the rectum, and, indeed, of the whole alimentary canal, may, through the medium of the incident excitor nerves, produce such a degree of excited action upon the nervous centres, as will ultimately be reflected through the reflex motor fibres upon the muscular systems.

Having brought forward the *post mortem* appearances, as well as the different opinions of authors regarding the proximate causes, and with such contradictory results in these investigations, Mr. Thompson asks whether it is not absurd to suppose that the disease depends upon organic lesions so various and uncertain as those described, more particularly when, in many instances, nothing whatever has been discovered to account for death? Ought we not rather to consider all those changes as the effects, and not the causes of the violent convulsions? Mr. Thompson then proceeded to describe the proximate cause of puerperal epilepsy and its appropriate treatment.

After concluding the subjects that came under decision by the Society during the past year, Dr. Gill introduced appropriately to the attention of the members the subject of the anticipated epidemic, the cholera, and recapitulated his views on the subject, viz.:—

1. The introduction and spread of the cholera has been the same everywhere.

2. A great mass of evidence contradicts the ordinary contagious character of the disease.

3. Cholera follows the laws of ordinary epidemics, being influenced by the same physical conditions, and attacking the same class of persons.

4. That impure and humid air are the chief physical conditions, which, acting on human beings for length of time, render them peculiarly susceptible of the prevailing epidemics.

5. That the track of cholera and the track of typhus are ever the same.

6. The absolute mortality from the two diseases are not widely different.

7. That the same hygienic rules which will prevent the one, doubtless act on the other. All evidence goes to prove that there is but one safeguard against this malady, as against others of the same class, viz., sanitary arrangements.

In vacating the presidential chair, Dr. Gill thanked the meeting for their uniform urbanity and support.

TER-CHLORIDE OF CARBON, OR CHLORIDE OF CARBON.

(To the Editor of the Medical Times.)

Sir,—My attention has just been directed to Mr. Hooper's letter, published in your Journal of the 18th of November; and, as that gentleman expresses a wish I should furnish the formula of the ter-chloride of carbon to the profession, through the medium of your Journal, I beg to make a few remarks upon this subject. About the year 1840 or 1841, I applied to Mr. Garden, of Oxford-street, to prepare for me some of the ter-chloride of carbon.

As I was induced to believe that as carbon possessed such antiseptic properties, and as I had seen great benefit result from the exhibition of chlorine in many cases of cancer, that the ter-chloride of carbon would be a most useful remedy, I was furnished with an etherial fluid, which I administered in a number of cases with considerable benefit, and the result was published in the *Lancet*, and in my work on the Structure and Functions of the Female Breast. An extract from the latter will give Mr. Garden's mode of preparing this remedy.

"The chloride of carbon may be most easily obtained by the action of alcohol on the chloride of oxide of calcium; when these are mingled together in the proportion of three or four parts of the former to one of the latter, the chloride is disengaged, and may be collected in a cooled receiver. It is an etherial fluid, dissolving slowly in water. When dropped into a glass of that liquid, it may be observed to descend gradually, floating about like some spirits. It has a strong odour of chlorine, not an unpleasant taste, diluted with water, and removes the fœtor when applied to ulcerated surfaces."(a) The preparation may be regarded as a solution of chloroform in alcohol, having a sp. g. of about 0·880. I consider that had not this remedy been brought before the public, the use of chloroform might not have been discovered. I do not pretend to take any credit to myself for the discovery of chloroform, but I must maintain my right to the introduction of the fluid termed ter-chloride, or chloride of carbon, as a medicinal agent, or the preparation furnished to me by Mr. Garden, call it by what name you please. In the *Times* newspaper of last month, the 18th, I believe, there appeared a statement, that at Belgium a young physician had discovered a new and infallible remedy, the ter-chloride of carbon, for the cholera, the effect of which was said to be so astonishing, that the Government had appointed M. Dumas to investigate the result. That this preparation will produce the utmost benefit, I have little doubt, not only as an internal remedy, but as an external application to the pit of the stomach, in solution with spirit or water. I have given a few drops in cases of violent gastric irritation, with immediate benefit, after all other means had failed; also, in cases of English cholera, with the same result; and I can most strongly recommend this preparation, as most likely to be of the utmost advantage in Asiatic cholera, in stopping the sickness, the alvine discharge, and the spasm. I may also add, for the benefit of the profession, that when this remedy fails to act, a few drops of vegetable acid, administered to the patient, will often produce an immediate result; or it may be combined with a few drops of the solution of acetate of morphia, with the utmost advantage. Allow me, in conclusion, to observe, that I shall be most willing to assist any practitioner in investigating the effects of this remedy, or any other that may be of benefit to the public.

I am, Sir, your obedient servant,

E. W. Tuson, F.R.S.

15, Harley-street, Nov. 27, 1848.

(a) See Tuson on the Structure and Functions of the Female Breast, page 411.

MR. ROSS'S LECTURES ON CHOLERA.

[To the Editor of the Medical Times.]

Sir,—Your Correspondent, "F. R. S.," has objected to my employing the term *law* to express that general uniformity of phenomena which I have laboured to develope, in reference to the progress and mortality of cholera, and has stated his opinion, that my tables demonstrate only an indication of a "*latent general principle.*" I really do not understand this. What is a latent general principle, if not a law? Will "F. R. S." explain his ambiguous phraseology? But then it is only an *indication* of a latent general principle. In other words, I presume that "F. R. S." means that I have not absolutely proven the law I have propounded. This may be true. I am rather pleased than otherwise that "F. R. S." is not wholly satisfied, as it may induce him to investigate the subject for himself, and either confirm the truth or expose the fallacy of my views. If my induction is proved to be incorrect, I will renounce my conclusions, for I have no object but truth.

With respect to certain facts in my tables, not corresponding with the theory, I can only say, that "F. R. S." has entirely misapprehended the nature of my investigations. It is not pretended that the mortality in Poplar, for example, ought exactly to correspond with the theoretical ratio for that place; such an expectation would be absurd, seeing that the mortality in any given place is influenced by many incidental causes, and, not the least of any, by treatment. The practical value of the theory is, to enable us to measure the operation of these causes. This is its merit rather than its fault. My tables are based upon the calculation of *means*; the only mode by which, for example, the laws of economics can be ascertained; yet no one doubts that the results, as arrived at in this science, are the true exposition of principles.

Then, Sir, let me ask, Is a law incorrect, because certain facts seem to be at issue with its decisions? "F. R. S." has illustrated his meaning by referring to the law of gravitation. Surely he ought to know that there was, at one time, a large number of observations that seemed to militate against that law, and caused a prolonged scientific warfare; and, even in this year, certain events have happened, which, if occurring at an earlier epoch, would have jeopardized the infallibility of the theory of gravitation. Messrs. Le Verrier and Adams, calculating from observations of certain disturbances of the planet Uranus, predicted the approach and visibility of a comet at a certain period and at a certain place. The comet came,—as it were, obeyed the prediction; the world was astonished, and more—satisfied. Science had achieved a great triumph. A few months elapse, and it is found that the comet does not describe the orbit chalked out for it by the astronomers; and, of course, all the calculations of these *savans* must be wrong. But do the two facts of the approach of a wrong comet, and the non-appearance of the right one, invalidate the law of gravitation upon which the calculations were based? Surely not.

But even admitting, Sir, that the position taken up by "F. R. S." is perfectly true,—that a law should explain all the facts which it professes to embrace, yet it must be remembered that my tables are composed of calculations of the means of these facts, and exhibit, therefore, a latent general principle, which I have called, and which is, in truth, a *law*; the special facts differ only as to the force of the disturbing causes.

The observations of "F. R. S." are, therefore, hypercritical, and merely verbal, for they do not touch the merits of my investigations. He admits, in fact, their truth; for which, and his polite remarks, I return him my thanks.

I remain, Mr. Editor,

Your obedient servant,

George Ross.

24, Farringdon-street, City, Nov. 28, 1848.

RACES OF MEN:" A FEW OBSERVATIONS ON THEM BY DR. TUTHILL MASSY.

[To the Editor of the Medical Times.]

Sir,—Having read with much pleasure and instruction Dr. Knox's Lectures on the "Races of Men," and in particular, on the many races in Ireland, I beg leave to give my views on those which I have seen in Ireland. Each province has its own peculiar race, but perhaps I should be more correct in saying each county. The Irish language, spoken by a Munster man, is quite unintelligible to a Connaught man; whether it be a difference of words or a difference in the pronunciation I cannot say. About Killarney the inhabitants have round faces, the eyes and hair dark. About the Killerys, in Connemara, the faces are long, eyes and hair dark. With the round face you have the round head, and with the long face the long head. About the Killerys the women ride *astride*, and manage their horses well. Those equestrians I have seen at Leenane riding from a pattern.

In a letter from Dr. Tuthill, of Jamaica, on those Connaught rangers, his reply runs thus:—"In a mountain district, thirteen miles from Linstead, Thomas Vale, there is not a decent cottage to be had; nothing but a negro hut, quite like an Irish cabin. One might fairly infer, from the similarity between the huts of the Irish and African, that either one must have visited the country of the other first. It, however, seems that the Milesian inhabitants of Miletus, a seaport of Caria, in lesser Asia, the birthplace of the celebrated philosophers, Thales and Anaximenes, and the famous musician Timotheus, when forced to quit their country by the Persians, had carried with them Africans from the northern shores, and, sailing through the Mediterranean Sea, west, into the Northern Atlantic, made the county Galway on the western part of Ireland—the most convenient and safest shore for them to make in their fragile vessels, for in doing so they escaped the heavy and dangerous Bay of Biscay. I remember, when in the county Galway, being very much struck with the copper-coloured skins of the inhabitants, especially about the Connemara mountains. Their long straight hair, the red garment wove or worked without the appearance of a seam, and the want of energy among them, as likewise the peculiar structure of their houses, which reminded me that they sprang from the black and European, most probably the Spaniards, as they were the most likely of all Europeans to sail at that time upon the Atlantic, the situation of their country being so favourable for nautical purposes in those early times."

In the north of Ireland you meet a people like the Scotch, and in the east you meet a people like the English. I thought I could trace a similarity between the Kerry Irish and the Glamorganshire Welch. In the counties of Limerick and Clare you have the fine oval face, with good teeth, and regular features. The boatmen, who take visiters to the caves at the Causeway, are elegantly-made, fine, athletic men, with large hazel eyes, giving a bold, searching, and intelligent look: their hair is dark. In the northern parts of Donegal—that rocky district, so wild and barren as to be almost a desert—you find a different people, thick in their make, heavy in their aspect, and plodding in their way, with blue eyes and light hair,—so unlike those in Antrim and Londonderry.

There is one characteristic of the Celt and Saxon, not mentioned, which I have for years remarked,—

the large calf and fore-arm, the small thigh and arm of the former; whereas the latter have a large thigh and arm, and a small calf and fore-arm. Let me be understood as speaking of those parts in proportion. With the large calf of the Celtic woman, you have a small breast; with the large thigh of the Saxon woman, you have a large breast. The thigh and arm are shorter in the Saxon than in the Celt; the fore-arm and leg are longer in the Saxon than in the Celt. The leg and foot of the Celt is beautiful,—the elastic, graceful walk, matchless; the leg and foot of the Saxon is abominable, as is seen in the heavy, awkward gait,—of course admitting of many exceptions, which are the result of continual intermarriages, and which are so conducive to a healthy offspring, of mental and corporeal vigour.

And here I may remark a leading cause of insanity,—the marriages of near relatives; families adhering together, on account of money; a little estate, making friends anxious to keep it among themselves, to join land to land, house to house, cousin to cousin; those friendly bodies called Quakers, who marry so much together, particularly in small towns, where they are but a few isolated beings. From these close family unions we see a great many cases of insanity. With the mind the body goes hand in hand; and you now have a small degenerate race of Quakers. Among them you seldom see a man having the bearing of a soldier. It occurs to me, that our silent friends have been moved to think over this, and of late they take the young of their families to the metropolitan meetings. This silent precaution, with the rapid railway intercourse, will, I hope, remove this mental contraction.

But, to proceed with my views. The Celtic woman has a large abdomen; the man, a small one. The Saxon woman a small abdomen; the man, a large one.

I may appear peculiar in stating those appearances; but they have struck me forcibly while a student. In the hospitals and dissecting-rooms in Ireland, England, Scotland, and France, I have observed them. This made me closely examine the people in the streets; but in the streets we are likely to be deceived. A few summers since, I was down in Wales. A smart, round, plump, dapper little Welch woman tumbled off a car, and alighted on her left shoulder, fracturing the clavicle. I got her into a house to set the collar-bone. A servant removed her dress, and with the corset, to my great surprise, came off her lovely bosom. I never felt more surprised. Here I had a new creature! an old, skinny, worn-out hag. Such deceptions are disgusting.

The small hand, as diagnostic of a small foot, cannot always be relied on. You very often meet the small hand with a large foot, and sometimes I have met a very large hand with a small foot, elegantly made, indeed beautifully proportioned. The Celtic hand and foot are more graceful than the Saxon.

The anterior curved line, from the waist to the knee, is most beautiful in the Celtic woman.

The posterior curved line, from the waist to the insertion of the hamstring muscles, is most beautiful in the Saxon woman.

The lateral curved line, from the arm pit to the ankle, is most beautiful in the Celtic man.

The Saxon woman's chest is lovely, the eye has no resting place, it is all so agreeably proportioned, so elegant as to be faultless; but the Celtic neck speaks its easy graceful movements, particularly visible when supporting a well proportioned head and pleasing happy face.

The Celtic woman's shoulders, and that curved line from the ear to the insertion of the deloid muscle, are filled with charms.

On a future occasion I hope to say a little on the bones of the skull and face of the Celt and Saxon.

I am, Sir, your obedient servant,

R. TUTHILL MASSY, M.D.

Southernhay, Exeter, Nov. 23, 1848.

CHOLERA AT HULL.

(To the Editor of the Medical Times.)

SIR,—On perusing a contemporary Journal, I observed a paper in it from Dr. Ayre, of this town, giving an account of his very successful practice in the treatment of cholera, in 1832; and that, out of 219 cases, there were only 43 deaths. On the contrary, in cases which were treated by other members of the profession, in Hull, he states, that "out of 23 cases, there were 14 deaths;" and out of "9 cases, 6 deaths."

Dr. Ayre is a most respectable physician, and his practice excellent in general, and I wish not to controvert any of these points; but I beg leave to remark, that other modes of treatment have been adopted for the cure of cholera, and also found successful. Much depends on constitution, climate, idiosyncrasy, date of disease, &c.; but as for the universality of any one drug, at all times, and in all places, I am no believer in the theory. However, the superiority of one medicine over another is not the object of this paper. It is the great superiority *claimed* by Dr. Ayre, for his mode of treatment over that of any other practitioner in Hull—an assertion which *I deny*.

As evidence of the success of my own mode of treatment, I refer to the *Medical Gazette*, 7th July, 1832, in which is stated the history of 26 cases, treated by me, which were at the same time successively reported to the Cholera Board of this town, with name, age, residence, &c.; and, of these 26 cases, only 3 deaths; and the next 20 cases, which I treated, 1 death, being not 1 death in 10 cases, and which I presume to be fewer deaths than that of the most of practitioners, not excepting Dr. Ayre himself, even by his own showing.

I remain, Sir,

Most respectfully yours,

THO. BUCHANAN, C.M.

Hull, 20th Nov., 1848.

THE INJUSTICE TO DOCK-YARD SURGEONS.

[To the Editor of the Medical Times.]

SIR,—The justness and discrimination displayed in your Article on the reduction of surgeons' pay in Her Majesty's Dock-yards, call forth the warm thanks of the profession, more particularly as it is only from such truthful exposures that the chilling oppressions of particular classes of our oppressed profession are made known to the truly thinking world. Well may you sympathize, and speak in becoming pity of the already paltry remuneration of the surgeons of our naval establishments, whose arduous duties, unlike every other *attaché*, never cease, never terminate. Every other officer's time is limited, but the medical man is always on duty; obliged always to be on the alert, night or day; his relaxations, either of body or mind, are but few; his feverish anxiety and responsibility (more particularly in the larger yards) are incredibly great. And yet, are these just claims not to be noticed? Cannot they stop the approach of the ruthless knife? Are past years of faithful service performed to be lightly forgotten? to be so ungraciously requited, for the sake of what?—a ridiculous saving of a few pounds per year? It cannot be. The surgeons' pay, of Her Majesty's dock-yards, is already considered as being incompatible,—as being much too low for the chosen talent employed: as also the assistant, who—although of perhaps many years' standing in the service,—after all the numerous expenses accompanying the various attainments of his professional knowledge—is deemed (if one may judge from his pay in the Navy List) to be of much less value than the boatswain of the yard in which he may serve.

I am, Sir, your obedient servant,

JUSTITIA.

THE MEDICAL AND CLERICAL WIDOWS' AND ORPHANS' ANNUITY SOCIETY AND BENEVOLENT FUND.

[To the Editor of the Medical Times.]

SIR,—With feelings of gratification we beg to call the serious attention of our professional brethren to the Society establishing under the above title, and to the subjoined abstract of its principles of operation. An association of this character has long been a desideratum to our profession, and we cordially wish its promoters every success in their praiseworthy undertaking.

The Medical and Clerical Widows' and Orphans' Annuity Society, will comprise a two-fold division.

First. The granting annuities to the Widows' and Orphans' of the Medical and Clerical professions exclusively, and on a strictly mutual principle.

Secondly. The providing a superannuation fund for the benefit of members of the two professions incapacitated from the pursuit of their avocations by casualty, infirmity, &c.

Proposals for the establishment of an association of the above character have already been submitted to a large number of the profession, who, after a most careful investigation of the subject, have fully satisfied themselves that the principle of investment as applied to annuities admits of a larger pecuniary compensation to recipients than the ordinary practice of life assurance does, where the payment is made in one sum at the decease of the assured. Besides, where families and children are concerned, the advantages of the annuity system are still more obvious.

This Society proposes granting annuities to widows and orphans, in sums commencing at £15, to be increased £1 annually until they reach £20 for each annuity. Members may subscribe for six such annuities, not more to be granted to one nominee; but no annuity to be claimable until the member shall have been a subscriber five years.

Annuities to widows to cease on their second marriage, but to become again payable in the event of a second widowhood. In the case of female orphans, annuities to cease on their marriage, but to accrue again should they become widows. Annuities to male orphans to cease on their attaining their majority.

An entrance fee of two guineas, with an annual subscription of not less than £1 10s. for each annuity to constitute a member; besides a small graduated sum payable for disparity of age between a member and his nominee, as provided for in Tables especially constructed for this Society.

The superannuation fund to be composed of subscriptions of not less than one guinea per annum, entitling the member under a given scale to a pension of from £20 to £30 per annum, in the event of such member becoming incapacitated from pursuing his profession, and provided he should possess no other adequate means of support, and shall have been a subscriber for five previous years.

In the formation of a "benevolent fund," to which the attention of the higher and wealthier members of the two professions is more especially directed, it is hoped such patronage may be obtained as will at once place this Society beyond competition. And whilst we beg to remind them that the object of the Society is to save from penury men who have honourably struggled for themselves, and in times of comparative prosperity have been willing to assist others, we doubt not it will meet with that pecuniary support to which it is so eminently entitled.

In conclusion, we unhesitatingly affirm, although so greatly needed, there exists no Association of a provident character, imbodying the principles of the present Society, at all commensurate with the wants of the above professions, or sufficiently comprehensive in its operations, as at the same time to entitle its members to its collective privileges as a vested right, and which shall thereby obviate the humiliating alternative of their becoming, in the event of adversity, suppliants for the bounty or charity of the public.

It only remains to be added, that the foregoing project emanates from no professional party, is dictated by no selfish views, but is open to every member of both professions to come forward and take a part in its management, or to give suggestions for modifying its principles or organization. A sufficient number of persons, already acquainted with the above details, have expressed their acquiescence and readiness to co-operate in its establishment, so as to give a fair warrant of success.

Any of your readers, who will forward his name to "Philo-Medicus," at Bulgin's, 221, Regent-street, will have a personal invitation to a Preliminary Meeting shortly to be convened, and which will be duly advertised.

London, 10th Nov., 1848.

UNIVERSITY OF LONDON.

BM. SECOND EXAMINATION. PASS EXAMINATION.—1848.

MONDAY, November 6.—Afternoon, 3 to 6.

GENERAL PATHOLOGY, GENERAL THERAPEUTICS, AND HYGIENE.

CELSUS DE RE MEDICA.

Examiners, Dr. Billing and Dr. Tweedie.

1. Mention the principal predisposing causes of disease, giving a few examples in illustration.

2. Explain the theory of the operation of cathartics. Mention, 1. the diseases in which they are especially indicated; 2. the circumstances by which their selection should be regulated; and 3. those which render caution necessary, or altogether forbid their employment.

3. Sketch shortly the diseases to which artisans are liable who are exposed to the noxious effects of metals in their occupation, with the hygienic rules to be adopted for their prevention.

4. Translate the following passage into English:—

Proximum est, ut de iis dicam, qui partes aliquas corporis imbecillas habent. Cui caput infirmum est, is si benè concoxit, leniter perfricare id manè manibus suis debet; nunquàm id, si fieri potest, veste velare; ad cutem tonderi: utileque lunam vitare, maximèque ante ipsum lunæ solisque concursum; sed nusquàm post cibum progredi. Si cui capilli sunt, eos quotidiè pectere; multùm ambulare, sed, si licet, neque sub tecto, neque in sole: utique autem vitare solis ardorem, maximèque post cibum et vinum: potiùs ungi quàm lavari; nunquàm ad flammam ungi; interdùm ad prunam. Si in balneum venit, sub veste primùm paulùm in tepidario insudare; ibi ungi, tùm transire in calidarium: ubi sudârit, in solium non descendere, sed multâ calidâ aquâ per caput se totum perfundere, tùm tepidâ, deindè frigidâ; diutiùsque eâ caput quàm cæteras partes perfundere; deindè id aliquamdiù perfricare; novissimè detergere et ungere. Capiti nihil æquè prodest atque aqua frigida: itaque is cui hoc infirmum est, per ætatem id benè largo canali quotidiè debet aliquamdiù subjicere. Semper autem, etiam si sine balneo unctus est, neque totum corpus refrigerare sustinet, caput tamen aquâ frigidâ perfundere; sed quùm cæteras partes attingi nolit, demittere id, ne ad cervices aqua descendat; eamque, ne quid oculis allisve partibus noceat, defluentem subindè manibus ad hoc regerere. Huic modicus cibus necessarius est, quem facilè concoquat; isque, si jejuno caput læditur, assumendus etiam medio die est; si non læditur, semel potiùs. Bibere huic assiduè vinum dilutum, leve, quàm aquam magis expedit; ut quùm caput gravius esse cœperit, sit quò confugiat: eique ex toto neque vinum neque aqua semper utilia sunt; medicamentum utrumque est, quùm in vicem assumitur. Scribere, legere, voce contendere, huic opus non est, utique post cœnam: post quam ne cogitatio quidem ei satis tuta est: maximè tamen vomitus alienus est.—Celsus, *De Re Medica.*

Tuesday, November 7.—Morning, 10 to 1.

SURGERY.

Examiners, Sir Stephen Hammick and Mr. Cæsar Hawkins.

1. What are the appearances and altered conditions of the leg, when in a state of common inflammation? Give the various terminations of inflammation; describe the symptoms of each termination respectively, with the mode of treatment, both local and general, through the different stages of the disease of this part, up to a favourable or fatal issue.

2. Describe the symptoms and treatment, both locally and generally, of a wound of the abdomen of moderate size, according as there is, merely a wound of the parietes opening the peritoneal cavity; or a wound of the abdominal walls with protrusion of uninjured intestine, or omentum, or both; or such protrusion of small intestine with a slight wound of its coats, or with a large wound, or with entire transverse division of the canal.

3. What are the symptoms and effects of gonorrhœa in the male sex in mild, or irritable, or acute cases? Give the treatment which should be adopted under these several circumstances for their different stages and symptoms of the complaint.

Tuesday, November 7.—Afternoon, 3 to 6.

MEDICINE.

Examiners, Dr. Billing and Dr. Tweedie.

1. Describe the anatomical characters and progressive changes in the cerebral tissue in cerebritis.

2. Sketch shortly the functional diseases of the stomach, with their diagnostic symptoms and treatment.

3. Give the differential diagnosis of pleurisy and pneumonia.

4. Describe the various forms of insanity, with the treatment, moral, remedial, and dietetic.

5. Give the symptoms, anatomical characters, and treatment of pericarditis.

6. Sketch the principal forms of cutaneous affections of the scalp, with the treatment applicable to each.

Wednesday, November 8.—Morning, 10 to 1.

MIDWIFERY.

Examiner, Dr. Rigby.

1. What are the symptoms approaching miscarriage?

2. What are the symptoms of approaching labour, and those which simulate it?

3. What is the diagnosis, prognosis, and management of a nates presentation?

4. Describe the forms, symptoms, and treatment of placenta prævia.

Wednesday, November 8.—Afternoon, 3 to 6.

FORENSIC MEDICINE.

Examiners, Prof. Brande, Dr. Pereira, and Dr. Rigby.

1. What is the nature of the noxious emanations from sewers and cesspools? What are the means of preventing their production; and when produced, how is their influence upon the sanitary condition of the neighbourhood most effectually guarded against?

2. Enumerate the principal inorganic poisons; annex to them their chemical symbols; state by what tests they are most unequivocally recognised, and what are their respective antidotes.

3. What are the symptoms and *post mortem* appearances of slow arsenical poisoning? What are the maladies with which the arsenical disease is liable to be confounded; and what are the circumstances calculated to aid you in your diagnosis?

4. The body of a person suspected to have been poisoned by arsenic having been exhumed, and the stomach and intestines having been found wanting, (having been removed prior to interment,) you are required to state how you would proceed in order to determine whether the suspicion is or is not well founded.

5. A woman recently married becomes pregnant: suspicions are excited that it is not her first pregnancy; how will you decide the question?

6. What are the evidences of recent delivery?

GOSSIP OF THE WEEK.

Royal College of Surgeons.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners, on the 24th inst.:—Messrs. James Carroll, Dublin; John Forbes Watson, Strathdon, Aberdeenshire; Charles Creed, East Indies; Robt. Thomas Deakins, Bicester, Oxfordshire; Samuel Churchill, Deddington, Oxfordshire; William Maltby, Southwell, Nottinghamshire; Thomas Venn, Pehembury, Devon; and William Blackborne, Clapham, Great Baddon, Essex.

Apothecaries' Hall.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, 23rd November, 1848:—Henry Julian, Hanfield, near Uxbridge; Thomas Walker, Wakefield, York; John William Billing Steggall, London; Robert Powell, Bristol.

Appointments.—Dr. William Lenhousekirkes, author of the "Hand-book of Physiology," was appointed Medical Registrar and Demonstrator of Morbid Anatomy, at St. Bartholomew's Hospital, on Thursday last. Mr. Joseph White has just been elected resident surgeon to the Nottingham General Hospital, vice Francis Sibson, Esq., resigned. A vote of thanks, and a testimonial to the high talents and services of Mr. Sibson, were awarded on the occasion.

Obituary.—On the 18th instant, at Long Langton, near Blandford, Dorset, George Crosse, Esq., aged 79, for many years a resident of Lyndhurst, Hants, and formerly a surgeon in the Royal Dragoons.—Nov. 22nd, of pneumonia, at Brompton, at the residence of Robert Howe Gould, Esq., George Hine Young, Esq., surgeon, late of the Blackfriars-road, and of Hampton-court, aged 32.—On the 29th instant, in Chester-place, Charles Buller, Esq., M.P. for Liskeard, President of the Poor-law Board, aged 41.

Births and Deaths in France.—The returns of births and deaths in France, drawn up with the greatest care, show that the excess of births over deaths is annually only 183,000, or one in 190, which would only cause the population to be doubled in 132 years.

King's College, Aberdeen.—The senate of King's College, Aberdeen, have unanimously re-elected the Earl of Ellesmere lord rector of the university.

St Luke's Hospital.—On Tuesday a special general meeting of the governors of this hospital was held at the George and Vulture Tavern, Cornhill: Mr. Shaw Lefevre in the chair. The resignation of Mr. Henry Lambert, the resident apothecary, was received and accepted, and the situation declared vacant. Mr. Lambert retires from ill-health, after having performed the duties of his office for eight years to the entire satisfaction of the Board. A resolution highly complimentary to Mr. Lambert was carried unanimously, and the secretary was directed to advertise for candidates to fill the vacancy. The salary has been hitherto £200 per annum, but the governors have not yet fixed upon the salary to be paid for the future. According to the last report, there were 34 males and 68 females in the hospital at the commencement of the year, and during the year 71 males and 125 females had been admitted. Of the total number of patients 101 were cured, being equal to 64 1-3 per cent.; uncured, 49, or 31½ per cent.; dead, 7, or 4½ per cent. The total receipts during the past year were 7,163*l.* 15s. 11d., including 5,065*l.* 5s. 11d. dividends on funded property. The disbursements amounted to 5,328*l.* 16s. 2d., leaving a balance of 1,835*l.* 1s. 9d. in the hands of the treasurer. There have already been numerous applications for the vacant office.

Banff.—Endowment of an Hospital.—By the death of Mrs. Chalmers of Clunie, certain properties, in which she was life-rented, and which were bequeathed by her late husband, Alexander Chalmers, Esq., of Clunie, for the endowment of an hospital and dispensary at Banff (to be called Chalmer's Hospital), fall into the hands of certain trustees named by the testator. The property consists of the estate of Clunie, in Marnoch, and Laithers, in Inverkeithney, the joint rental of which is estimated at about 1,300*l.*, and also considerable property in the Sea-town of Banff, being the site on which the hospital is to be erected. The hospital is for sick paupers, lunatics, &c., born and resident in the county of Banff.

Proposed Change in the Construction of Hospitals.—Every one acquainted with hospital practice, whether obstetric, surgical, or medical, is well aware of the great liability among the patients to febrile and inflammatory attacks whenever the wards are overcrowded; and I believe there are few or no circumstances which would contribute more to save surgical and obstetric patients from phlebitic and other analogous disorders, than a total change in the present system of hospital practice. I have often stated and taught, that if our present medical, surgical, and obstetric hospitals were changed from being crowded palaces, with a layer of sick in each flat, into villages or cottages, with one, or at most two patients in each room, a great saving of human life would be effected. And if the village were constructed of iron (as is now sometimes done for other purposes), instead of brick or stone, it could be taken down and rebuilt every few years; a matter apparently of much moment in hospital hygiene. Besides, the value of the material would not greatly deteriorate from use; the principal outlay would be in the first cost of it. It could be erected in any vacant space or spaces of ground, within or around a city, that chanced to be unoccupied; and, in cases of epidemics, the accommodation could always be at once and readily increased.—(*From Professor Simpson's Report of the Edinburgh Royal Maternity Hospital.*)

The Board of Health in Tangiers, imitating the

absurd regulations at Gibraltar, had promulgated a decree ordering a quarantine of fifteen days to be imposed on all ships arriving from ports of Great Britain.

THE CHOLERA.—There have been two cases of cholera at Blyth during the last three weeks, one of which proved fatal. At Cowpen Quay (a low, flat, undrained place, without a single sewer, and hardly a gutter to carry off the water), there have been several cases during the same period, most of which have proved fatal. A woman named Soulsby, the wife of a shipwright, died on Monday after ten hours' illness. In two instances there have been two deaths in one house. The total number of fatal cases, up to Wednesday, has been ten. A great amount of sickness continues yet.

NO CHOLERA IN THE CITY.—Mr. Simon, the Medical Officer of the Board of Health, reported to the Court that no case of cholera had occurred since he had made his last report. He, however, repeated that he considered it necessary that he should be supplied with the particular returns from the medical officers of the city unions, for which he had in the first instance applied, as an indispensable means of enabling him to adapt the sanitary regulations to the various contingencies which might arise.

CHOLERA.—Inquests have been held during the last week on the bodies of three persons residing in the eastern part of London, in which the origin of the disease was, in two instances, clearly traced to the filthy condition of the neighbourhood, from want of ventilation and drainage; and in the third, to the dead wall belonging to the London Dock, which is 60 feet high, thereby impeding the circulation of fresh air, and the admission of light, to the dwellings of the the poor.

CHOLERA.—MEETING OF MEDICAL PRACTITIONERS.—On Friday evening a large and influential meeting of the medical practitioners of Glasgow was held in the Faculty Hall, St. Enoch Square, to meet Dr. Sutherland of the General Board of Health, and to take steps towards acquiring more complete information than has hitherto been obtained regarding the nature and treatment of cholera. Professor A. Thomson occupied the chair. Dr. Sutherland detailed the progress of cholera from Hamburgh to Hull, and submitted interesting details regarding some of the localities visited by the disease. Thereafter it was moved by Dr. J. Watson, that a committee be appointed to inquire into the natural history of cholera and the laws which regulate its development and progress. On the motion of Dr. Charles Ritchie, a committee was nominated to make a microscopical, chemical, and pathological investigation of the phenomena of the epidemic; and lastly, it was moved by Professor Rainy, that a large committee be intrusted with the statistical part of the inquiry. The utmost zeal and enthusiasm pervaded the learned body, and we cannot doubt that very important benefits will result from it.

SANITARY MOVEMENT AT PUTNEY.—COMPLIMENT TO THE UNION MEDICAL OFFICERS.—A document has been addressed to the Board of Guardians of the Wandsworth and Clapham Union, and signed by the whole of the clergy, medical men, parish officers, and gentlemen composing the Putney and Roehampton Committee of Health, which pays a high compliment to the medical profession generally; and to Mr. Whiteman, the medical officer of the district, individually. In this memorial, a wish is expressed, that "*the remuneration of the medical officers generally will be proportionate to the value of the service required of them as educated professional men.*"

THE LATE MR. CALLAWAY.—We are informed that this gentleman, of whom a short notice was given in this Journal last week, has left behind him upwards of £60,000, the greater part of which was made by the practice of his profession. His father, who for many years was connected with Guy's Hospital, left him a handsome sum, which was increased by the great care taken of it by his friend Mr. Harrison, the late Treasurer of the Hospital.

ANÆSTHETIC MIDWIFERY IN AMERICA.—The anæsthetic agents, ether and chloroform, have now been used in perhaps 2,000 cases of midwifery, and, so far as the Committee have been able to learn, without a single fatal, and very few, if any, untoward results. The Committee, in a pretty extensive correspondence with physicians in various parts of the country, have found an entire unanimity of opinion among those who *have tried* these agents, as to their favourable effects, both in advancing the progress of the labour, and in relieving the sufferings of the patient.—(*Report of the Committee of Obstetrics of the American Medical Association.* See *Transactions*, Vol. I. p. 288.)

MYSTERIOUS POISONING OF SEVEN PERSONS.—A most singular and mysterious case of poisoning occurred, last week, at the Old Swan, Liverpool. One of the children of the gardener to the Rev. J. A. Wilson, May-place, purchased a halfpennyworth of common Spanish liquorice at a small shop in the village, and shared it with his seven brothers and sisters. Shortly after having eaten it, the whole seven were seized with the most urgent symptoms of poisoning: incessant vomiting, burning pain in the region of the stomach and eyes and forehead, which in two of the sufferers was accompanied by the appearance of spectral illusions, such as sometimes attend a highly excited state of the brain and circulation. Medical aid was immediately called in, which, for some time, appeared unavailing. Although the violence of the symptoms was considerably mitigated, excepting in one case, where the sufferer had violent vomiting of blood; the whole of the sufferers are, we understand, still in considerable danger. No efficient cause for these alarming effects has yet been discovered. Under present circumstances, no blame can attach to the vendor of the liquorice, as he does not manufacture it himself. It is unfortunate that none of the liquorice used by the children remains for examination. Some, however, purchased from the same person, is, we understand, about to be submitted to chemical analysis, when it is to be hoped some light will be thrown on this painful and mysterious case.

MORTALITY TABLE.

For the Week ending Saturday, Nov. 25, 1848.

CAUSES OF DEATH.	Total.	Average of Five Autumns.
ALL CAUSES	1,207	1,154
SPECIFIED CAUSES	1,206	1,149
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	387	270
SPORADIC DISEASES:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	57	52
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	117	127
Diseases of the Lungs, and of the other Organs of Respiration	222	232
Diseases of the Heart and Blood-vessels	42	38
Diseases of the Stomach, Liver, and other Orgsns of Digestion	62	67
Diseases of the Kidneys, &c.	7	12
Childbirth, Diseases of the Uterus, &c.	6	14
Rheumatism, Diseases of the Bones, Joints, &c.	7	8
Diseases of the Skin, Cellular Tissue, &c.	1	2
Old Age	52	64
Violence, Privation, Cold, and Intemperance	27	32

TO CORRESPONDENTS.

The list of books received will be published next week.

"A Medical Student."—The diploma costs £20, and cannot be obtained without the candidate undergoing an examination. We shall immediately publish a full account of the German Universities, with a sketch of student life, and the expenses incurred in pursuing studies at the German schools. Our Correspondent then will be in possession of all the information he needs on these subjects.

"Dr. Bethel."—Search shall be made for the documents to which our Correspondent refers.

"B. M."—The communication has not reached us.

"A Regular Reader."—The school of chemistry referred to is a respectable one.

"G. L. M."—Bisulphuret of Carbon is the best solvent for the purpose.

"Philophysics."—The remarks shall receive attention.

"A Provincial Surgeon."—We do not agree with the opinions of our Correspondent. It is probable that a just remuneration would be awarded by the Judge of the County Court. The cause is worth trying.

"Amicus" asks too great a favour. If he become more moderate, we may be disposed to accede to his wishes.

"Bentham."—No.

"Matter of Fact."—We cannot decide at present.

"Medico Chirurgus,"—There is a great difference between an uneducated practitioner and one duly qualified. We must decline the communication.

"Inquirer."—Certainly not.

"A Member of the Profession."—The debt can be recovered, in consequence of the recent decision in reference to Licentiates who may not have paid the £10, and are practising within ten miles of London.

"A Constant Reader."—Our Correspondent should apply personally to the Secretary.

"B."—The blood of the vena portæ is darker than the ordinary venous blood; it coagulates slowly, the clot assumes a gelatinous appearance, and readily breaks.

"A Licentiate of the Royal College of Surgeons, Ireland."—The letter is under consideration.

"A Reader."—Yes; in April and June.

"Mr. J. Bloxam."—The exertions to which our Correspondent so kindly refers will be continued.

"Dr. Letch."—It will be necessary to ascertain the age of the person.

"A Looker On" must authenticate his letter before we can engage to publish it.

"F.R.S."—We shall feel obliged by the communication.

"A Subscriber, Exeter," wishes to know if any real cases of Asiatic cholera have occurred in the Metropolis. There is no doubt on the subject.

"Dr. J. B."—It is not necessary to publish the explanation forwarded to us.

"Amicus."—In the compound referred to, chlorine exists as an ultimate constituent, in the form of hydrochloric acid.

"Civis."—The Edinburgh College of Physicians does not confer the Fellowship on a foreign graduate, without previous examination.

"G. L."—The dentists of the principal London Hospitals are members of the College of Surgeons.

"A Member."—We have not seen the letters, and shall be glad to have them forwarded to us.

"Kaf."—Communication received.

"Mr. Crumney, Stokesley, York." — Observations on cholera, received.

"Mr. Hugh Hastings, Stokenchurch."—We will endeavour to insert the communication next week.

"Mr. Evan Thomas, Cumberland Infirmary," is thanked for the papers forwarded. They shall appear next week.

"A Subscriber to the *Medical Times*, Eastbourn." (1)—We cannot give the information in reference to the Electric Light. (2.)—We have received no communication "On the Treatment of Cholera by Roasted Rye." We shall feel obliged by the papers being sent.

"Mr. R. Pencott, Chipping Ongar."—The request shall be complied with.

"Dr. Paxton's" communication shall receive an early insertion.

"Dr. Ch. Burnett."—Received.

"Dr. T. R. Torbock, Bishopsweamouth."—The Letter shall be inserted next week.

"Dr. Duncan, Notting-hill."—The numbers shall be forwarded.

Letters and Communications have also been received from A Medical Student; Dr. Bethel; B.M.; A Regular Reader; G. L. M.; Philophysics; A Provincial Surgeon; Amicus; Bentham; Matter of Fact; Medico Chirurgus; Inquirer; A Member of the Profession; A Constant Reader; B.; A Licentiate of the Royal College of Surgeons, Ireland; A Reader; Mr. J. Bloxam; Dr. Letch; A Looker On; F.R.S.; A Subscriber (Exeter); Dr. J. B.; Amicus; Civis; G. L.; A Member; Kaf; Mr. Crumney, Stokesley, York; Mr. Hugh Hastings, Stokenchurch; Mr. Evan Thomas, Cumberland Infirmary; A Subscriber to the *Medical Times*, Eastbourn: Mr. R. Pencott, Chepping Ongar; Dr. Paxton; Dr. Ch. Burnett; Dr. T. R. Torbock, Bishopsweamouth; Dr. Duncan, Notting-hill.

ORIGINAL LECTURES.

LECTURES
ON
THE RACES OF MEN.

By ROBERT KNOX, M.D., F.R.S.E.
Lecturer on Anatomy, and Corresponding Member of the French Academy of Medicine.

(Continued from p. 123.)

HISTORY OF THE SLAVONIAN RACE.

The views I had adopted of the nature of man—his past history and future prospects, having been strengthened by what I witnessed in Belgium in 1815, and further confirmed by a residence in Southern Africa, I became desirous in 1820-21, of investigating a difficulty which had arisen in my mind respecting the term German, and the German people. I asked the Germans I met to point me out *Germany* on the map; and they could not do it. The German race, as I understood them to be, were originally a fair-haired, blue-eyed race, of large stature, of great perseverance, and at times of vast strength. This race I took for granted, and indeed was certain, still existed abundantly in England, in the lowlands and eastern parts of Scotland, and in the eastern parts of Ireland, where they form the great bulk of the population, giving to these kingdoms their Anglo-Saxon character, visible in their physical organization, demonstrable in their mental, legibly written down in their history and their institutions. The same race, that is Saxon or pure German, extended, I was well informed, over Norway, Denmark, Sweden, and a large portion of the kingdom of Prussia. They existed also in Saxony proper; especially in Holland, and some of the smaller states of Germany, properly so called. But when I inquired if Central Germany and Austria were also *strictly Germans*, I soon discovered that other races existed there; that even on the Rhine it was not improbable that the remains of some primitive races, distinct from Saxon, distinct from Slavonian, might still be found; but that no fact was more certain, than that the greater part of the so-called Austrian Empire was really peopled by a race, the Slavonian, between whom and the *real German* there had ever existed the bitterest enmity. This fact enabled me immediately to comprehend, as I hope to explain, innumerable facts, not merely as regards the physical organization of these pretended Germans, but also the peculiar literature and civilization for which South Germany was remarkable. It explained to me also the origin of the sanguinary wars between the Austrian Power, which is Catholic and anti-German, and the true German race,—the attempt to exterminate the Slavonian race of Bohemia, the frenzy shown by the House of Hapsburgh, to arrest civil and religious liberty in Germany proper,—the struggle between the Imperialists, composed mostly of Slavonians, and Gustaphus Adolphus, who headed the true German population against a Slavonian,—lastly, it explains, what I ventured to predict more than three years ago, that the time must come when the Austrian power, no longer supported by her German population, would be forced to throw itself on its eastern or Slavonian provinces. These events, which flow simply from the principle of race, are now in progress.

But in 1820-21, another circumstance occurred, which induced me to weigh deeply in my mind the striking peculiarities of South Germany and of Eastern Europe. It was this. Under no circumstances do the leading physical or mental characteristics of a race alter profoundly. This I had proved satisfactorily, at least, to myself. How, then, was it that there existed in Central Germany, and in Austria, a civilization so entirely different from that which I knew to prevail in any other country undeniably of Saxon or pure German origin? By civilization I here mean literature, science, and art. In what Saxon land could we have such dreamers as Fichte and Hegel; Goethe and Kant; Leibnitz and Spix; Oken and Von Martius? Minds so visionary, doctrines so transcendental, not only could never have originated with any Saxon or pure German race, but are absolutely unintelligible to the best informed Saxon mind. The character of the true Saxon race, occupied wholly with material interests, seems to me subversive of every attempt, come from where it will, to attach to the Saxon race the merit, whatever it be, of discovering the transcendental theory in Philosophy. To the Slavonian element, then, I feel disposed of necessity, as being unacquainted with any other, to ascribe German literature, properly so called; German philosophy, German music. Before discussing this point in detail, permit me to submit a few observations respecting the first appearance of the race in history, their present position, their physical organization; with the question of their modes of thought on their civilization, we shall conclude the lecture.

From the most careful attention I have been able to bestow on the opinions of ancient authors, I have ventured to draw the conclusion, that, prior to Cæsar's time, the Slavonian race occupied chiefly the countries they now dwell in, extending from the Danube, both banks of which they occupied, quite to the shores of the Baltic, by the Vistula, and the present country of Poland. They had penetrated into Finland, where we still find the race: but I do not consider the Lappes as Slavonians. On such points I speak with great hesitation, never having visited Finmark, or Finlandia, as the Finns are pleased to call it. To the eastward, dwell the Sarmatian or Muscovite race, pressing southward, as they still do towards the mouths of the Danube, and the shores of the Black Sea.

Beyond these, and deeper in Asia, lay the Mongol or Tartaric race, occupying Central Asia from the icy borders of the frozen ocean to the Himalaya range.

To the west of the Slavonian race or races,—for there are probably more than one, we find the true German or Saxon, and the Celtic races; the former occupying the Scandinavian countries, Holland and Northern Germany, as they still do; the latter, France, a portion of Spain, and northern Italy. It is, then, a singular and astounding fact, that the actual position of the races of Europe has not greatly altered during eighteen centuries, in despite of nationalities and conquests, treaties and protocols.

Between the seventh and twelfth centuries the Slavonian race completely overspread the countries from the Euxine to the Adriatic, occupying pretty nearly the territory they still possess. They were called Croatians, Wallachians, Bulgarians, Servians, &c.; they belonged seemingly to one race.

According to Gibbon, the Germans overturned the Western monarchy of Rome; to me this event seems distinctly traceable to the influence and power of the Slavonian race, and that no true German race ever possessed Italy. To this day, northern Italy is held by the Tedesche or Slavonians, acting under a German name and prince. It is the same race as it was ten centuries ago; the Slavonian element had been introduced into central Europe, deeply affecting European civilization.

Ancient Germany was much as it is now, but rather more extensive: "the Rhine separated them from the Celt, and the Danube from the Slavonian;" but we have seen that the Slavonian, mingled no doubt with Sarmatian tribes, extended to the Baltic.

The Gothic armies seem to me to have been composed mostly of Slavonian men; before the Christian era they were in possession of the country round the mouth of the Vistula; the Slavonians, under the name of Poles, still occupy the same country.

We next trace them in the age of the Antonines from Prussia into Dacia, and in seventy years to the shores of the Euxine, from whence, I think, they originally came. All the Goths seem to have used the Slavonian language.

Much has been written and said of late years concerning the Huns or Magyars. Gibbon says, that the Huns or Magyars are Turks. Their name was carried to a lofty eminence by Attila, who certainly was a Mongolian or Tartar. To what race precisely the present Huns belong has not, I think, been determined; the Slavonian intersects Hungary deeply, and has probably mingled greatly with the race.

When, several years ago, I called attention to the discordant elements in the constitution of the Austrian and Prussian monarchies, and which, I venture to predict, must one day cause their downfall, I had no positive information as to the actual strength of the Slavonian race. In England—Saxon England—we care for nothing but what is English. It now appears that, under the governments of Prussia, Austria, and Russia, thus mingled with the German and Sarmatian races, there are seventy millions of Slavonians. Their union as a race and empire would alter the civilization of Europe and of the world. History shows, that the origin of the Austrian and Prussian monarchies arose mainly from their being considered the outposts of the German race, against the Sarmatians, Mongols, and Slavonians. The Marquess of Brandenburg and the Duke of Austria were merely nobles appointed to military command on the frontier against *Slavons*, *Huns*, and *Czecks*. Points like these are not clearly set forth in the modern history of these countries. These nobles gradually absorbed the military power of the German race, and pushed its forces against the Slavonian population, Prussia seizing Silesia, Posen, a large part of Poland, and many other Slavonian countries; Austria waging war against the Slavonian Bohemians, Hungary, and all the Slavonian and Hunnish or Turkish tribes to the south of the Danube. To these countries, and to the command of Italy, it based its pretensions, by affecting to represent the German or Gotho-German Empire. The value and amount of such pretensions may best be understood by examining the statistics of its population. By these, we learn that the German population of the Austrian monarchy amounts only to 7,285,000; the remaining seventeen millions are Slavonians. The policy, then, of the Hapsburgh Family, of necessity, from the origin of the House to the present day, must always have been the same. With Slavonian and Croat armies they attempted to crush civil and religious liberty in northern Germany. They were defeated by Luther and Gustavus Adolphus. With Hungarians they crushed the Italians—with Germans they oppress the Croat and the Hun; when the Huns became troublesome, they raised the Croat against him; and a Slavonian army now bombards Vienna.

Austria, then, must cease to pretend to be what she really never was, a German State. These events we leave to the deep consideration of the historian. The destinies of a mighty race, the Slavonian, are now in progress: an intellectual Attila may arise—a Slavonian leader, equal to the emancipation of his race. The Celtic race will aid them in recovering their rights; Russia, menaced by France, will not dare to cross the Danube; the expulsion of the Ottoman power from Europe will be hailed by mankind with unfeigned joy.

Whilst the minutest shades in the character of many of the dark races of men have been inquired into, and detailed in travels and voyages by sea and land; whilst quartos have been filled with the history of the Esquimaux; eloquent pens in many a volume have traced the history of the New Zealander and the Taitian; the real history of the Slavonian race is still to write. Austria, it is true, has been for many years a kind of European China, into which it was difficult, if not impossible, to penetrate; its jealousy of Hungary was excessive.

Retzius informs us, that the Slavonian skull is shorter than the Saxon, that it is less, in fact, in its dimensions. But he has not described the physical peculiarities of the Slavonian brain. Such, no doubt, exists. They have been described, especially the Huns, as the ugliest of the so-called fair races.

In complexion they are dark, with black hair, and features arranged with an expression quite distinct from all others. Their inventive genius seems to me of the highest order, evidenced by their music, their arts, their literature. With them it is my belief originated most, if not all, the transcendental-

ism of philosophy the *diablerie* of Germany; the wild theories of homœopathy and hydropathy—phrenology and mesmerism. The anatomical writings of Oken and Carus, of Spix and Von Martius, are a perfect antithesis to the true German character. They are, and must be, Slavonian; German they are not, in the strict sense of the word,—the real Saxon or German has no inventive genius; no taste for transcendental subtilties; no power to write, nor mind to understand the doctrines of "Pure Reason;" the Faust of Goethe; the incredible absurdities of Schelling. A belief in *diablerie* still holds its ground in Vienna; and there De Haen, a court physician, wrote a defence of witchcraft.

The Slavonian race, then, is a highly intellectual race,—inventive, metaphysical, transcendental. This latter belongs to him, so does mysticism in philosophy. They have, or, at least, their admixture with the German has given rise to great names. Leibnitz must, I think, have been of a Slavonian family. I speak of them where civilized. Uncivilized, they are said to be peculiarly savage and barbarous: late events have shown this.

Vienna may one day become the capital of a Slavonian Empire; if Europe owes its escape from the barbarous fanatical Moors to the Celtic race, who, under Charles Martel, defeated them in the plains of Chelons, she owes a debt of gratitude to the Slavonian race, who, under John Sobieski, defeated the Turkish hordes once more attempting the enslavement of Europe, raising the siege of Vienna—the outpost of European civilization towards the East. But the Slavonians, to carry out their destinies as a race, must separate from the selfish, grasping German, whose notions of liberty, fraternity, and equality have been fully developed in India, and in the United States of America. It is a one-sided freedom alone which the Saxon understands; the Slavonians have never enjoyed liberty, from Attila to Ferdinand. The peasantry were at all times strictly slaves, like the Muscovite or Sarmatian, whose history will form the subject of my next Lecture.

ORIGINAL CONTRIBUTIONS.

THE LATE LORD GEORGE BENTINCK; "DEATH AT THE HEART."

By G. CORFE, Esq., Middlesex Hospital. Author of "The Physiognomy of Diseases," &c.

Much has been written, and more has been said, upon the alleged cause of the melancholy and sudden death of the lamented Lord George Bentinck; several members of the profession have raised angry discussions upon the evidence which the medical gentleman gave at the inquest upon the body of the deceased nobleman. It may be remembered, that the practitioner in question considered that "spasm of the heart" was the immediate cause of death; but the incredulity of some men is such, that, unless ocular demonstration is afforded them of morbid and fatal changes, with which they are familiar, in one or more vital organs, they are slow to believe, or wholly unwilling to accept the statements of an individual who points out a morbid structure equally as fatal, though not equally as discernible, as are an ossified mitral valve, or an aneurismal tumor, bursting into the pericardium. My present object, in now addressing you, Sir, is to remark that the term "spasm of the heart," is merely an expression of a fact. At an inquest held in this Hospital, twelve months ago, I was induced to arrive at the same conclusion as the gentleman did in the case of Lord George Bentinck. The points of the case were as follow:—A stout and well-formed Irishman, about 50 years of age, was working in the adjoining street on the morning of November 2, ramming in the road stones; he had always enjoyed good health, and had made no complaint of illness up to the hour of his fatal seizure, except a slight pain across the abdomen, which he resolved on "working off." He commenced his labour at half-past eight, and continued till half-past ten, when he was seen to reel, fall, and was instantly brought here. I saw him ten minutes after he fell, but the vital spark was evidently gone. As I have already referred to a peculiar condition of the heart, which is liable to induce sudden death, in in the papers lately published in the *Medical Times*, on "The Physiognomy of Diseases," permit me, at this time, just to give an outline of the *post-mortem* appearances, but especially of the heart, in the case above referred to, and then to conclude these observations with a brief account of the real pathology of this disease.

Head.—The brain was healthy; each ventricle contained half an ounce of fluid, which was slightly sanguinolent in the right cavity.

Thorax.—The plurse contained four ounces of clear serum. The lungs were healthy and crepitant, though gorged with sero-sanguineous fluid.

In the pericardium, there were about two drachms of clear serum. All the chambers of the heart contained dark venous blood; there were no fibrinous coagula in them, but a few, thin, weak, and very friable clots of black blood here and there. The whole organ was dilated in its cavities. The right auriculo-ventricular opening, instead of receiving three, admitted four fingers, and the ostium ventriculi was dilated into a pouch-like form. The valves were healthy throughout; but the left ventricle was dilated to half its natural capacity; it was flabby, soft, and friable in texture, pale in colour; and instead of gaping when laid open, it collapsed, just as its corresponding chamber on the right side natually does.

The Alimentary Canal presented traces of unusual vascularity throughout the pharynx and œsophagus; small portions of food were lodged on the rima glottidis, which had evidently been brought there by the act of vomiting, as the whole œsophogeal tube was lined with the same substance.

The stomach contained a pint of porridge-looking fluid. About the middle of its lesser arch, and over the space of the palm of one's hand, there was a patch of numerous villi, presenting the character of a series of red puncta, gorged with blood. Opposite to the second portion of the duodenum, and about the entrance of the hepatic and pancreatic ducts (which, by-the-bye, were pervious) was a dark ecchymosis of the peritoneal coat, the size of a crown piece, and an inch below this spot the mucous membrane was also deeply ecchymosed, and in one point it presented almost unequivocal evidence of destruction of surface. Several other such spots were likewise seen in the upper part of the jejunum and lower part of the ilium, especially some spots in the ilium, and sigmoid flexure of the colon, whilst the intervening portions were quite natural. The liver, spleen, and kidneys, were healthy, but gorged with dark blood. The pancreas was much congested, with effusion of blood into its texture, which increased from its head to its extremity. The lacteals were full of chyle. The aorta was healthy as far as its cœliac axis, where it presented unusual corrugations from disease of its inner membrane, particularly just as the superior and inferior mesenteric and renal arteries were given off. The contents of the stomach were carefully preserved, and analysed by our Professor of Chemistry, Dr. Ronalds, who tested them for hydrocyanic, arsenious, and oxalic acids—for acetate of lead and bichloride of mercury; but not a trace of either of these poisons could be detected. It should be observed, that the *post-mortem* examination was not made until Nov. 5, or 74 hours after death.

Before I proceed to notice the pathology of "spasm of the heart," or as I ventured to term it at the inquest, "death at the heart," permit me to observe, that when instantaneous death occurs, as in the above instance, it is by no means unusual to find numerous ecchymoses of a very equivocal character, particularly so to an inexperienced pathologist, and these are ordinarily met with throughout the various organs of the body, but especially throughout the alimentary canal; and if digestion was actively progressing at the time of the fatal attack, they are more palpable;—this fact alone should induce medical men to be extremely cautious how they pronounce such appearances to be the result of a corrosive or deleterious agent.

But as I have already exceeded the limits of an ordinary letter, I would prefer to add the remarks upon the pathology of this disease in a second communication, which I hope, if it pleases Him, in whose Almighty Hands our breath is, to spare my life and health, to forward in a few days.

CASES.

By GEORGE BORLASE CHILDS, Esq., Fellow of the Royal College of Surgeons of England.

CHANCRE LARVE, CONNECTED WITH GONORRHŒA PHIMOSIS; BUBO; FOLLOWED BY SECONDARY SYMPTOMS:—SUPERFICIAL ULCERATION OF LOWER EXTREMITIES; PUSTULAR ERUPTIONS ON FACE.

Edward H., policeman, came under Mr. Childs' care, May 24th, 1846, with chancre of the urethra, together with a gonorrhœal discharge, was ordered saline aperient medicines at first, and superficial cauterization of the urethra. May 26th—four grains of blue pill, and a quarter of a grain of opium, night and morning; dossils of lint, saturated with black wash, were introduced into the urethra, and changed frequently during the day. This treatment was continued up to June the 2nd, when, feeling much better and anxious to resume his duties, he discharged himself. Mr. Childs lost sight of him until August the 2nd, when he again applied to him with a large suppurating bubo in the right groin. The chancre had become phagedænic in its character, and was spreading over the whole of the upper surface of the glans, together with partial phimosis. There was pretty much constitutional disturbance present. He was ordered the blue pill with opium again, and a drachm of mercurial ointment to be rubbed in twice a day, morning and night. The chancre was cauterized, and ordered to be dressed with the following lotion:—

Acid nit, M. V.; Vin. opii, ʒj; Aq. pura, ʒij; bubo to be bandaged with the cerat. hyd. co.

August 5th.—Gums not yet affected; bubo has opened spontaneously; to be well poulticed with linseed meal poultice; pustular eruption on the face; superficial spreading ulcer on the legs; looks haggard and worn down, rest much disturbed from the painful nature of the sores; ordered gr j. of opium to each pill twice a day; to rub in three drachms of the ointment in the twelve hours, and keep to his bed; sores to be poulticed with bread and water poultices.

August 7th.—Gums are now affected—reparative process has commenced in the chancre; pustular eruptions disappearing, sores on the legs to be dressed with an ointment made with Hydrargyra proto iod. ʒi.; Ung Cetacei ʒj.; and the bubo with Zinc ointment. The pills were now stopped, as well as the mercurial ointment, and 3 grs. of potass hydriod, ordered twice a day in an ounce of decoction of bark; beef tea, and mutton broth. He now continued to improve up to August 16th, under this treatment, when, in consequence of some previous irregularity in his conduct, he was discharged the force. The bubo has entirely healed.

SECONDARY SYPHYLITIC ULCERATION OF THROAT AND TONGUE.

Isaac R., October 24, printer, applied to Mr. Childs, July 31, 1844, with the above symptoms. The mucous membrane at the back of the throat was inflamed and irritated, presenting some obstacle to deglutition; there was an an excavated ulcer on each tonsil, with hypertrophy of the edges, small patches of ulceration, superficial and oblong in shape, on the sides of the tongue and cheek; contracted chancre about twelve months since, which healed in the ordinary time. A month after the chancre had healed, the above symptoms made their appearance, from which he has never been since free. The ulcerations were touched with the nitras argenti and the sulph. cupri in the proportion of one scruple to the ounce of water, ordered to be applied daily. The following mixture was also prescribed internally:—Hyd. oxymur gr. iss.; Ext. sarsæ Co. ʒi.; Sp. vini rect. ʒij.; Sp. æth. sulp. ʒi.; aqua distillat ʒivss.; M. ft. mist. cap. coch. ij. ter. in dies. This treatment was rigidly pursued up to August 14th, when he was discharged cured.

NEURALGIA OF URETHRA CONSEQUENT ON GONORRHŒA.

Mr. E., 26, a Bank clerk, applied to Mr. Childs with the above symptoms, July, 1844. He had contracted gonorrhœa three years before, since which he has never been free from pains; occasionally a white gluey discharge makes its appearance; he has been under various medical men, but has derived no permanent relief to his symptoms. On my first interview with him, suspecting the presence of stricture, I introduced No. 10 metallic bougie, which passed into the bladder with ease. He was ordered a mild saline aperient, with ten minims of Colchicum wine in each dose. Four days after, the urethra was cauterized freely with argent nit. This was repeated on three or four successive interviews with considerable benefit; in fact, to use the patient's own phrase, "nothing ever gave him so much relief." A teaspoonful of the following drops was then ordered to be taken three times a-day:—

Tr. lyttæ, ʒ i.; Ir. ferri sesquichlor., ʒ ii.; Quinæ disulph., gr. xij; Acid sulph. dil., ʒ i.; Aqua destill., ʒ iv.; ft. guttæ.; four grains of the Extract conii; and ¼ gr. Hydrochlor. morph. every night.

After steadily pursuing the above treatment for about five weeks, he left perfectly relieved of his complaint.

ON SCARLATINA.

By J. W. TRIPE, M.D., M.R.C.S., and L.A.C., London.

(Continued from page 128.)

Table B. c. *a.* 3.

FOR THE METROPOLIS.

Quarters ending June 30.	Barometer. Mean Height.	Deaths from Scarlatina.	Average of Nine Winters.
	In.		
1844	29·919	601	349
1846	29·740	177	
1845	29·731	201	
1843	29·717	816	
1847	29·713	174	

This Table shows, that in all these years, excepting 1844, the barometrical pressure was much below the average, and also, with one exception, that the mortality from scarlatina was, in the same years, much below the average, which, if calculated from that of 1840-8, being a period of 9 years, amounts to 349 deaths for the winter quarter. And it is somewhat remarkable, that the exception,—viz., this year,—is that in which the disease was epidemic. I think, then, we may assume that a low barometrical pressure in spring is frequently co-existent with a low mortality.

From an examination of a table similar to Table B. c. *a.* 2, but constructed for this quarter, the following statistics have been drawn:—The absolutely highest barometer mean for the quarter, occurred in 1847, being 30·345 in.—the year during which the mortality was least,—whilst the lowest, 30·182 in., was in 1848, when the mortality was highest; the lowest daily mean, 28·946 in., happened in 1846; the next lowest, 29·160 in., occurring in 1848.

The average variation was as follows:—In 1848, ·450 in.; in 1846, ·422 in.; in 1847, ·318 in. The highest variation in one week, in 1848, amounted to ·790 in.; in 1847, to ·452 in.; and in 1846, to ·799 in. The greatest variation in the daily mean during these quarters, reached, in 1848, 1·022 in.; in 1847, 1·101 in.; and in 1846, 1·263 in. We thus see, that the absolutely greatest weekly variations occurred during the spring quarter of 1846, whilst the smallest number of deaths happened in the same year: the greatest mean variation, however, was observed in 1848. No conclusions can, therefore be drawn from these data.

In the quarter, ending September 30th, the relation between the mean height of the barometer, and the mortality from scarlatina, becomes less marked, even than in any of the other quarters; in fact, scarcely any appeared to exist. But here there is a difficulty to be encountered, which did occur to so great an extent in the winter and spring quarters, viz., that in this, and the following quarter, the other atmospheric agencies are more marked, and exercise more influence over the disease, so that but little dependence can be placed on the small number of examples that our space will admit of.

Table B. c. *a.* 4.

FOR THE METROPOLIS.

Quarters ending Sept. 30.	Barometer. Mean Height.	Deaths from Scarlatina.	Average of Nine Years.
	In.		
1847	29·871	316	550
1848	29·800	1,560	
1846	29·797	208	
1845	29·768	194	
1844	29·762	1,020	

An average, deduced from the years 1831-40, and 1844-48, embracing a period of 15 years, shows that the mean height of the barometer for this quarter, is 29·830 in. If we apply this to the examination of the corresponding periods in 1844-48, we shall find that one only exceeds, whilst four are below the average; out of these four, there were two years in which the disease was epidemic. In another year, 1845, the mean of the barometer was only 6-1000th of an inch above that of 1844; the mortality in the former was only 194 in 10 quarters, whilst in the latter it reached 1,020: it is evidently useless to consider these data any longer, and had better pass to that of the variations.

The variations were as follows:—The highest weekly difference in 1846, amounted to ·596 in.; in 1847, to ·312 in.; in 1848, to ·846 in.; the absolutely highest in 1846 to ·994 in.; in 1847, to ·835 in.; in 1848, to 1·069 in.; the mean in 1846, to ·372 in.; in 1847, to ·298 in.; and in 1848, to ·495; the quarterly mortality in these years being 208; 316; and 1,560 respectively. The absolutely highest, the highest weekly, and greatest mean variations, all occurred in 1848, being the same year in which the mortality was highest; but, in 1847, when the variations were least, the number of deaths were greater than in 1846, in which quarter the differences were intermediate between those of 1848 and 1847. These data are scarcely sufficient to draw any conclusion from, but they rather incline towards the supposition that a large variation in the barometer produces an adverse effect in the mortality of scarlatina.

The last quarter of the year, including the months of October, November, and December, and called the autumn, presents a mean of 29·803 in.; in the years 1844-7, only one is above this height.

Table B. c. *a.* 5.

FOR THE METROPOLIS.

Quarters ending Dec. 31.	Barometer. Mean Height.	Deaths from Scarlatina.	Average of Eight Years.
	In.		
1847	29·851	747	506
1845	29·767	269	
1844	29·713	872	
1846	29·621	322	

In two of these quarters we find that the mortality was above the average, whilst the mean barometrical height was so in one only. But we must not forget that scarlatina was epidemic in the year 1844, and, as the number of deaths was less than during the preceding quarter, whilst ordinarily it is greater, we may perhaps consider that the low barometrical pressure assisted in diminishing the mortality.

It appears to me that the best mode of testing the influence exerted by the variations in the atmosphere as indicated by the barometer, consists in making a careful examination of the period in which the disease becomes changed from a sporadic to an epidemic form. This happened between August and November of last year, when the present epidemic commenced; in the previous months the average weekly mortality was about 14½, which increased by November to 71. I have therefore drawn up a table shewing the mean readings and the mean variation for each week, as well as of the number of deaths in the same period.

Table B. c. *a.* 6.

FOR THE METROPOLIS.

1847.	Barometer. Variation.	Barometer. Mean.	Deaths from Scarlatina.
	In.	In.	
August 7 ...	·425	29·651	16
14 ...	·512	29·939	16
21 ...	·223	29·906	29
28 ...	·332	30 010	21
September 4 ...	·173	29·752	29
11 ...	·230	29·871	48
18 ...	·434	29·542	32
25 ...	·368	29·901	46
October 2 ...	·280	30·095	50
9 ...	·422	29·644	58
16 ...	·190	29·749	55
23 ...	·600	29·627	42
30 ...	·314	30·145	61
November 6 ...	·346	30·077	64
13 ...	·693	29·941	71
Mean	·369	29·851	42·5

The mean height of the barometer for fifteen years during fifteen corresponding weeks is about 29·820 in., so that the average for this period under consideration is ·031 in. per week in excess. The weekly mortality should not have exceeded 40·6, which is the average for the corresponding weeks in 1841—8: it was, therefore, 1·9 in excess. Considering it in this point of view it presents but little interest; but when viewed in a different manner this period is evidently worthy of close investigation.

The number of deaths from this disease was only at the rate of 15·07 per week, forming an aggregate of 196 in the first quarter of this year, at the rate of 13·38 deaths per week, or 174 in the second quarter, and at the rate of 15·6 for the weeks of this quarter previously to August 7. The sudden and great increase from about 14·5 per week, if we take the mean of the year, or of 16 if we take the number in the first week in the period to 71 in the last week of it, could not have occurred unless some causes exceedingly favourable to the increase of the malady had been present. Now, although other causes, as will be presently shown, were in operation to produce this result, yet, I think we may attribute part of this result to the variations indicated by the barometer, which were greater than the average.

During the greatest part of the last quarter of 1847, and of the whole of the present year, the variations in the barometer have been unusually great, and the mortality from the malady have been almost unprecedented. From the consideration of the preceding, and of other much more extensive tables, I believe that a high barometrical pressure does not exercise that injurious influence on the mortality of scarlatina that it exerts on many other diseases, and that a low barometer pressure is not so favourable as it is to some other maladies; whilst excessive and long-continued variations exercise an adverse influence over its progress.

CHOLERA—ITS SCORBUTIC NATURE.

CURED BY LIME JUICE AND THE OTHER VEGETABLE ACIDS.

By W. G. MAXWELL, M.D., Calcutta.

Previously to the time when I was attacked by cholera, I had for ten years and more been treating it, and trying to cure it in others; but when my own time was come, and I lay prostrate, then did I feel how little I knew of the disease. I had lost my patients under every treatment that I tried; and I had also seen cases recover which I had given up, and placed on litters to be brought to the next halting ground for interment. These would have no covering, but would have the cold damp air of night blow on them, and they recovered.

It was by chance I fixed on citric acid for myself. It was standing amongst many other bottles on my table in my room, and I fancied it as the very thing I had an internal longing for.

I took more than two ounces of the crystalized acid, in copious repeated draughts, which refreshed me and allayed the dreadful thirst; *I passed urine*, and recovered.

I will not *here* wander from the point of treatment into the labyrinths of this disease, but will content myself by sending you the *raw material, for* other abler hands than mine to polish into form.

1. In every fully proved case of cholera, the urine is retained in the blood.

2. There is no hope of cure till the urine flows.

3. The urine changes the blood to a thick and tarry nature, and the circulation is thus mechanically stopped.

All my treatment, now, is directed to the restoration of the urine. To effect this I employ the following means:—

α. The *immediate* exhibition of the first vegetable acid that can be procured, in repeated copious liquid draughts, with as *much sugar*, thin arrow-root, or starch, or mucilage as possible.

β. The *immediate* immersion in a bath (acidulated with the same acids—the temperature to be regulated *exactly* by the patient's feelings).

γ. Sponging the surface with the same acids in solution.

δ. The inhalation of aromatic vinegar.

ε. The diffusion of the vapour of vinegar through the sick chamber.

I shall not now speak of the relation of this disease to fever and dysentery, &c.; suffice it here to say, that it is many years since I observed, in protracted fatal cases, that the ulcerations of the bowels could not be distinguished from those in dysentery.

CASE OF ENLARGED PALMAR BURSA.

By R. PINCOTT, Esq., Surgeon, Chipping Ongar; formerly House Physician to King's College Hospital, London.

James Cornell, aged 22, servant at an ironmonger's, accustomed to lift very heavy weights, applied for advice on the 22nd of August last; states, that about a year ago his right wrist became very weak and painful; about the same time a soft tumor appeared on the front of the wrist, above the annular ligament. He then rested it for three weeks, and applied a bandage, which relieved the pain, the tumor still remaining; about three months afterwards the tumor disappeared from the wrist, and made its appearance in the front of the hand, on the inner side of the os pisiforme; this increased in size until the date of his application to me, when a large tumor occupied the palm of the hand. There was abundant evidence of fluctuation, accompanied by a grating sensation,—the apex of the tumor was inflamed and painful on pressure. I at once punctured the swelling; a quantity of glairy fluid escaped, resembling thickened synovia, accompanied by numerous cartilaginous discs. I then injected the sac with strong tinct. of iodine, and ordered a poultice to be applied. I saw the case daily, and, on applying pressure, numerous cartilaginous bodies escaped from the orifice of the puncture. I also daily injected a strong solution of sulphate of zinc. This treatment was continued for six weeks, when he was discharged, the perfect use of the hand being restored, and all traces of the sac obliterated.

I have been induced to give publicity to the above case, as every practical surgeon knows how very difficult such enlargements are to treat satisfactorily, and also to bear testimony to the plan devised by Professor Velpeau,—for I by no means claim any novelty in the plan of treatment. An additional motive for the report of the above case, is in consequence of the plan of treatment proposed by the celebrated surgeon Professor Syme, who states that the difficulty of treating pulmar bursæ arises from the constriction caused by the annular ligament, and advises it to be completely divided and the wound filled with lint, a bandage and compress being applied to prevent the protrusion of the flexor tendons. I do not mean to deny the efficiency of this plan of treatment, which may, doubtless, be easily managed in *hospital practice*. In *private*, however, it is necessary, for many reasons, to abstain as much as possible from the free use of the knife; and, indeed, there are few who would submit to so severe an operation for what appears a trifling malady.

HOSPITAL REPORTS.

CUMBERLAND INFIRMARY, CARLISLE.

Reported by EVAN THOMAS, Esq., House Surgeon.

CARIES OF THE SPINE SIMULATING DYSPEPSIA.

John L——, 21 years of age; a tile-maker; admitted into the infirmary, under the care of Dr. Lonsdale, December 9, 1846. He said that he had always enjoyed very good health, until May, 1845, when he first had what he calls a stomach complaint. The symptoms under which he laboured at the time were, pain in the right side, in the region of the liver and colon, which was most severe early in the morning, when he went to his work. He lost his appetite, but did not then feel much pain in the stomach. He got well of this attack in about a fortnight, after having taken some opening medicine, and enjoyed rest. He had no medical advice. Since, he has had several like attacks, and in all of them he has suffered dreadfully from pain in the pit of the stomach, and in the course of the ascending colon. During an attack in September last he had much pain in the thighs, legs, and feet. Pressure over the stomach neither decreased nor increased the pain; no kinds of diet influenced it; but the pain was always present whether the stomach was empty or otherwise. His appetite, when he came under our observation, was pretty good; he had no thirst; his bowels torpid.

January 13, 1847.—Since his admission we have tried various agents—antacids, purgatives, opiates combined with alteratives, bismuth, prussic acid; and, lastly, quarter-grain doses of nitrate of silver, thrice a day, seemed to have a good effect. He was at his own request made an out-patient.

February 17, 1847.—Re-admitted; is much worse; still in pretty good condition; appetite good. He complains now, for the first time, that he cannot walk well without the help of a stick; the pain in the stomach is so much worse, that he cannot stoop to tie his shoe-strings. He is easiest when in bed, in a position midway between lying and sitting, and, whenever he sits in a chair, he is best when leaning forwards upon his elbows on a table, inclining to the left side. On examining the spine, there is a slight prominence over the last dorsal and upper lumbar vertebra; this region is extremely tender when pressed. He was treated for the spinal affection alone, taking no medicines except to regulate the bowels. He had generous diet, rest in the recumbent posture, and the affected part was repeatedly blistered with Acet. lyttæ. As soon as counter-irritation was applied over the seat of mischief, the pain in the stomach and right side left him, and as yet he has had no return of the disease. He was discharged well, June 2nd, 1847.

RENAL DROPSY PRODUCED BY LARGE DOSES OF COPAIBA.

Charles F——, 43 years of age, married; a weaver; became an out-patient of the infirmary, July 10, 1846. He said that he was quite well until three weeks ago, when he contracted gonorrhœa, for which he applied to a druggist, who gave him a copaiba mixture, of which he was ordered to take a table-spoonful three times a day. For a few days he took the quantity ordered, but finding himself not much improved, and anxious to get well, for fear of being detected, he was induced to double the doses. The urethral discharge in the course of a few days had entirely ceased, when a new train of symptoms set in,—much pain in the lumbar region, urine scanty, and very high coloured. When he presented himself at the infirmary his legs and thighs were œdematous, besides a little effusion into the abdomen. His urine was of a smoky colour, and very albuminous. He was cupped on the loins, and ordered a drachm of compound jalap powder twice a day, and a warm bath twice a week. This treatment was continued (though less vigorously) until the end of July, when he was discharged well. I have since repeatedly examined his urine, and always found it healthy. I may remark, that all the information elicited from him tends to show, that the drug with which he overdosed himself had produced the disease. He had none of the early symptoms of granular disease of the kidney, though for many years, when obliged to do extra work, he has been subject to *lumbago*. At that time there was no scarlet fever near his house, though it was very rife in other localities in the town, nor had he been exposed to wet and cold. It may not be unreasonable to suppose, that copaiba, when not producing purgation, may cause, in some mysterious manner, so much disturbance in the renal capillaries, as to bring on, like the scarlet-fever poison, renal dropsy.

ERYSIPELAS.

Whilst reading the leader of your Journal of Nov. 25, you say, and I have no doubt of its truth, that bad drainage, open sewers, and cesspools, engender dysentery and erysipelas. During my residence here, now more than two years and a half, we never had a case of erysipelas, until September last; when we admitted a man who died on the following day. About a fortnight afterwards, (I cannot say very precisely the day,) the woman whom we employ once a week as cleaner caught the disease. She was quite well when leaving the infirmary at night to go home; she went to bed as well as usual; on the following day she was confined to bed. Since we have admitted three well-marked cases, besides two others in the house. A brief account of all these I will give below.

Here we cannot attribute it to any cause except it be atmospheric; the two patients, *Allen* and *Lenox*, were so far apart, as in my opinion to preclude the possibility of infection. The infirmary is a new building, capable of accommodating 50 patients, and I believe well drained and ventilated, standing on high ground a short distance from the town. For a year past it has been well supplied, and is now, with good water; and latterly we have adopted dry scrubbing, instead of scouring and washing the floors. As I said before, the drains are good, and the closet taps are kept nearly always running.

Erysipelas is not common in the town, though not confined to this locality. On the 2nd of this month, I was at the Sheffield Infirmary, and there I was informed by the house surgeon, that, of late, erysipelas had become rather general. On the 3rd of the month I was at the Royal Infirmary, Manchester, where Mr. Bowring showed me a great number. He attributed the disease to washing the dirty floors after whitewashing the walls. This is done annually about this time of the year, when erysipelas follows as cause and effect. I have taken the liberty of sending you this very imperfect account; should you think any part of it worth noticing, you are welcome to do so.

1st case. James Hetherton, a farm servant, 45 years of age, admitted September 26th, with extensive sloughing of the left arm, extending to the shoulder and side of the chest. Died on the following day.

2nd case. Jane Hogarth, 25 years of age, was employed for the first time as cleaner. She was quite well when she left the infirmary, in the morning she was very ill. On the second day the face and entire scalp were affected. She got well, but since has had a second and very severe attack.

3rd case. Joseph Bowman, 30 years of age, admitted October 29th. He got his finger injured in a public house affray. He had been ill nearly a week, when he was admitted, and was discharged quite well on the 22nd November.

4th case. Richard Davison, 44 years of age, cut his thumb slightly in cutting a piece of bread. The whole hand was attacked a few days before his admission. He was discharged well on the 22nd November.

5th case. Robert Lenox, 12 years of age, admitted October 18th, for conjunctivitis of the right eye. He was cupped on the temple the day after his admission; no untoward result followed. On the 31st, a few leeches were applied to the under eyelid; this was followed by a severe attack of erysipelas. He was discharged well on the 25th November.

6th case. John Hodgson, a farm servant, 44 years of age, was admitted on the 19th November, with

a severe attack of erysipelas of the face, and both sides of the neck. He is doing well.

7th case. Mary Allen, 40 years of age, admitted October 25th, on account of discharge from the left ear, supposed to be the consequence of concussion of the brain, received many years ago. She was nearly well of this, when, on 19th of November, she caught cold by getting, as she thought, her feet wet. This was followed by catarrhal symptoms, and subsequently by erysipelas of the scalp, and is now likely to be fatal.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

ACADEMY OF SCIENCES.

Meeting of Nov. 27, 1848. M. POUILLET in the Chair.

EXPERIMENTAL RESEARCHES ON THE EXHIBITION OF PERUVIAN BARK. BY M. BRIQUET.

M. B. endeavoured in this paper to establish, that in fevers, continuous, remittent or intermittent, rheumatism, gout, neuralgia, and convulsive disorders, satisfactory results were to be expected from the exhibition of the bi-sulphate of quinine only when the doses were carried to one gramme daily at least,—three at most: further, the doses should be subdivided as much as possible, and their influence upon the system ascertained by the production of headache, giddiness, &c.

ACADEMY OF MEDICINE.

Meeting of November 28. M. ROYER COLLARD in the Chair.

ELECTION OF A MEMBER.—SECTION OF CHEMISTRY.

M. Gaultier de Claubry was elected by 53 votes, against 35 obtained by M. Boudet.

CHOLERA IN DUNKERQUE.

M. Magendie stated, that in his official visit to that city, he had seen only three cases, which did not present the characters of epidemic cholera.

ENDOCARDITIS (DIAGNOSIS OF).

M. Bouillaud thus enumerates the differences between the souffle of chlorosis and that of endocarditis:—

In chlorosis, the bellows-murmur is inconstant,—soft and short; it accompanies the first sound of the heart without concealing it entirely, and is most distinct in the neighbourhood of the aortic orifice, whence it is propagated to the carotids;—this murmur increases when the patient is erect, and disappears in effort.

In endocarditis, on the contrary, the murmur is constant, rough, and prolonged; it not only accompanies but absorbs and conceals the first sound. It is most distinct at the apex of the heart; does not increase when the patient stands,—nor ceases on the production of an effort.

PARTIAL AND GENERAL ATROPHY.

(Union Méd.)

Various authors have described general Idiopathic Atrophy at considerable length,—a disease which, notwithstanding the name "Idiopathic," is, after all, only a symptom of some internal disorder, at least in most cases. But partial atrophy, limited to a circumscribed portion of the body, supervening at a time when the patient appears in the enjoyment of perfect health, is, on the contrary, a malady of so rare an occurrence as to impart a considerable degree of interest to the following case observed in the wards of Doctor Rayer, at the hospital of La Charité.

Case.—X., aged 50, a journeyman, was for several years engaged in most laborious professions; for a long time he was employed in washing coarse sugar-bags. Five years ago he abandoned this trade, to adopt the occupation of turning the wheel of a mechanical press; and since fifteen months he had become a paper-glazer. In the month of August, 1847, he perceived that his arms were becoming gradually weaker; and in January he was obliged to give up his business. On examination of the patient, his countenance was found natural; his mind seemed to have preserved its integrity,—his hands in a continual state of semi-flexion were extremely thin. The muscles of the thumb and little finger had disappeared; the fingers, on the contrary, preserved, to a certain degree, their form, showing plainly that the muscular system had suffered atrophy in a much higher degree than the cellular. The fore arm was altered in a similar manner; its muscles, when stimulated by electricity, were thrown into action; but those of the palm of the hand, and the interosseous muscles remained insensible to galvanism. The legs were weak; but the patient could walk without difficulty. Sulphurous baths were prescribed, but without any success.

M. Rayer was induced to admit that this atrophy of the muscles of the superior extremity had been brought on by over-exertion, and that the cause which usually occasions the hypertrophy of the muscular system may also, in particular instances, bring on an opposite effect.

CAUSES OF THE CHANGES OCCASIONED IN THE LUNGS BY THE DIVISION OF THE PAR VAGUM.

By Dr. SCHIFT.—(Gaz. Méd.)

The researches of Chirac and Valsalva have demonstrated, that in animals who out-live for some days the division of the pneumogastric nerves, the lungs undergo peculiar changes, which many physiologists have accurately described. Those changes have been attributed to the paralysis of the filaments distributed to the capillaries of the pulmonary organs. Dr. Mendelsohn referred the hyperhæmia of the lungs to the difficulty of the passage of the air through the glottis; Dr. Traube ascribed to paralysis of the glottis the introduction into the air tubes of foreign substances from the pharynx. In order to solve the question, Dr. Schift instituted a new series of experiments, and observed that the glottis constantly became narrower after the section of the recurrent nerves, but no changes were observed in the texture of the lungs. When the pulmonary branches only were divided, Dr. Schift remarked a congestion of the bronchi and lungs, but could not detect any connexion between this congestive state, and the patent condition of the glottis.

DETECTION OF IODINE IN THE ANIMAL FLUIDS.

M. Rayer recommends the following method for the detection of the presence of iodine in the tissues:—A piece of starched paper should be imbibed with the saliva or the urine of the patient, and touched with nitric acid. A blue colour is developed with more or less intensity, according to the amount of iodine contained in the fluids. If that quantity is very trifling, the urine should be previously concentrated.

THE CHOLERA.

Several cases of the disease having appeared in the Department du Pas de Calais, the Minister of Commerce has communicated the fact officially to the faculty of medicine.—D. M'CARTHY, M.D., Physician to the British Embassy.

IRELAND.

[From our Dublin Correspondent.]

The various Societies here are commencing their sittings; and if we can judge by the number of persons attending, there will be no lack of excitement or instruction during the winter.

DUBLIN OBSTETRICAL SOCIETY.

INTRODUCTORY ADDRESS.

On the 30th, the Obstetrical Society commenced its meetings for the session. Professor Montgomery read the opening address. As it is intended to publish this document, I shall content myself with giving a short sketch of its nature, for the benefit of those whom it may concern. The Professor adopted for a theme the proposition, that the high cultivation of obstetrical art was a faithful index to the civilization and Christian enlightenment of a nation. He described the various methods of treating parturient women, among the Hindoos, the modern Greeks, the Chinese, the South Sea Islanders, &c; and contrasted these ignorant and semi-barbarous customs, with the scientific and intelligent practice pursued in these islands. He ascribed this difference to the degrees of estimation in which women were held, according as polygamy or monogamy was practised, and according as they were considered inferiors or slaves, or regarded as equals and helpmates. The learned Professor then spoke of the Dublin Lying-in Hospital, and the great men who have been connected with it. He told of Bartholomew Mosse, its founder, the man who, feeling deeply the deprivations of poor lying-in women, made it the object of his life to gain for them an asylum; who worked on, with this purpose in view, through good report and bad report, amid occasional success and frequent difficulty; and, at length, although bankrupt in health and fortune, considered himself sufficiently rewarded in being permitted to see completed the noble pile which now adorns our Irish metropolis. Dr. Montgomery also spoke of Sir Fielding Oulde, who first described the mechanism of natural labour; of Dr. Clarke, who, struck by the prodigious mortality of new-born infants from convulsions, and tracing them to their cause in the defective ventilation of the wards, was enabled, by correcting this, to reduce the mortality from 1 in 6 to 1 in 104, and may be said to have been thus instrumental, as far as the present, in saving 20,000 lives. The Professor then referred to Dr. Collins's labours, as well as to the late work by Drs. Hardy and M'Clintock, and told his younger hearers to remember the saying of the Roman historian, and regard the deeds of their predecessors as torches whereby to examine their own labours, and to see in how much they equalled, in how much they fell below their industry and genius. The learned Doctor then carried his auditors with him to the consideration of proposed obstetrical improvements, and, among others, the employment of anæsthetic agents during delivery. He commented very severely on the unusual manner in which the use of chloroform has been commended, not only to the profession, but to the public, not alone in medical periodicals and the proceedings of learned societies, but in a new variety of books of the boudoir. It had been stated, he said, and not very courteously, that facts required four years to travel to London; but ten years would barely suffice to carry them to Dublin. Where these facts emanated from it might be easily supposed, and certainly it required no small amount of national and personal self-sufficiency to arrogate to one city the exclusive monoply in medical discovery. But he (Dr. Montgomery) did not deny that the profession in Dublin were very slow and cautious in the admission of every newly vaunted remedy. The medical men in this city are not ready to catch at every gaudy butterfly hypothesis that may float around them, or to catch at every gilded bait which may glitter in the tide of novelty. And he hoped that they might long pursue this cautious and circumspect career, and never recommend any new remedy until they were convinced of its safety and efficiency. He proceeded to remark on the inconsistent effects which had been attributed to chloroform; he showed that it was a drug of great power, and had, in some instances, produced sudden death; and he utterly condemned its indiscriminate employment merely for the purpose of avoiding ordinary labour-pains. He considered that there were circumstances in which it might be usefully employed, as in cases of operation where the patient was more or less exhausted by the previous labour, and felt extreme terror at the prospect of the operation. After a very eloquent and lengthened discourse, the learned Professor terminated by a well-merited eulogium on the late Professor Wilmott.

THE SURGICAL SOCIETY OF IRELAND.

INTRODUCTORY ADDRESS.

The first meeting, for this session, of the above Society, was held in the Examination-hall of the Royal College of Surgeons, on Saturday, the 2nd of December. The chair was taken by Andrew Ellis,

Esq., Vice-president, who delivered a short prefatory address. He mentioned that, as far back as the year 1831, the Council of the College, anxious for the spread of surgical science, and the progress of discovery, and believing that the existence of a society, whose new observations could be published and recorded, would be serviceable for both these purposes, appointed a Committee to report on the best means of establishing such a society, and to draw up regulations for its conduct. The Committee took two years to execute this trust; and it appeared, according to the Chairman's statement, that, at the end of that time, they did their business badly; for when the Society was at length established, it was manifest that serious errors in its regulations impeded, in a great measure, its usefulness. One of these errors the Chairman believed to be, the requiring a yearly subscription from the members; and another, the prohibition of discussion at the meetings. Time and experience, however, have corrected these evils; and for several years, the Society has been working very satisfactorily. A great number of papers, many of them of a nature truly valuable to surgical science, have from time to time been read before that Society, and discussions of great interest and utility have often taken place. It would be impossible for the Chairman to enumerate all the important matters which had been brought before the Society since its commencement, and he hoped that, in particularly alluding to a few, he might not be considered as drawing any distinction unfavourable to the many that want of time would compel him to pass in silence. He thought he would not be justified in omitting to allude to the numerous instances in which valuable surgical instruments had been brought before the notice of that Society. He well recollected the evening that Mr. l'Estrange exhibited his calculo-fractor in that room, and no circumstance could better prove the utility of such societies, for he was, subsequently, by the record in their transactions, able to prove the priority of his discovery over Mr. Weiss, who also claimed it. After enumerating a variety of instruments, some invented by Mr. l'Estrange, and others by Mr. Trant, the Chairman next alluded to Dr. Bellingham's industrious reports on the treatment of aneurism by compression; Dr. Jacob's papers on the eye; the various contributions to comparative anatomy, by the late Dr. Houston, Professor Harrison, and Mr. Carte, the present curator of the College museum; and terminated his address, by urging the members to renewed activity during the session which had just commenced.

ELEPHANTIASIS.

At the conclusion of the Vice-President's address, Dr. Bellingham read the account of two cases of elephantiasis of the Arabs, which he had lately under his care. In one of these cases the disease was complicated with ichthyosis. The object of Dr. Bellingham's remarks was to ascribe elephantiasis to repeated attacks of erysipelas. He believed it to be a disease entirely of the skin and subcutaneous cellular tissue, and that the lymphatics were not at all engaged.

The Secretary (Dr. Benson) said, that having heard that Dr. Bellingham meant to bring the subject of elephantiasis before the Society, he had brought with him the report of some observations made by himself, some years ago, before that Society, on the subject, in which he brought forward exactly the same views now promulgated by Dr. Bellingham. The occasion upon which he expressed those opinions was on the reading of a paper by Dr. Walsh, on the disease erroneously called the hydrocele of Brazil, and which is likewise common in Egypt, and called sarcocele of the scrotum by Baron Larrey. He had on that occasion expressed his belief that the disease was pathologically identical with Barbadoes leg, and that it was produced by repeated attacks of erysipelas.

Dr. BELLINGHAM expressed his regret, that Dr. Benson had not informed him previously of his views, as, if he had been aware of the want of novelty in his communication, he would not have unnecessarily occupied the time of the Society.

Mr. STAPLETON said, that he had not the advantage of a previous notice of the nature of the subject, and, therefore, had not it in his power to come prepared, like the learned Secretary, with authorities; but he could not avoid recording his dissent from the opinion advanced by that gentleman, and advocated by Dr. Bellingham. He agreed in the belief, that the disease occasionally met with in our hospitals was identical with the Barbadoes leg, and Cochin leg of Authors; he had that disease frequently under his care, and he had several opportunities of observing the acute attacks considered erysipelatous by Drs. Bellingham and Benson. He, however, did not consider these acute attacks truly erysipelatous in their nature; and his experience was perfectly in accordance with that of M. Velpeau, as published by him in the Cyclopœdia of Surgery, commenced by Dr. Costello, a work which he was sorry had not been continued. It was true, that in those acute attacks a diffused blush, accompanied by œdema and tenderness, took place; but these symptoms were always preceded by enlargement and tenderness of the glands in the groin; and before the redness became diffused, it might be observed following the track of the absorbents in lines. The larger lymphatics, also, became chord-like and resisting to the touch. The result of treatment also showed, that the primary seat of these attacks was in the lymphatic system, for he had on several occasions succeeded in arresting their progress by freely leeching the skin over the large lymphatics in the groin.

Dr. BURNE wished to bear testimony to the opinion of one of the best informed and most experienced of their members who was now no more. He remembered, many years ago, a case of elephantiasis under the care of the late Mr. Wilmot, at Stephen's Hospital. The subject of the disease had previously been under Mr. Wilmot's observation for a great number of years, and he (Dr. Burne) had frequently heard that distinguished surgeon state, that he attributed the disease, in that instance, to repeated attacks of erysipelas, to which the individual had been subject. He was happy to be enabled to corroborate the opinion arrived at by Dr. Bellingham, by that of the eminent man whom he had mentioned.

ANEURISM OF THE FEMORAL ARTERY—PRESSURE—AMPUTATION.

Mr. BANON exhibited a specimen of compound and comminuted fracture of the lower end of the femur. After which, Mr. TUFNEL read an account of an aneurism of the femoral artery, for which amputation had to be performed, after the failure of compression. It appeared that the patient had been a soldier in India during the disastrous period of the Affghan war. He was quartered at Jellalabad, and was one of those who made the extraordinary forced march of forty-six miles in sixteen hours, in order to escort Lady Sale and the other English ladies, on the occasion of their being surrendered by Akbar Khan. It would seem that he never completely recovered the effects of that exertion, having ever since had a varicose condition of the saphena veins. In April last he was quartered in a provincial town in Ireland, and on the 17th of that month suffered from an accident, which was shortly followed by all the signs and symptoms of aneurism. He was sent to Dublin by easy stages, and arrived at the Military Hospital in the Phœnix Park on the 10th of May. Although much care was taken during his removal, he received on one occasion a hurt which was followed by intense pain, that continued during the night, and was not relieved by the application of twenty leeches. A few days after his arrival at the Military Hospital, compression of the femoral artery was tried in the ordinary way, but soon afterwards the swelling became enlarged, and it was feared that extravasation had either taken place, or would so shortly. Amputation was resolved on, and the subsequent examination of the aneurism showed that it was the only measure that could have given a chance of life. All the coats of the artery had been torn completely through, and the patulous orifices were fully an inch apart. The sac was formed by the condensation and adhesion of the surrounding tissues. The condition of the adductor magnus was remarkable, being hard, and grating under the scalpel; this condition being, seemingly, due to the extravasation and coagulation of fibrine. He (Mr. Tufnel) supposed that at first, when he received the injury, the walls of the artery were only partially broken through, and a dissecting aneurism produced; and that, subsequently, when he was hurt during his journey to Dublin, that the outer coat was burst. This was the only way he could account for the circumstance of the aneurism remaining circumscribed, although the patulous and broken extremities of the artery were fully an inch asunder. If the injury to the vessel had occurred all at once, he could not conceive but that extravasation and mortification must have been the consequence. It was satisfactory to find, however, that this case did not furnish any argument against compression, inasmuch as ligature would, manifestly, be equally unsuccessful.

After the reading of Mr. Tufnel's paper, Dr. Corbett elicited from that gentleman that amputation was preferred to ligature of the iliac, in consequence of the extremely low condition of the man, and the sub-inflammatory state of the parts in the neighbourhood of the aneurism; and that the probability is, that if the man had been treated by ligature or pressure shortly after the receipt of the injury, and without being obliged to go a journey, the case might have terminated favourably without amputation. After some observations by Mr. Butcher, Professor Harrison, and Mr. Power, as to the formation of the aneurism, the Society adjourned until the 16th of this month.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—Nov. 28, 1848.

J. M. ARNOTT, Esq. F.R.S., PRESIDENT.

An abstract of the proceedings at the last meeting having been read, several gentlemen were formally admitted into the Society, after which the following paper was read:—

On the Causes of the Endemic Puerperal Fever of Vienna. By C. H. F. ROUTH, M.D., London, communicated by Dr. MURPHY.

There are three lying-in departments in the General Hospital of Vienna. To one of these strangers are not admitted. Of the two others, to which only the author's remarks refer, one is destined for the instruction of medical men and midwives, the other for the instruction of midwives only. The average number of deliveries in each department is from 250 to 300 per month. The mortality in the division for midwives and medical men has generally been 30 per month, and has occasionally been 70. In the division for midwives only, the number of deaths has generally been from 7 to 9 per month. The clinical instruction is conducted on precisely the same general plan in the two departments. But the medical men receive also practical instruction in a private course, in which the operations are performed on the dead body of some female; while the midwives receive this instruction by means of the leather phantom.

The frightful mortality in the division to which medical men are admitted became the subject of a Government inquiry, and the number of students in attendance was reduced from forty to about thirty. The mortality, however, remained the same as before. On inquiry, it was found that in other countries where there were two divisions in the lying-in hospitals, one for midwives, and another for medical men, the mortality was far greater in the latter. The author shows that this difference could not depend on the manipulations of male attendants being more rough than those of midwives, nor to the influence of contagion or infection. He adopts the explanation proposed by Dr. Lemelweiss, the Assistant Physician of that division of the Vienna Lying-in Hospital in which the great mortality has occurred, namely, that the real cause of the mortality from puerperal fever there was the "uncleanliness of medical men and students in attendance;" their hands being impregnated with cadaveric matter through dissecting, making autopsies, and performing obstetric operations on dead bodies. Dr. Lemelweiss recommended all students attending his division of the Lying-in Hospital not to handle dead matter, or, if they did so, forbad them to make any examinations of the patients till the follow-

ing day. And he directed every student to wash his hands in a solution of chlorine prior to, and after, every examination made on the living subject. The result was, that the number of deaths was reduced from 30 per month to 7 per month,—the usual average mortality of the division for midwives only.

The author makes some remarks on the modes in which the cadaveric matter may be introduced from the hand of the medical attendant into the system of the woman. He then describes the characters of the puerperal disease, so fatal in the Vienna Hospital, with the view of demonstrating its resemblance to the effects of a poisoned dissection-wound; and he concludes by recapitulating the inferences which he believes to be justified by the facts stated in his paper.

A vote of thanks to the author being passed,

The PRESIDENT intimated that he should be happy to hear any observations on the paper just read; on which

Dr. WEBSTER said he thought that puerperal disease was more fatal in Vienna than in any capital in Europe. He had himself resided there, and had visited the very hospital mentioned in the paper to which they had just listened. Vienna was, in his opinion, the most unhealthy capital in Europe. The author should have taken this into account in his calculations respecting the comparative fatality of puerperal fever. He could also bear out what had been said with reference to ventilation and general cleanliness. Much evil resulted from want of due attention to the latter on the part of young men attending hospitals. The situation of Vienna was low and marshy; he should like to know whether the author considered this had not something to do with the fatality. Strasbourg was in the same condition — situated on the banks of a river; and with all due deference to the learned author, he thought this would account, in some degree, for the great fatality mentioned. He fully agreed with those who considered the disease to be communicated by individuals. The one important point connected with this subject was, how was the disease propagated? It seemed to be one that was not generally considered contagious. A parallel had been drawn by the author, between that division of the hospital in which the midwives practised, and the one in which the students were engaged. They were similar as to their means of promoting the disease; but in that division in which, from want of knowledge, and, in many cases from want of cleanliness also, the disease appeared likely to spread most, it was otherwise; and it seemed, that the division attended by the students had, in this respect, proved to be the worst, notwithstanding they were far more conversant with the means of its prevention. The only reason which had been assigned for this was, that they had been previously engaged in dissection. The students should make use of preventive means, such as washing the hands in a solution of chlorine, &c.

Dr. MURPHY said his own experience of the fever in the Dublin Lying-in Hospital, was very much in favour of the belief, that a strict attention to cleanliness and ventilation was the best way of preventing its progress. He would adduce an instance which strongly corroborated this remark; it was a case which occurred while he was in the Hospital. When Dr. Collins first came, the disease was very rife; they made proper use of chlorine, paid due attention to cleanliness, and, for a considerable period, no case of the fever occurred. During the third year, there was studying there a German pupil, who was extremely zealous in the investigation into the nature of the disease, though he was negligent with reference to cleanliness, forgetting that he might, while searching into the causes of the disease, from this reason, be himself the means of spreading it. This student had cases committed to him out of the Hospital; and it was remarked that a large proportion of them were fatal. At length this fact became so notorious that he was compelled, for the time, to relinquish his midwifery practice. It did not occur to them that the disease might be communicated by the clothes. He thought there must be other causes; for many of the midwives invariably used the same dress without spreading the disease.

Dr. GREGORY called their attention to the fact, that the disease had been very prevalent in this country during the last six weeks. It appeared there were four, five, and sometimes ten cases weekly, of this fever. Most of these, he believed, took place in the Lying-in Hospitals; but as he had no precise information on that point, he was unable to state the proportion. Probably some gentleman present would inform them. He had listened with great pleasure to the paper which had been read at the commencement of the evening's proceedings. It conveyed a number of excellent ideas: and ideas to which sufficient attention had not been directed. He had recently been engaged in the investigation of cases of puerperal fever. He had been connected with a Lying-in Institution for some four or five and twenty years. He believed that only *one* of the modes of communicating the disease had been mentioned. Again, the disease often broke out without any possible communication. The Metropolitan Hospitals afforded abundant proof of this. In most instances, where the disease had occurred in the Lying-in Hospitals, the patients had been delivered by the midwives, or the matron of the Hospital, who were never engaged in *post-mortem* examinations; and in such cases, a private ward was used. Most of the officers, too, had not been engaged in any *post-mortem* examination for some time previously.

Dr. COPELAND thought something was due to the frequency of examination; and to a peculiar state of the atmosphere, which affected the generative organs. He believed that the disease was also frequently produced by a want of cleanliness with respect to the bed, linen, &c. It might be propagated by the clothes, and also by the hands; for instance, if an individual had been examining a case of erysipelas, and had not sufficiently purified his hands, the disease was afterwards communicated; yet it was, also, sometimes the case, that puerperal fever occurred when no such means of propagation had taken place.

Mr. MOORE said, he had much pleasure in bearing testimony to the cleanliness of the Hospital in Vienna. From his own personal experience he could affirm, that the cleanliness throughout the whole of the wards was remarkable. The number of *post-mortem* examinations carried on at Vienna in the morning was extraordinary. He, himself, on one occasion, had been present at the examination of fifteen bodies. The hands of the students were thus in cadaveric matter for some two or three hours. There was something, too, in the situation of Vienna. Its relative position to a portion of the Alps produced, naturally and frequently, severe storms. It was located on a flat and marshy spot. The immediate vicinity of the Danube, in addition to this, removed all surprise at the frequency of typhus and puerperal fever. He did not think, however, that the mortality from typhus exceeded that of other capitals.

A Gentleman, whose name did not transpire, then rose, and remarked, that much might be done to check the spread of the disease, by a rigid adherence to certain means—such as the use of chlorine, &c., which had been referred to. On one occasion he had been engaged in a *post mortem* examination four hours; he, 24 hours subsequently, attended a case which resulted in puerperal fever; and, after that, four others. He did not consider the preventive means, which had been mentioned, sufficient. He did not not mean to affirm, that they could not remove the smell from the ward, but that was not sufficient in every case.

The following papers were then read:—

On the Minute Anatomy of the Lung of the Bird, considered chiefly in relation to the Structures with which the Air is in Contact whilst traversing the ultimate Subdivisions of the Air Passages. By G. RAINEY, M.R.C.S., Demonstrator of Anatomy, St. Thomas's Hospital. Presented by Dr. Todd.

The author, after having made some prefatory observations respecting the non-existence of the mucous membrane and ciliated epithelium in the air-cells of the human lungs, as inferred by Dr. Addison and others, from pathological considerations, and as shown by himself in a previous communication to the Society, refers to the minute structure of the lung of the bird, and several mammals, in confirmation of this fact.

The trachea in birds, in addition to the structures composing this part in the mammal, is almost entirely surrounded by a layer of muscular fibres, of the striped variety. The calibre of the bronchial tubes is more uniform than in mammals, and the intercellular passages, which are very minute, are given off at right angles with their axis, instead of being continued from their extremities. These peculiarities, the Author observes, are rendered necessary in birds by the additional function which these tubes have to perform in this class of animals.

The bronchial tubes in birds are lined by a distinct fibrous membrane, which, at those parts of the tube from which the inter-cellular passages proceed, is distinctly perforated, so that the bronchial membrane, as in the human lung, does not extend further than the bronchial tubes. The inter-cellular passages, which, at their commencement, are but small, soon lose themselves among the air cells. The air-cells surround the bronchial tubes and fill up the interval between them and the spaces which separate the lobules; the interlobular fissures appearing, in the uninjected lung, to be merely the cellular walls of these tubes. The author observes, that he has called these air-cells, because, physiologically, they may be considered as such. The capillaries (he goes on to notice) form, by their frequent anastomoses upon different planes, a kind of dense solid plexus, with no other separations between the vessels, for the reception of the inspired air, than the open areolæ or meshes of the plexus, which communicate freely through the whole of a lobule.

The author next observes, that the bronchial tubes have a very distinct lining of ciliated epithelium, which ceases where the bronchial membrane gives off the inter-cellular passage. To render this fact more striking, he gives the measurement of epithelial cells, which were taken from the bronchial tubes of a pigeon, which are stated to be 1-800ths of an inch in length, and about 1-3300ths of an inch in breadth, showing that the ultimate subdivisions of the air-passages in the bird are several times smaller than the individual particles of epithelium, which are by some physiologists considered to line them. Although, he observes, the ultimate subdivisions of the air-passages in birds are so extremely minute, yet it is in them we see a respiratory organ of the greatest efficiency, and in its greatest state of simplicity, the inspired air being admitted directly in contact with the pulmonary capillaries, and all around their entire circumference.

The author then remarks, that, however the organs of respiration in the different classes of animals may differ in their anatomical characters, the principle upon which they act must be the same; and, therefore, that if the simple exposure of the blood in the capillaries to the action of the air be all that is required for the aeration of the blood in the bird, in which this function is performed with the greatest activity, it ought to be sufficient in those animals in which it is performed with less energy. The correctness of this inference is then shown by a comparison of the structure of the lungs of several mammals with those of the bird, by which it is apparent that a gradually increasing resemblance in structure to the lung of the bird exists in different animals, in proportion as the activity of their respiration approaches to that of birds.

This resemblance is marked by the minuteness of the air-cells, the absence of all regularity in their arrangement, and the partial deficiency of the membrane which connects the pulmonary capillaries. The air-cells in many mammals are stated to be much smaller than the individual particles of ciliated epithelium lining their bronchial tubes. In confirmation of this fact, the author refers to the lung of the kangaroo, hare, rabbit, and dog; also, the rat and the mouse. From a review of these facts and considerations, the author concludes, that the ciliated epithelium can have nothing to do with the immediate function of the lung in the process of aeration of the blood, and that its office is probably only mechanical, the function of aeration requiring for its performance only the pulmonary capillaries, with the blood within them, as they exist in the simple, though the most perfect and efficient, respiratory apparatus of the bird.

Case of Cysticercus Cellulosæ in the Anterior Chamber of the Human Eye. By WILLIAM MACKENZIE, M.D., Surgeon-Oculist in Ordinary, in Scotland, to the Queen.

E. G., aged sixteen, applied at the Glasgow Eye Infirmary, in September, 1848, on account of obscurity of vision in the left eye. On examination, a spherical body, about one-eighth of an inch in

diameter, was discovered, lying close in front of the pupil, in the anterior chamber; and this proved, on closer inspection, to be a cysticercus cellulosæ. The patient stated that, in June, the left eye had been the subject of acute inflammation, which occurred immediately before the appearance of the hydatid. Objects placed in a direct line before the eye or below it she saw very indistinctly; but, in a moderate light, the expansion of the pupil left one-third, at its upper part, unobscured. The position of the hydatid varied to a certain extent, and was an object of curiosity to many; its opaque body, its tail-vesicle, and rostellum, together with its four lateral suckers, could be distinctly made out; and it was observed to be most lively in the morning, and when the patient was warm. She was quite unconscious of the motions of the hydatid, and did not appear to suffer pain from its presence.

On October 14th the foreign body was removed by the following operation:—The patient was placed on her back, and, the eyelids being retracted, a puncture was made, with Beer's pyramidal knife, at the temporal edge of the cornea, to the extent of 3-20ths of an inch. Schlagintweit's hook was then introduced, and the hydatid was seized, and easily withdrawn. The iris protruded a little through the wound, but was readily reduced by friction, through the medium of the upper eyelid. Not a single bad symptom followed; and the patient was dismissed, quite well, in a week.

The hydatid was placed in tepid water, and continued to move for fully forty minutes after its removal from the eye. Viewed through a compound microscope, the transparent corona of claws, surrounding the rostellum, were distinctly seen, as were the corpuscles scattered over its neck, and the four lateral suckers.

The author states it as his opinion, that the attack of ophthalmia in June, immediately preceding the appearance of the hydatid, was owing to the development of its ovum in one of the blood-vessels of the iris or choroid, and that the inflammation ceased suddenly, as soon as the hydatid dropped into the anterior chamber, where it lived at its ease, and throve on the aqueous humour. He then proceeded to make some remarks on other cases recorded, and to state his reasons for not trying any application to the eye with a view of killing the hydatid, which he considered likely to irritate the organ; and, even if effective, an exciting cause of inflammation would still be left. He did not apply belladonna, fearing that the cysticercus—as occurred in Neumann's case—might fall into the pupil, and irritate the iris. A further delay in operating he considered unjustifiable, on account of the risk which it involved of inflammation being excited, and the eye being sacrificed.

The meeting passed a vote of thanks to Mr. Raine, and Dr. McKenzie, and the Chairman having announced that the usual time for concluding the proceedings had arrived, the meeting separated.

In our report of Mr. Acton's paper read at the last meeting of the Medico-Chirurgical Society, we stated that "the solution of gun-cotton, when dry, corrugates the skin too much to be available for the purposes required." We have been requested to add the following paragraph from the author's paper, in further explanation of his views regarding the inapplicability of the preparation in question:—"If the skin is stretched, this thin film (of the dried solution) ruptures in various places, and the surface of the healthy cuticle beneath is chapped, and becomes excessively painful, particularly if ether be applied to remove the hardened pellicle."

STATISTICAL SOCIETY, 20TH NOV., 1848.

Col. W. H. Sykes, V.P.R.S., Vice-President, in the chair.

The statistical session commenced by reading—

1. *Analysis of the Report of Surgeon F. P. Strong, of the Bengal Army, to the Bengal Government, for* 1847, *of the Mortality in the Gaols of the 24th Pergunnahs*, by Colonel W. H. Sykes, V.P.R.S., Vice-President.

Dr. Strong had medical charge of these gaols for many years, and has distinguished himself by improving the health of the prisoners, and diminishing the high rate of mortality, which appears generally to result from confinement; attending to ventilation, exercise, occupation, and diet; and the result is, that instead of the mortality being 8½ per cent. per annum, which was the case for the first 16 years from 1820 to 1836, it has been reduced to 5·57 per cent. per annum for the years 1836 to 1847. It was, however, to Dr. Strong's remarkable cholera return for 31 years, that Colonel Sykes called the Society's attention, which not only contains instructive facts for the professional man, but consolatory assurances that ought to alleviate the usual panic that pervades all classes of society into which it unhappily intrudes. Colonel Sykes has already shown, in a paper upon the vital statistics of the East India Company's armies in India for 20 years, both European and Native, that the deaths to the strength from cholera, amongst Europeans in Bengal, was 1·15 per cent. of the strength amongst the Native troops of Bengal,—average for 20 years, ·22; the Europeans in Madras, ·42; the Native troops ·583: the European troops in Bombay, ·565; the Native troops, ·281; and the average mortality of all the European troops of the East India Company in all India, for 20 years, ·724; of the strength and of the Native troops, ·342.

There results are in close conformity to those of Dr. Strong. The return embraces the number of prisoners, the number of cholera sick, and the number of cholera deaths for every month of every year, from 1817 to 1847, both inclusive. A striking feature of the table is, that there is not any one year of the whole series, and, with few exceptions, not any one month of any year, in which there was not cholera in the gaols. This disease, therefore, took its place with the ordinary diseases to which man is subject, and yet the average mortality from cholera to the strength, for 31 years, was exactly 1 per cent., the average mortality from all causes for 27 years being 7·11 per cent. in the gaols of the 24 Pergunnahs, while the mortality in Calcutta for the same period was 4·64 per cent. Here we have a most important and consolatory fact. The disease permanently located within the walls of prisons, under the most favourable circumstances for its development, and spread from the constrained juxta-position of parties, produced only 6,531 cases in 31 years, to an average annual strength of 1,863, or about 11½ per cent.; so that whether cholera be contagious or not contagious, only 1 in 9 persons was susceptible of taking the disease when constantly exposed to its influence, and only one-eleventh of those who took the disease died; the average loss of those treated for 31 years being 8·86 per cent.

Remarks on the Plan adopted for taking the Census in 1841, *and some Suggestions for the Improvement of the same.* By the Rev. E. WYATT EDGELL, M.A.

After some pertinent remarks in favour of Christmas, instead of Midsummer, being the period of the year best adapted for taking the Census, Mr. Wyatt Edgell remarked that the Census of 1841 was far more comprehensive than the former ones, for it was so arranged, as not only to give the number of individuals, but the name and description of each, the advantages of which are at once apparent; indeed, the theory of it may be considered perfect. There were, however, imperfections in the practical arrangement, which Mr. Wyatt Edgell proposes to remedy. Thus:—

1. Instead of the Enumerator inquiring if the persons were born in the county in which they are living, and then entering them in two columns, headed respectively, *Born in the Country—Born Elsewhere*, simply to inquire where they were born, and to enter the answer in his schedule as he receives it. The mere knowledge of the counties of nativity throw no light on the subjects of migration from one part of our island to another; nor does it establish any point with respect to the races of men; nor does it prove the tendency of any particular locality to produce particular habits, or to foster peculiar opinions. For instance, what do we gain by knowing that every other inhabitant of Southwark was born out of Surrey?

2. Instead of the Enumerator entering the ages in his schedule by quinquennial periods, (a useless arrangement, and more than useless, by producing confusion, and suggesting untruths,) to enter the answers as he receives them, except in certain cases which were pointed out. The day after the Census, the Enumerator should proceed to compare his schedule with the parochial and other registers, and verify or correct the figures and spelling thereby, the verifications being underlined, and the corrections made in red ink, and also to compare it with that of the previous Census; and then to underline with black ink all the names which are identical in the two schedules.

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THE MEDICAL TIMES.

SATURDAY, DECEMBER 9, 1848.

THE ROYAL SOCIETY.

AN unusual degree of alarm and excitement has, for the last week or two, existed among the Fellows of this Society, which is generally rather remarkable for the gravity and demureness of its proceedings, than conspicuous for activity and bustle. The cause of all this stir, now that its aim and object have become apparent, seems fully to have warranted the very unfrequent display of zeal called forth upon the occasion.

The facts of the case, we understand, to be simply these. The Marquis of Northampton, after having for ten years, presided over that learned body, thought proper to resign the Presidentship, and Dr. Roget, who, for a quarter of a century, has occupied his post as one of the Secretaries to the Society, embraced the same opportunity to relinquish his office; accordingly, when the time arrived for appointing fresh officers, a new President and another Secretary had to be nominated by the Council, and elected by the Fellows. In this state of things, as we learn from "a statement of facts" now before us, at a meeting of the Committee of Zoology and Animal Physiology of the Royal Society, held July 4th, 1848, the following resolution was moved by Professor Owen, seconded by Mr. Gray, and unanimously agreed to:—

"That the Committee, taking into consideration the large proportion of papers communicated to the Royal Society on subjects of Anatomy, Physiology, and other branches of Natural History, and the loss which the Society is about to sustain by the retirement of a Secretary eminent for his acquaintance with those sciences, beg respectfully to request the attention of the Council to the advantage and desirableness of having one of the Secretaries conversant with those branches of knowledge."

"Resolved, that the Secretary be instructed to communicate the above resolution to the Council."

This resolution of the Physiological Committee having been duly communicated to the Council, it was proposed in Council by Sir Charles Lyell, and seconded by Mr. Gassiot,—

"That Mr. Grove be recommended by the Council to the Society, for election as Secretary at the next anniversary;"

on which an amendment was moved by Mr. Brown, and seconded by Dr. Reget,—

"That Mr. Thomas Bell be recommended as Secretary;"

which amendment was negatived. The original motion was then put, and carried.

And here, in order that the *grievances* of the matter may be understood, it will be necessary to say a word or two concerning the two gentlemen thus pitted against each other. Mr. Grove is, we believe, a barrister, honourably known in the scientific world by his researches in electricity, and other branches of physical science; but not pretending to be conversant with physiological or zoological lore. Mr. Bell, on the contrary, has been for many years prominent in the cultivation of comparative anatomy and natural history.

The effect of the recommendation of the Council was, therefore, to use the words of the statement above referred to, to constitute the executive officers of the Society *entirely* of cultivators of physical science, leaving the natural sciences without an officer capable of abstracting an anatomical, physiological, or natural-history paper, or of giving an opinion as to its merits. It could not, therefore, be a matter of surprise that such a deliberate and total neglect of the interests and feelings of the anatomists, physiologists, zoologists, and botanists, who form so large and highly important a portion of the Society, should have stimulated a considerable number of the Fellows to endeavour to procure for the natural sciences an officer in the executive capable of superintending the publication of their works, either in abstracts in the Proceedings, or in detail in the Transactions.

It was likewise pointed out by the Committee, that in the new Council, as proposed by that recently in office, there was a most unequal apportionment of the members to the respective sciences which are supposed to be represented by that body; there being eight members to represent the physical sciences, five geologists, and two chemists; while there was but one for comparative anatomy, one for physiology, and one for zoology, and not one representative of botany. Thus, of the whole Council of twenty-one members, three only represent the natural sciences.

Here, indeed, seems to us to be the root of the evil, as in all self-constituted bodies it is only natural that the parties who select their own associates, should give the preference to individuals whose acquirements they can understand, or whose department of science they prefer to others, who cultivate studies they are not disposed to appreciate, or who labour in researches that to them may possess little or no interest. However, upon the present occasion, little harm was done; it was not from personal predilection for either of the candidates, but to establish the principle, that the battle was fought, and the physiologists, we are happy to learn, came off victorious by a very considerable majority. In thus congratulating the Royal Society upon the result of the contest, we are by no means disposed to underrate the duties of the physiological Secretary, so far as to limit them to making abstracts from papers for the proceedings of the Society; still less are we disposed to attach much importance to any individual opinion as to their merits; the writers of communications can themselves furnish the former, and the appointed Committees alone decide upon the latter; but, at the same time, it must be remembered, that an undeniable, though perhaps tacit influence is exercised by the secretaries, whoever they may be; and while some members of the Council can see no value in any thing short of a mathematical formula, and others confine their ideas to tertiary strata and Sewalik fossils, the less obtrusive, though to us far more important results of physiological research, might run some risk of falling into unmerited neglect, were it not for the occurrence of such expressions of opinion as that which has just been rendered unavoidable. The discoveries in physiology, promulgated through the medium of the Transactions of the Royal Society, have, during the last few years, been of no ordinary interest; and we doubt not, under proper auspices, will still maintain a character second to those of no other learned body in Europe;—let us hope, from the determined spirit shown upon the present emergency, that the cultivators of natural science may in future, at least, expect fair-play.

SANITARY CONDITION OF DUBLIN.

Every thing which is calculated to promote the public health is worthy of high consideration at all times, but is especially so when a malignant disease threatens to invade the inhabitants of any city, town, or village. In densely populated districts there always exists much sickness, and the mortality is high compared with other places where there are fewer inhabitants. The aid of science has been invoked, to mitigate human suffering; and when her resources are properly developed and applied, we cannot doubt that the plague of great cities—typhus—will be deprived of much of its virulence. The history of nations allows us to draw this conclusion, and modern researches amply confirm it. Egypt, in the days of her greatness, when a thousand cities adorned her land, and a splendid superstition rewarded science for preserving the bodies of the dead from corruption, knew nothing of that plague which for the last twelve centuries has, at different times, swept suddenly away large numbers of the population. The preservation of the dead in that country was not only a religious rite, but a sanitary precaution, and the traveller meets, at every step he takes in the land of the Pharaohs, proofs that religion and science went hand in hand to promote the health of the million.

In this great metropolis we have a more recent instance of the power of sanitary regulations, to mitigate or annihilate disease. Once the plague made such havoc amongst the inhabitants, that whole streets became desolate, while the cemeteries could scarcely contain all the victims of the terrible epidemic. To the genius of Sir Christopher Wren, who laboured to make this large city the first in the world for beauty and salubrity, we probably owe our present exemption from "the plague." That he did not accomplish all he intended was not his fault, and he deserves an unfading wreath, not only for his architectural skill, but for his efforts to promote the health of the people.

It is not our intention, on the present occasion, to advert to the sanitary condition of London; this has been amply discussed in the newspapers and in the medical periodicals. There is another metropolis in this empire, whose condition is little known by the English public, but to which, as medical journalists, we are bound to direct the attention of our profession. We advert to the capital of our sister island, renowned for its beauty and calamities. To political economists belongs the duty of discussing the general doctrines of government; to us, those which appertain to public hygiene.

In the city of Dublin a Sanitary Association has been recently established, and, through its instrumentality, some very important facts have been brought to light. Some parts of the Irish metropolis appear beautiful to the eye, and large sums of the public money have been expended to render them attractive to the rich and noble. The splendid grounds surrounding the vice-regal palace have been, from time to time, improved at a vast expense, but the squalid misery in its neighbourhood has been forgotten, and left to pine under the noxious influence of pestilential exhalations. The Secretary of the Dublin Sanitary Association (Dr. Aldridge) has given a fearful picture of the condition of the city and of its inhabitants, whose poverty compels them to inhabit the hovels of the back streets and lanes. Fever, as he justly observes, may be looked upon as "the Irish plague," never entirely disappearing from the island, usually concealing itself in the cottages of the poor, but, in a decade of years, bursting over the length and breadth of the land like a desolating hurricane, and sparing neither age, sex, nor condition.

On an average, a thousand of the City population are annually swept away by fever. The spots where it seems to take up an everlasting abode, are places where influenza, scarlatina, small-pox, and other contagious diseases are generally to be found; and there is little doubt that, ere long, cholera will make its appearance in these localities.

The Secretaries of the Association have laboured diligently to obtain evidence which would throw some light upon the prevalence of fever in certain districts of the City; and the unanimous opinion of ten dispensing physicians declares, that fever generally prevails in the most over-crowded, the most filthy, and the worst-ventilated quarters. These gentlemen have returned to the Association the names of eighty-nine streets, lanes, and courts in Dublin where fever has been mostly prevalent; and it is important to know how these places are supplied with water, and what is the condition of the drains or sewers.

It is a melancholy fact to publish, that there are thirty-eight miles of lanes and streets in that city, mostly in the poverty-stricken districts, without drainage, notwithstanding that Ireland furnishes an annual revenue to the Woods and Forests of 50,000*l*. Whatever portion of this large sum has been expended upon Dublin, has been laid out for the benefit of the vice-regal park, the lanes and alleys of the city being left without one symptom of improvement. But the sewers that are constructed under the streets of the Irish metropolis are built in defiance of all scientific rules: they are, therefore, not only useless as regards the preservation of health, but are positively injurious to it.

It has been observed, that fever is more apt to prevail in the sewered than in the unsewered districts. In certain streets in St. Thomas's parish, furnished with drains, fever prevails, while others, undrained, are comparatively free from the disease. In one of the sewered streets, Dr. Kidd attended fifteen persons, in one house, labouring under fever; and, doubt-

less, the number of the victims, and the severity of the complaint, were augmented by the emanations from the stagnant cess-pool dignified with the name of sewer. Plunkett-street, which has a first-class main sewer, is one of the fever spots; but this sewer is blind at both ends. In Bride-street, extending from Bride's Church to Golden-lane, there is another of these first-class main sewers, which has no means of emptying itself, except through a second-class sewer running through Chancery-lane. Nicholas-street is provided with a first-class sewer, emptying itself by a second-class sewer which runs down hill to join the Poddle at Patrick's Close. These sewers, also, are built with flat bottoms, so that the free escape of their contents would be impossible, even supposing their extremities were not blocked in the way they are. To continue these channels in their present condition is an insult to science, and a deliberate wrong to the poor inhabitants of the city.

We are glad to see the members of the Irish profession on the alert, for the information on the sanitary condition of the city has been furnished by them. In Ireland, as in England, they have been the pioneers of sanitary reform; and they have persevered in their benevolent work under the most discouraging circumstances. If the Irish metropolis ever become a salubrious city, it will be mainly through the labours of the members of the profession, and they only will be the class whose temporal interests will be the least benefited by the change. While their efforts will produce for the engineer employment, for the Court-dependent a situation, and for the poor a large amount of freedom from disease,—the chief reward that it will bring to themselves will be the testimony of a good conscience.

INJUSTICE OF THE IRISH COLLEGE OF SURGEONS TO MEDICAL STUDENTS.

The Irish medical students are evidencing some discontent at the conduct of the licensing boards. Since the Dublin College of Surgeons got its last charter, it has been in the habit, yearly, of applying to the Secretary of State, for leave to dispense with some of its own by-laws, to enable it to give to its Council the discretion to receive certain certificates, which its by-laws refuse. Under this discretionary power, the certificates given for attendance on lectures at the School of Physic, in Trinity College, have hitherto been received, to a certain extent; but, latterly, the Council resolved not to apply any more for this discretionary power, and, consequently, the Trinity College certificates are completely shut out from the College of Surgeons. The students, who are the chief sufferers, write occasional letters in the papers, and post up notices, which the Professors pull down; but they are not very likely to get redress.

On the first of the month, Sir Philip Crampton, Bart., was elected a Member of the Council of the College of Surgeons, in the room of the late Mr. Wilmot. At the last general election of Council, he was thrown out, in consequence of the unpopularity created by his connexion with the Board of Health. The proposal of 5s. a day, for attendance on fever hospitals, during pleasure, so irritated the profession, that, although the worthy baronet was on the house-list, and supported by every effort of his friends, he was not on more than one-third of the voting papers, at a meeting at which 130 Fellows of the College were present. He was, however, elected yesterday, at a meeting of about 60 Fellows.

NOTICES OF NEW BOOKS.

Sanitary Questions, Observations, and Suggestions on the Wolverton Well Water, as supplied to the Inhabitants. By George Corfe, Esq., Middlesex Hospital.

This is an interesting pamphlet, by our respected and talented correspondent, Mr. Corfe. Wolverton, on the London and Birmingham Railway, having been selected as a station, and the water for the engines being supplied, at an exorbitant price, by a Canal Company, a well, fifteen fathoms deep, was sunk, which yielded an abundant supply of water. It was speedily observed, however, not only that the boilers and machinery of the engines clogged by using this liquid, but the inhabitants who drank of it became affected with obstinate cutaneous eruptions. Some were also seized with dizziness, and occasional loss of consciousness: the water was submitted to chemical analysis, and proved to be a saline and alkaline spring. After this discovery, the patients were treated with nitro-hydrochloric acid, administered internally, with or without steel, in bitter infusion; and, to the eruptions, lotions of the same acid were applied. The majority, by the use of the remedies, quickly improved in health.

On Functional Diseases of the Liver, associated with Uterine Derangement, &c. By Butler Lane, M.D., &c.

The author endeavours, in this pamphlet, to prove that a physiological and pathological relation exists between the liver and uterus in the female; that this relation is apt to be disturbed in many forms of disease, primarily implicating either organ individually; and that the disturbance, though varying much in nature and degree, assumes certain definite aspects, the recognition of which serves much to direct and facilitate therapeutic appliances. Many cases are given in illustration of the author's views.

Report of the Edinburgh Royal Maternity Hospital, from 1844 *to* 1846. By J. Y. Simpson, M.D., &c.

This "Report" contains facts particularly interesting to obstetric practitioners. We have here recorded the number of women delivered in the Institution during two years, their several ages, the time of quickening, the duration of pregnancy, the number of pregnancies, the number of children, their sex, state, weight, length, and way in which they presented; the duration of labour, mode of delivery, and amount of maternal deaths. Drs. M'Clintock and Hardy, in their valuable work, have given us similar statistics from the Dublin Lying-in Hospital; and an accumulation of these facts cannot fail to be of great service in the science of obstetrics.

On the Employment of Chloroform in Dental Surgery. By J. B. Imlach, Dentist, &c.

The conclusions at which the author arrives, after administering chloroform in 300 cases of dental surgery, are,—that the patient is saved by it from physical suffering, and that the dentist is able to perform his work with more satisfaction, certainty, and success. Chloroform, we consider, ought not to be employed merely to save a person from pain consequent on the extraction of a tooth.

Remarks on Chloroform in alleviating Human Suffering; addressed particularly to the Female Sex. By W. H. Brainbrigge, Esq., F.R.C.S.

The principal object of this pamphlet is to remove the religious objections of parturient females to the use of chloroform. The arguments are those employed by Dr. Simpson. We have, on a former occasion, stated our objection to the interpretation put upon certain Hebrew words by the Edinburgh Professor; and we do not consider it at all necessary to exercise philological ingenuity, merely to prove the lawfulness of administering chloroform to mitigate the pains of labour. Christianity applauds the effort to alleviate human suffering; and it is right that we should employ every means in our power to remove the sufferings of parturient females.

Surgical Experience of Chloroform. By James Miller, F.R.S.E., &c.

This valuable pamphlet contains the substance of three lectures introduced by the author into his course of Systematic Surgery. They must have been exceedingly interesting to those to whom they were originally addressed, and they will be not less so to the profession generally. The lectures contain a record of the principal facts in reference to anæsthetic agents; and we would recommend the pamphlet to the notice of surgeons who employ chloroform in their operations.

An Essay on the Teeth. By Augustus Cook.

This little work is written in a popular style, and contains some useful directions on the care of the teeth.

Observations on the Pathology of Croup, with Remarks on its Treatment by Topical Medications. By Horace Green, A.M., M.D., &c., New York.

The author is well known to the profession in America and England, from the papers which he has published in reference to the treatment of disease of the larynx and trachea, by means of the direct application of therapeutical agents to these cavities. The author recommends, in the treatment of croup in children, a solution of nitrate of silver in the proportion of from two scruples to a drachm of the salt dissolved in an ounce of distilled water. This may be applied freely to the fauces, pharynx, and into the larynx of young children, without any danger of suffocation. In the early stage of inflammation, before exudation has extended much into the larynx, it may be arrested by one or two applications of the caustic solution to the fauces and the opening of the glottis. This remedy has not yet been much employed in England in affections of the fauces, &c., but it is worthy of a fair trial, and we have reason to think that, judiciously used, it will be found not unworthy of the praise bestowed upon it by Dr. Green.

Hints towards the Formation of a more Comprehensive Theory of Life. By S. T. Coleridge. Edited by Seth B. Watson, M.D., &c.

The writings of Mr. Coleridge bear the impress of originality and genius. Even when he theorises we cannot fail to admire him, though we may not coincide with the sentiments he propounds. In the essay before us he disclaims the division of all that surrounds us into things with life, and things without life; and maintains that the term life is equally applicable to the irreducible bases of chemistry, or to the various forms of crystals, or to the geological strata which compose the earth's crust, as to the human body. He supposes that rocks and mountains share with mankind the gift of life. The doctrine of atoms Mr. Coleridge disbelieves, imagining these atoms to be mere abstractions of the mind, life being in itself not a thing, the result of atomic arrangement, but is itself an act or process. Life, he says, is the principle of individuation, and this, he conceives, unites with the co-operating action of magnetism, electricity, and chemistry. We think that the learned editor, Dr. Watson, has acted judiciously in presenting to the public so interesting an essay, though the author's life was not spared to put a finishing hand to it.

Wonders Displayed by the Human Body in its endurance of Injury. From the Portfolio of Delta, with Etchings by the Author.

This is a curious book, containing many singular facts in reference to the physical frame of man. Here we have narrated cases of luminous emanations from the body—instances of spontaneous combustion, of catalepsy, and of the calm endurance of severe injury. The book will prove interesting to those who are fond of the "marvellous," for whose benefit we suppose it is published.

An Inquiry into the Proximate Cause of Gout, and its Rational Treatment. By Anthony White, Esq., M.B., Cantab, late President of the Royal College of Surgeons of England.

The author, in consequence of being severely afflicted with gout, directed his attention to the study of this disease. The conclusion at which he arrives is, "that, not to the stomach or the kidneys, or to the impaired functions of any other viscus than the liver, is the cause of gout ascribable." The author has long relied exclusively for the cure of this disease on the following prescription:—

℞. Hyd. chlorid.; ext. colchici acet.; ext. aloes purificati; pulv. ipecac. aa. gr. j. M. ft. pilula quartis horis sumenda.

Two or three of such pills are generally enough to produce a considerable disgorgement of the liver, which may then be assisted with one or two doses of the compound decoction of aloes. After the gouty paroxysm has either ceased, or there is a marked subsidence of all its distressing symptoms, the pills may be administered at longer intervals, varying from eight to twenty-four hours.

Memoranda on Poisons. By T. H. Tanner, M.D., &c. London: H. Renshaw. 1848.

Chemistry, as Exemplifying the Wisdom and Beneficence of God. By G. Fownes, F.R.S., &c. London: John Churchill. 1848.
A Treatise on the Diseases of the Heart and Great Blood-vessels, and on the Affections which may be mistaken for them. By J. Hope, F.R.S., M.D., &c. Fourth edition. London: John Churchill. 1849.
Medical Jurisprudence. By Alfred S. Taylor, F.R.S., &c. London: J. Churchill. 1849.
Observations upon Bulam, Vomito-Negro, or Yellow Fever. By Sir William Pym, K.C.H., Inspector-General of Army Hospitals, &c. London: J. Churchill. 1848.
Surgical Anatomy. By Joseph Maclise, Surgeon. Fasciculus I. London: Churchill.
Clinical Lectures, delivered in the Theatre of Mercer's Hospital during the Session 1847-8. By J. F. Duncan, M.D., T.C.D., &c. Dublin: James M'Glashan. 1849.
A Practical Treatise on the Use of the Microscope, &c. By John Quekett, Assistant Conservator of the Museum, and Demonstrator of Minute Anatomy at the Royal College of Surgeons of England. London: Hip. Baillière. 1848.
A Treatise on the Cure of Ulcers by Fumigation, &c. By G. A. Walker, Surgeon. London: Longman and Co.; and Highley. 1847.
Physiological, Anatomical, and Pathological Researches. By John Reed, M.D., &c. Edinburgh: Sutherland and Knox. London: Simpkin and Co.; and S. Highley. 1848.
Remarks on the Extension of Education at the University of Oxford; in a Letter to the Rev. W. Jacobson, D.D. By H. W. Acland, M.D., F.R.S., &c. Oxford: J. H. Parker. 1848.
The Dublin Quarterly Journal of Medical Science.
Dr. Clay's Obstetric Record.
The Monthly Journal of Medical Sciences.
The American Journal of Medical Sciences.
Transactions of the American Medical Association. Vol. I.
Journal of the Statistical Society of London, for November. London: J. W. Parker.
Insanity tested by Science, &c. By C. M. Burnett, M.D. London: S. Highley. 1849.
A Practical Treatise on the Domestic Management and most important Diseases of Advanced Life, &c. By Geo. E. Day, M.D., &c. London: T. and W. Boone. 1849.
Cuvier's Animal Kingdom. Part IX. London: W. S. Orr and Co.
A Critical Treatise on the General Paralysis of the Insane. By James M. Winn, M.D., &c. London: J. Churchill. 1848.
Chemical Manipulation and Analysis, Qualitative and Quantitative. By H. M. Noad, Lecturer on Chemistry at St. George's Hospital, &c. London: R. Baldwin, 1848.
Obstetrical Statistics; or, a Second Letter to Dr. Collins. By J. Y. Simpson, M.D., &c. Edinburgh: Sutherland and Knox, 1848.
The Anglo-Jewish Magazine.

REPORTED DEATH OF DR. CHAMBERS.

NOTE FROM DR. CHAMBERS.

Dr. Chambers presents his compliments to the Editor of the *Medical Times*, and requests he will contradict, in the next Number of his Journal, a statement of his death, which appeared in the *Lancet* of last week, which was not only hurtful to his feelings but highly prejudicial to his interests.

London, December 6, 1848.

ARSENIC IN AGRICULTURE—POISONING BY ARSENIC—CHOLERA—THE GAME LAWS.

[To the Editor of the Medical Times.]

SIR,—In these days of alarm respecting cholera, any facts suggesting an occasional and hitherto unsuspected source of gastric irritation cannot fail to prove interesting to the medical practitioner; and as the circumstances I am about to communicate have an important bearing, not only upon the sanitary condition of our population, but upon the whole question of poisoning by arsenic, I need make no apology for laying them at once before the profession.

For some months past, in certain parts of Hampshire, partridges have been found dead in the fields, presenting a very remarkable appearance. Instead of lying prostrate on their side, as is usually the case with dead birds, they have been found sitting with their heads erect, and their eyes open, presenting all the semblance of life. This peculiarity, which for some time had attracted considerable attention among sportsmen in the neighbourhood, led to no practical result, until about ten days ago, when a covey of ten birds having been found nestled together in this condition, two of the birds, together with the seeds taken from the crops of the remaining eight, were sent up to London for examination. I was requested to undertake the investigation, and the result of my experiments I will now briefly detail.

I first examined the seed taken from the crops of the birds, and detected, as I had anticipated, a large quantity of arsenic. I will not take up your valuable space by detailing the various steps of my analysis; suffice it to say, that by Reinsch's process I speedily obtained a thick incrustation of metallic arsenic; that I then applied the reduction test, and subsequently Marsh's test, and the tests of the ammonio-nitrate of silver, and the ammonio-sulphate of copper, each of which gave its characteristic result.

Having thus ascertained the presence of arsenic in the food of the partridges, I proceeded to examine the birds themselves. They were plump, and in good condition, but the œsophagus was, in both cases, highly inflamed throughout. The intestines were not inflamed, and presented no trace of ulceration; but they were remarkably empty and clean, almost as if they had been washed with water. May not this have been the result of diarrhœa?

I now, at the suggestion of my friend Mr. Stone, proceeded to ascertain whether the flesh of birds, so poisoned, might not itself prove poisonous when eaten; and, with this view, I carefully cut the flesh off the breast and legs of one of the birds, and gave it, together with the liver, to a fine healthy cat. She ate it with avidity; but, in about half an hour, she began to vomit, and vomited almost incessantly for nearly twelve hours, throughout the whole of which period she evidently suffered excessive pain. After this, nothing could induce her to eat any more partridge. I kept her without food for twenty-four hours, but in vain; she resolutely refused to touch an atom more of the bird. This being the case, I gave her some beef and some milk, which she eagerly swallowed, proving beyond doubt that her instinct, and not her want of appetite, had induced her to forego the dainty meal which had just been offered her.

I now felt satisfied, from my observation of the symptoms induced in the cat, borne out as they were by my many facts we are acquainted with respecting the action of poisons, that the arsenic which the partridges had swallowed had been absorbed in sufficient quantity into the system to render the flesh of the birds poisonous, and to produce poisonous effects in any one partaking of it. However, I was anxious to leave nothing to hypothesis, and, as the cat had so soon rejected, by vomiting, the greater part of the bird she had eaten, and pertinaciously refused to renew the experiment, by again partaking of the poisoned food, I was obliged to have recourse to chemical analysis, with the view of ascertaining with certainty the existence or non-existence of arsenic in the flesh itself. I therefore cut the flesh off one side of the breast of the other partridge, and, after about an hour's boiling, I obtained, by Reinsch's process, a thin incrustation of metallic arsenic, thus demonstrating beyond question what the previous experiments had left little room for doubting.

I was now anxious to ascertain the source of the poison; and a very little inquiry served to satisfy me on this point. I will not stop to go into many details, which, though in themselves exceedingly interesting, have no direct bearing upon the question at issue. I will simply mention the leading facts, viz., that in Hampshire, Lincolnshire, and many other parts of the country, the farmers are now in the habit of steeping their wheat in a strong solution of arsenic, previous to sowing it, with the view of preventing the ravages of the wire-worm on the seed, and of the smut on the plant when grown; that this process is found to be eminently successful, and is, therefore, daily becoming more and more generally adopted; that, even now, many hundredweight of arsenic are yearly sold to agriculturists for this express purpose; that, although the seed is poisonous when sown, its fruit is in no degree affected by the poison; that, whenever this plan has been extensively carried out, pheasants (a) and partridges have been poisoned by eating the seed, and the partridges have been almost universally found sitting in the position I have already described; and, lastly, that the men employed in sowing this poisoned seed not unfrequently present the earlier symptoms which occur in mild cases of poisoning by arsenic. This last fact I give on the authority of Dr. Heale, who, up to the last two or three years, practised at Staines, and has repeatedly had men under his care suffering from symptoms due to this cause.

Now, the facts just enumerated suggest several most important points for consideration. It is notorious, that many of the dealers in game are supplied through the agency of poachers, or others, who have a direct pecuniary interest in supplying them with the largest possible number of birds. It is certain, moreover, that if men of this sort were to find a covey of partridges in a field, dead, but fresh, and in good condition, they would not hesitate to send them, with the remainder of their booty, to the poulterer, who would as certainly, without suspicion, sell them to his customers. And, after the experiments above detailed, there are no reasonable grounds for doubting that these birds, when eaten, would produce disagreeable and injurious, not to say poisonous, effects on those who partake of them. It is obvious, therefore, that in all cases of supposed cholera, or of suspicious belly-ache, occurring at this season of the year, we shall do well to make particular inquiry as to whether our patient has recently partaken of pheasants or partridges purchased at a poulterer's: and it is further manifest, that, in all cases of poisoning or suspected poisoning by arsenic, the fact of persons having lately eaten of partridges or pheasants must form an important element in the inquiry, and must tend to cast a suspicion on the evidence adduced to prove a criminal intent in the administration of the poison; so that, in a medico-legal point of view, the question is one of the gravest import. 2nd. If it should prove, on further inquiry, that the practice of steeping seed-wheat in arsenic is even indirectly productive of injurious effects on our population, it may become, in these days of sanitary reform, a matter for the anxious consideration of the Legislature, whether they should not adopt some measures to prevent the continuance of such a custom. 3rd. As in the event of a practice so destructive of game becoming universal, pheasants and partridges, in their wild state, at least, must, at no distant day, become extinct in this country, it is a question whether landlords may not henceforth be induced to insert a clause in their lease, prohibiting the use of arsenic on their farms; while, on the other hand, it may be a question with those who are already weary of the protracted debates on the Game-laws, whether they should not allow them to die a natural death, by the gradual but inevitable destruction of the game it is the object of these laws to preserve.

I am, Sir, your obedient servant,

HENRY W. FULLER,

Assistant Physician to, and Lecturer on Medical Jurisprudence at, St. George's Hospital.

45, Half-moon-street, Piccadilly, Dec. 5, 1848.

(a) In a review of Mr. Taylor's work on Poisons, in the last October volume of the British and Foreign Medico-Chirurgical Review, the reviewer states, that, "in the spring of 1846, a great number of pheasants having been found dead in their preserve, their crops were removed, and sent to us for analysis, and, with them, some young wheat (about six inches high) which had been grown from poisoned grain, and of which it was suspected the birds had fed. The earth about the roots of the plants yielded distinct traces of arsenic, but the leaves were perfectly free from it."

THERAPEUTICS OF CHOLERA.

[To the Editor of the Medical Times.]

SIR,—The re-appearance of the Asiatic cholera in this country renders it important that communications on the subject should be invited, especially while ample opportunities offer for the investigation and recording the several phenomena belonging to that extraordinary disease. Valuable notices have appeared in your columns, but none there, or elsewhere, so well deserving an attentive perusal as the "Lectures on Asiatic Cholera by Mr. Ross." I have not the pleasure of his acquaintance, or would assure him that he deserves our best thanks for the lucid arrangement of facts relating to the history and therapeutics of "the pestilence which walketh in darkness." That which particularly deserves attention are the "Tables" showing the result of the various methods of treatment of cholera. The most successful seems to have in view the restoration of the quantitative materials of the circulation, which, under an attack, has been abstracted from the blood. If we adopt this theory, we shall be at no loss to discover reasons why the administration of the solution of saline substances are demonstratively the most scientific course. The "Synopsis of Treatment," referred to by Mr. Ross, entirely confirm this practice as the most fortunate hitherto adopted. A great quantity of a whitish fluid is brought up from the stomach as from a pump, and evacuations of a similar character pour from the bowels. An examination of these fluids has been frequently made, and with little variation they have been found to consist of some of the chief ingredients of the blood—fibrin, albumen, and water, or the more colourless parts of the blood. Chloride of sodium, lactate and acetate of soda, alkaline phosphates, and also phosphate of lime and magnesia are suspended in both the ejections and dejections, as all these matters are derived from the blood. Thus the condition of blood is so changed that what remains in the arteries and veins is "thick, black, and tar-like;" indeed, deficient in the properties requisite for sustaining the vital powers.

The functions consequently cease; the lungs, liver, and kidneys are deprived of their wonted sources of secretion and combustion. Hence, the indication in the cure, it is obvious, would be, to replace those materials which have escaped from the current of the circulation. At least, we should attempt to supply, in the best way we are able, the loss of serum. As in cholera, vomitings and stools are copious, so ought the fluids given to the patient to be equally copious. Water should be allowed *ad libitum*, and whey (*serum lactis*) as much as can be drunk. Much that is taken, at first, will be rejected by the stomach; yet some always will be retained. If whey cannot be readily procured, then other fluids, containing the salts above named, should be advised. The injection of salt water into the veins is a clumsy expedient for renovating the blood. We wonder not at the joke which Dr. Watson introduces in his lectures:—"However it might be with pigs or herrings, *salting* a patient in cholera was not the same thing as *curing* him." The effects, however, of the experiment, are sufficient to explain the principle of its action. Even in a relapse, the patient revives. The injection of warm fluid into the veins has an immediate and marked good effect upon the system; but, unfortunately, a relapse follows, and terminates fatally. It is very different with the exhibition of draughts containing the elements required by the blood. It is never found injurious to advise the coldest liquids. The thirst ceasing, will dictate the amount of fluid to be permitted.

If we would form a correct estimate of the effects of this or any other means of cure, we ought, every quarter of an hour, to place a thermometer under the tongue. When the mercury (from being under 50°) is observed to rise, from time to time, one or two degrees, the plan is so far successful. We may venture the most favourable prognosis.

Whatever adjuncts, from special circumstances, may be deemed needful, as wine, brandy, or calomel, &c., must be left to the judgment of the practitioner. Only, let us bear in mind, our grand object in all attempts to relieve Asiatic cholera must be, to keep up the action of the heart by recruiting the lost materials of the blood.

I am, Sir, your most obedient Servant,
JAMES PAXTON, M.D.

ON PLUGGING THE VAGINA IN HÆMORRHAGE DURING PREGNANCY.

[To the Editor of the Medical Times.]

SIR,—Having, in your last number, seen a report from the meeting of the Academy of Sciences, Paris, relative to plugging the vagina in cases of "hæmorrhage during pregnancy," by M. Stein and Mons. Miguel, viz., the "introduction of a *bladder* into the vagina,"—in reply, I beg most respectfully to observe, the practice, though it may be new in France, is not so in this country, having had the honour to read papers on this subject before the medical section of the British Association, at the meeting held at Newcastle-on-Tyne, several years ago. I regret I cannot at this moment avail myself of the manuscript of cases, but will do so at my earliest convenience. The instrument invented and used by me was made of caoutchouc, with tube, stop-cock, &c., which could be inflated so as to fill the *whole* of the vagina. It is certainly the best mode of arresting hæmorrhage in placenta prævia, making use of external pressure at the same time.

I remain, Sir, yours respectfully,
THOS. R. TORBOCK, M.D.
14, Lambton-street, Bishopwearmouth,
Nov. 29, 1848.

TER-CHLORIDE OF CARBON.

[To the Editor of the Medical Times.]

SIR,—A delay has arisen in my reply to Mr. Hooper's letter, in the *Medical Times* of Nov. 18, in consequence of writing to the friend who procured the ter-chloride of carbon. I now find it was supplied by Roper and Co., who give for its composition C_2, H, Cl$_3$. Whether this is correct or not I shall leave to more practical chemists to determine; but of one thing I am satisfied, that it possesses powerful remedial properties, especially in diseases of the nervous system, amongst which I place the present epidemic, and cannot too urgently recommend a trial; for, though neither of the cases detailed by me were decided Asiatic cholera, insomuch as it was not epidemic at the time, they were of sufficient severity to warrant me in coming to the conclusion that, but for the ter-chloride of carbon, they would have died.

My attention was directed to this preparation by Mr. Tuson's work on the female breast, and also by an article in the *Medical Times* of December 9, 1843. Since then, I have been in the habit of using it most extensively in cases of violent hysteria, in which nothing else subdued the fit, and as a local application to foul and painful sores. One case was particularly interesting. It was that of a corroding ulcer of the labia, involving the clitoris and upper part of the nymphæ. The pain was most severe. No application gave relief until the ter-chloride was used, under the use of which the woman rapidly recovered, and still continues well. Trusting that this note will not have exceeded your limits,

I am, Sir, your obedient servant,
JOHN E. BOYTON, Surgeon.
Watlington, Oxon, Dec. 4, 1848.

POOR-LAW MEDICAL REMUNERATION, WYCOMBE UNION.

[To the Editor of the Medical Times.]

SIR,—On Wednesday, the 26th September, a meeting of the medical officers of the Wycombe Union, Bucks, was held at the Red Lion Hotel, High Wycombe. The following medical gentlemen were present, viz.:—Messrs. John Turner, Hugh Hastings, Thomas A. Warren, William Rose, John Hutchinson, Joseph T. Savory, J. Drew. Letters were read from Messrs. Lee, Jestow, Colbourn, Wilkinson, and Smeatheram, regretting non-attendance through previous engagements, but promising to acquiesce in the resolutions of the meeting. John Turner, Esq., of Wycombe, Chairman. The following resolution was proposed by Mr. Hastings, of Stokenchurch, and carried unanimously:—

"That the medical officers of this Union draw up a return of the number of pauper patients; the average duration of attendance on each; the average distance of each from the residence of the medical officer; the number of extra cases; the rate of remuneration per case, including extras, and excluding extras, attended by them, respectively, during the year ending 31st August, 1848; and that the medical officers, in a body, submit these returns to the Board of Guardians, praying for an increase of salary, on the 7th August next."

The medical officers, accordingly, on the above day, presented themselves before the Board, and submitted to the Board the information as agreed to in the resolution; from which returns it appeared that one shilling was the average payment for each case.

The Board heard the statements of the several medical officers with marked attention, and a great many of the Guardians sympathized deeply with the surgeons.

The Board appointed a Select Committee to investigate the subject; and after a great many meetings and adjournments, and calling for additional information and statistics from the several medical officers in the Union, they came to the conclusion that *some* of the officers were *badly paid*, and have *actually* increased their salaries 15 per cent.!

Here, then, is a partial victory on the part of Union surgeons. The enemy has given way at several points; and having thus granted an entrance and opened up a breach, in their hitherto all but impregnable parsimonious fences, to their officers, it is hoped the opportunity now given, of stating calmly, though determinedly, their grievous Egyptian bondage, will not be lost. Only let medical officers consider well whose cause they advocate in thus assailing the strongholds of Poor-law abuses: it is not only their cause, it is a popular cause,—it is the cause of the poor.

I am, Sir, yours truly,
H. HASTINGS.
Stokenchurch, Oxon, Nov. 7, 1848.

THE RIGHT OF EXTRA-URBEM LICENTIATES OF THE APOTHECARIES' COMPANY TO PRACTISE IN LONDON.

[To the Editor of the Medical Times.]

SIR,—I beg to suggest that you are in error in supposing that the right of an apothecary, possessing a diploma from the Company to practise in the country only, to recover his charges, had remained, as yet, undecided by the superior Courts of Law. The question came before Lord Tenterden several years ago, and was decided by that learned Judge in favour of the apothecary limited by the Society to country practice only, unless on payment of four guineas. His Lordship laid it down, that there was no difference in the diploma; and, with respect to the fee paid, the public could have no interest, it being merely a debtor and creditor question between the Apothecaries' Company and the practitioner. The country licentiate, coming to London, gets no other diploma than the one he first possessed; and, on paying four guineas to the Society, the fact is indorsed upon the back of his diploma. Nor is there any penalty, as might be imagined; for it is purely a matter of debt, which the Company could have recovered in any of the superior Courts; but now, I presume, the Apothecaries' Society would be compelled to proceed for the recovery in the County Court. The question, however, raised in the case of Young *v.* Giger, has been long since decided by one of the most able Judges that ever sat upon the English Bench.

Dec. 2, 1848. JUS.

INSANITY AMONGST QUAKERS.

[To the Editor of the Medical Times.]

SIR,—In the excellent remarks of Dr. Tuthill Massy, on the Lecture on the Races, contained in your last number, I observe the following phrase:—"A leading cause of insanity is the marriages of near relatives. . . . Those friendly bodies, called Quakers, who marry so much together,—from these close family unions we see a great many cases of insanity. With the mind the body goes hand in hand; and you now have a small degenerate race of Quakers." I have had a considerable intercourse with "Friends," and although I do not deny the Doctor's rule with regard to insanity and in-and-in marriages, I do deny that I ever met with an insane Quaker; but quite the reverse, for they have been too many for me in many transactions; while they are, as a whole, the most intellectual and intelligent of companions. I agree, that in reference to their *form*, both men and women, they are diminutive and angular, I had almost said unpleasing; in *expression* they seem to me harsh and thoughtful, their women owing much to the peculiarity and simplicity of their dress.

If it be conceded that they are nearly exempt from the rule of insanity laid down as affecting other classes, I think I can point to the cause in the superior care with which they are, while young, watched over and educated. They are taught *self-control* in its keenest sense, and herein lies their great advantage as well as preservation.

I remain, Sir, your constant reader,
M.

DEATH OF SAMUEL COOPER, ESQ., F.R.S.

This gentleman, deservedly well known all over the world for the variety and extent of his surgical information, expired on the 3rd instant at his country residence, Shipperton, in the 68th year of his age. The deceased was admitted a member of the Royal College of Surgeons, October 7, 1803, soon after which he entered the army and became staff surgeon. In 1807 he obtained the Jacksonian Prize for an elaborate treatise on the joints; and on the 26th of May, 1827, he was elected a member of the Council of the Royal College of Surgeons. In 1832, on the anniversary of the birth of the immortal Hunter, he had the honour of delivering the annual oration in memory of the founder of the College Museum. In 1835 he was appointed an examiner, and in 1845 was elected to the highest honour he could obtain—viz., President of the Royal College of Surgeons. Mr. Cooper was for 17 years connected with the University College and Hospital as a most popular teacher—as a proof of which it may be mentioned, that his first class consisted of 100 students, which number gradually increased to upwards of 300. When the late Mr. Liston's health began to suffer in the autumn of last year, he apprised Mr. Cooper of his inability to continue the usual assistance in the surgical lectures; the deceased, therefore, made application to the Senate for the necessary assistance, and, it is stated, requested that Mr. Morton might be appointed his assistant. As this gentleman was educated at the University, held an appointment in it, had occasionally acted as surgeon, and, moreover, had delivered lectures for both Messrs. Liston and Cooper, and was, withal, a very popular teacher with the students, who were desirous of continuing with this gentleman in preference to any other, there could be no objection to the appointment. But this suggestion of Mr. Cooper's gave great offence to two of his colleagues,

and Mr. Cooper felt compelled to resign. Accordingly, on the 28th of April last, he addressed the President and Council, directing their attention to the treatment he had received, and finally tendering his resignation as Professor of Surgery in University College, and of Consulting Surgeon to the Hospital —appointments he had held for 17 years. Mr. Cooper has immortalized his name by the publication of his "Surgical Dictionary," and his "First Lines of the Practice of Surgery." These works have been highly prized by the profession, and have passed through many editions.

POOR-LAW REMUNERATION.

It has occurred to the mind of the writer, that an easy and practicable settlement of the amount of the Poor-law medical remuneration might be arrived at, by fixing the salary of the medical officer at 1d. per week for each of the paupers returned by the Relieving Officer in his weekly Schedule to the Board of Guardians. This rate is not unsuitable to both in and out-door paupers, and I think it would be not unacceptable to the medical profession. In order to test it, I have compiled the following Table for Bodmin Union:—

No. of Medical District.	Acres.	Population.	Average of Paupers for four Weeks.	Proposed Annual Salary.	Present Annual Salary.	Difference.
				£. s. d.	£. s. d.	£. s. d.
No. 1	10,420	2,293	125	27 3 10	25 0 0	Less 2 3 10
2	13,700	2,786	151	32 13 3	24	,, 8 13 3
3	10,760	5,160	166	38 0 6	22	,, 16 0 6
4	4,160	1,804	47	10 5 10	30	More 19 14 0
5	13,680	3,123	126	27 10 4	35	,, 7 9 8
6	13,630	4,050	168	36 8 0	30	Less 6 8 0
7	7,260	1,531	74	16 1 9	15	,, 1 1 9
8	Workhouse.	250	250	54 3 4	18	,, 36 3 4

	£. s. d.
Total Estimated Annual Cost.....	242 6 10
Total paid by Bodmin Union	199 0 0
Deficiency	£43 6 10

The above Table will further demonstrate the propriety of raising the salary for No. 3 District of this Union; and does it not show at a glance, that interference to defeat an increase by the officer of the district overpaid nearly 20*l.*, in the salary of 30*l.* allotted to it, must be both wanton and ungenerous?

The Table shows the random work which has been done in apportioning the salaries; the Board of Guardians, having no rule to guide them, have not unfrequently been at variance with medical officers; and when they have had persons to contend with who are neither inclined in their minds nor constrained by their circumstances to submit to them, they have generally been defeated; and, bearing this statement in mind, all the discrepancies may be explained.

The present exposure will certainly assist in advancing the salary for the Union-house and Home District.

The plan appears to stand the test well with the exception of the two parishes of Blisland and Cardinham; respecting these, I have doubts that some private plan for diminishing the applications to the Relieving Officer is had recourse to; they merit further inquiry.

I proceed from these remarks, which have only a local interest, to a few on the general system.

1. *It is easy of accomplishment.*—The returns are already made, and every week the Medical Officers' pence would be entered and paid quarterly.

2. *It is uniform.*—This, to my mind, is decidedly in its favour. I know the different rates of mortality in rural, town, and urban districts; but, as set forth in Neison's "Vital Statistics," I think they are hardly worth recording. The journals of the rural may be set off against the protracted cases of the urban population, or, if need be, a difference in the pay may be made, increasing it as population thickens; but the three classes above-named would be enough to recognise, and the city would but little preponderate.

3. *It is accurate, and there is but little facility for evasion.*—This at once stamps it superior to the "Case" system on the one hand and the "Fixed Salary" system on the other; both of which have been dreadfully abused.

4. *Is it just?* I think it will be found to be so, if the districts are made sufficiently large to give a medical officer a decided stake in good behaviour.

Two or three objections may be made.

1. *It gives the same remuneration for near and distant patients.*—True, this is a difficulty; and what plan is without a hindrance? But this may be partially obviated by the Board of Guardians so allotting the parishes as to give every officer both near and distant work, and so to compensate.

2. *It takes no notice of persons who receive medical and no other parochial relief.*—These are but a small per centage of the total (about 40 such cases in a year in this union); they can be paid for, by the average of a year, at, say 5s. per case, (dispensary patients generally cost 4s. per case;) but I rather think they might be disregarded for a year or so, during which statistics might be collected respecting them.

3. *Why pay for paupers on the Relieving Officer's List, and off again without requiring the Doctor?* on the principle of *risk incurred*, precisely the same as a life assurance office charges for a single week's or a year's assurance, though the probability is, the party will not want the premium. The essence of the plan is the striking the average, so that the well assist the sick.

4. *The sum, 4s. 4d. a-year, is more than most Friendly Societies pay.* The members of Friendly Societies are *picked men*, who begin to pay in health and youth; paupers are a different and inferior class.

H. Mudge, Surgeon.

Bodmin, October 21, 1848.

GOSSIP OF THE WEEK.

The Royal Society.—The anniversary meeting of this Society was held, as usual, on St. Andrew's Day, for the purpose of electing a Council and Fellows for the ensuing year, this being the first election since the adoption of the new bye-laws. The discussion which has arisen on the subject of the House List proposed by the Council, brought together no less than 250 Fellows, some few of whom, however, refrained from taking any part in the voting. The following is the list of Members of Council and officers issued by the President and Council:—G. B. Airy, Esq.; T. Bell, Esq.; S. H. Christie, Esq., Secretary; Sir J. Clark, Bart.; J. P. Gassiot, Esq.; T. Graham, Esq.; W. R. Grove, Esq., Secretary; L. Horner, Esq.; Sir R. H. Inglis, Bart.; J. G. S. Lefevre, Esq.; Sir C. Lyell; W. A. Miller, Esq.; the Marquis of Northampton; R. Owen, Esq.; J. Phillips, Esq.; G. Rennie, Esq., Treasurer; P. M. Roget, M.D.,; the Earl of Rosse, President; Lieut.-Colonel E. Sabine, Foreign Secretary; the Dean of Westminster; C. Wheatstone, Esq. After an unsuccessful attempt on the part of certain members of the Society to substitute the name of Mr. Thomas Bell for that of Mr. Grove in the Council's list, as successor to Dr. Roget in the Secretaryship,—a Committee was formed for the purpose of carrying his election *against* the Council. The result has been the defeat of the ministerial body. The votes for the three Secretaries were as follows:—For Mr. Christie, 215; for Mr. Bell, 134; for Mr. Grove, 108.

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the college at the meeting of the Court of Examiners on the 1st inst., viz.:—Alfred Brooks, Chesham, Bucks; Rawson Senior, Batley, near Dewsbury, Yorkshire; Joseph John Augustine Disham, Dublin; Thomas Jeston, Henley-on-Thames, Oxon; Charles William Whitby, Army; James Russell, Holywell-street, Westminster; Thomas Hughes, Galway; Robert Thomas Elsam Cooke, Doncaster, Yorkshire; John Duff, Tain, Rosshire; Henry Potter, Cadogan-place, Chelsea; and Philip James Elborough, Pleasant-row, Islington.

Apothecaries' Hall.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise, on Thursday, 30th November, 1848:—Edward Ilott, Bromley, Kent; John Edward Elam, Leeds.

Appointment.—The Queen has been pleased to appoint Robert Ebenezer Brown, Esq., Doctor of Medicine, to be Colonial Surgeon for Her Majesty's forts and settlements on the Gold Coast.

War Office, Dec. 1.—6th Regiment of Foot: Assist.-Surg. John William Mostyn, M.D., from the Staff, to be Assist.-Surgeon vice Duncan, promoted to the 12th Foot.—12th Foot: Assist.Surg. William Duncan, from the 6th Foot, to be Surg., vice William Robertson, M.D., who retires upon half-pay.—82d Foot: Acting Assist.-Surg. Andrew Leith Adams, M.D., to be Assist.-Surg., vice Webster, promoted on the Staff. — 12th Dragoons: Staff-Surg. of the Second Class George Anderson to be Surg., vice James Lowry Tighe, who retires upon half pay. *Hospital Staff.*—Assist.-Surg. George Murray Webster, M.D., from the 82d Foot, to be Staff-Surg. of the Second Class, vice Anderson, appointed to the 12th Light Dragoons.—Acting Assist.-Surgeon Neil Henry Stewart, M.D., to be Assist.-Surg. to the Forces, vice Mostyn, appointed to the 6th Foot.

Obituary.—On the 30th ult., at his residence, John Hooper, surgeon, 29, Newington-place, Kennington, aged 66.—On the 2nd inst., at Shepperton, Middlesex, in the 68th year of his age, Samuel Cooper, Esq., F.R.S., late President of the Royal College of Surgeons of England, and Professor of Surgery at University College, London.—On Tuesday, the 5th inst., at his residence, in Wimpole-street, John Clendinning, Esq., M.D., F.R.S., in the 51st year of his age.—On September the 27th, at Lahore, Hosier Gell Grayling, Surgeon of the 14th Irregular Cavalry, youngest son of Thos. Grayling, Esq., Longport, Canterbury, aged 24.

Death of Dr. Watson.—Died at North Berwick, on the 19th ult., in the 41st year of his age, universally regretted, Mr. John Watson, surgeon. He has died a martyr to his professional zeal and benevolence. Stricken with the pestilential disease (typhus spotted fever), caught in the hovel of wretchedness, where he sought to arrest and remove it—he has fallen immolated in the cause of humble suffering humanity. The high and the low, the young and the old, with one accord, are seeking, by a public monumental tribute, to honour the grave wherein he reposes.

King's College Hospital.—On Friday week, a meeting of the governors was held at the Hospital in Portugal-street, for the purpose of receiving a report of the state of the Institution; Mr. D. Fisk in the chair. The Report of the Committee stated that they had at length been enabled to purchase the Grange estate, together with the two houses belonging to Mr. Wood in Clement's-lane, thus allowing of the advantage of a frontage in Carey-street to the proposed addition to the hospital, and also a frontage to the new street about to be formed. The cost of the whole amounted to 7,500*l.*, the ground being 215 feet in length and 60 feet in width. During the past half-year the number of out-patients had greatly increased, 10,553 having received medicine and advice. In 1847 the

total number of out-patients was 17,901, and that showed for the present half-year an excess in the number of out-patients of 1,603. The number of patients in the hospital during the past half-year was 748, and of these 567 were discharged cured or relieved, 5 were incurable, 20 were dismissed for disorderly conduct, 48 died, and 108 remained in the house. Of the out-door patients there were 218 poor married women attended during their confinement. The total number of patients admitted from the opening of the hospital was—in-door, 10,184; and out-door, including 2,095 poor married women attended during their confinement, 112,213; making altogether 122,997.

Botanical Society of London.—The 12th anniversary meeting was held on Wednesday evening, at the Society's rooms, 20, Bedford-street, Strand, Mr. J. E. Gray, F.R.S., President, in the chair. From the Report of the Council it appeared that 25 new members had been elected since the last anniversary, and that the Society now consisted of 217 members. The distribution of the valuable British and foreign specimens to the members during the present year had given the greatest satisfaction, and increased exertion had been made this season to obtain the more interesting plants, which had been attended with success; while great progress had been made in the arrangement of the British Herbarium. The Report was unanimously adopted, after which a ballot took place for the Council for the ensuing year, when the Chairman was re-elected President, and he nominated Mr. J. Miers, F.R.S., and Mr. E. Doubleday, F.L.S., Vice-presidents; Mr. J. Reynolds and Mr. G. E. Dennes, F.L.S., were severally re-elected Treasurer and Secretary.

University of Edinburgh.—It is most satisfactory to learn, that for several years there has been a progressive increase in the number of students attending our University. The matriculation list on Friday exhibited an increase of 102 above the corresponding day of last session, which was a more prosperous year than usual. There is an increase in all the faculties, but chiefly in the literary and law classes.

Hospital for Consumption, Brompton.—Yesterday a quarterly general meeting of the Governors and Directors was held in the Board-room of the Institution, Brompton. From the Report it appeared that since the opening of the western wing in November, 1846, the resident patients had numbered 610, of whom 425 were discharged more or less relieved, and 75 now remain in the wards. During the same period the out-patients amounted to 4,187. The Report having been adopted, a re-organization of the Building Committee was determined upon, with the view to facilitate the extension of the hospital, after which thanks were accorded to the Chairman, and the meeting separated.

The Fellowship.—We understand that six gentlemen presented themselves for examination for this honour. The names of the successful candidates will appear next week.

Munificence.—It is stated, that the benevolent Swedish Nightingale, Jenny Lind, intends transmitting the nett proceeds of her provincial tour, calculated at £6,000 to Stockholm, for the completion of the hospital commenced under her auspices.

Jenny Lind.—A Deputation from the committee of the Queen's Hospital, Birmingham, waited on Mademoiselle Jenny Lind last week, and requested her to aid in behalf of the funds of that institution. This gifted songstress and most generous lady at once declared her willingness to sing at a concert in Birmingham, for the benefit of this charity.

The *Athenæum* states, that Dr. Faraday, in pursuing his researches into the operations of magnetism, has obtained evident proofs of some mechanical power, new to our knowledge, and connected in a remarkable manner with magnetism.

The Cholera.—In consequence of the apprehensions entertained of the spread of cholera in the close and crowded streets of St. Mary's, Newington, the Guardians of the Poor have elected ten medical officers, in addition to those already appointed, one for each particular locality; but each being required to act in any part of the parish, should it become necessary, with (much to their credit) an extra fee of half a guinea.

Cholera in Edinburgh.—Dr. Taylor made a verbal report from the Committee on Public Health, from which it appeared that the total number of patients admitted into the Cholera Hospital from the 30th October, the date of its commencement, till that day, was 177, of whom 106 had died, 57 had been cured, 2 had been sent to the Infirmary as not being cholera cases, and 12 were still under treatment. With respect to the habits of the persons admitted, he might state, that out of 127 of them, there were 42 males and 85 females, of whom 15 males and 15 females were of dissipated habits; 3 males and 22 females were of irregular habits; 2 males and 14 females were doubtful in their habits; and 22 males and 34 females were of sober habits; but out of the latter class had to be deducted 12 boys and 15 girls under 14 years of age, which, therefore, left a very small proportion of sober people. The districts from which the patients generally had come were as follows:—26 from the Canongate, 25 from the Grass-market, 9 from the Cowgate proper, 6 from the High-street proper, and 33 from the closes in connexion with the High-street and Cowgate.

The Cholera.—The returns since our last of the state of this disease in Edinburgh, show an increase both of the number of cases, and of the fatality. On Wednesday there were 4 new cases; Thursday, 17; Friday, 12; Saturday, 7; Sunday, 5; Monday, 6; Tuesday, 2; in all, 60 new cases. The number of deaths were:—On Wednesday, 3; Thursday, 9; Friday, 7; Saturday, 5; Sunday, 6; Monday, 8; Tuesday, 1; in all, 38. The recoveries reported during that time have been 9. In Leith only 2 new cases have been reported since our last, and no deaths. The total number of cases in Leith have been 298; deaths, 115; recoveries, 175; remaining 8. At Gilmerton, on Thursday, there were 3 new cases; at Loanhead, 1 case; at Dalkeith, on Friday, 1, the individual having since recovered.

Glasgow.—The following is the number of cases since last publication:—Tuesday, 12; Wednesday, 10: Thursday, 11; Friday, 8; Saturday, 6; Sunday, 6; Monday, 2. During the same period there have been reported 23 deaths. The localities in which the cases have occurred are chiefly in Springbank, South Woodside, and Tarbet-street.

Bellshill.—We regret to have to announce that cholera has made its appearance at the village of Bellshill, in the parish of Bothwell, in a very decided form. Two persons have already died of the malady, and a third, at least, has been attacked by it.

Coldstream.—We regret to learn that the town of Coldstream, which on a former visitation of cholera to this country suffered severely, has again been visited by the epidemic. There have been seven cases of cholera reported, five of which have proved fatal.

Kelso.—A case of decided Asiatic cholera occurred in Kelso on Monday night last. The patient had, we understand, rendered himself liable to the inroads of this fatal epidemic by previous excess in drinking, and by exposure to the weather. He died after a few hours' illness. Another case terminated fatally on Thursday, after twelve hours' illness.—*Kelso Chronicle.* The *Kelso Mail* of Thursday says, that a third case had also terminated fatally.

Dumfries.—Scarcely any town of the same size suffered so much from cholera as Dumfries in 1832; and at this time its ravages are more extensive than anywhere else in Britain, in proportion to the population. The disease manifested itself there for the first time on this occasion on the 16th of November. There have been only two cases in Maxwelton. Up till Friday last, there had been seventy-nine cases in all, and thirty-two deaths.

The Cholera in Ireland.—A case of this disease, occuring in the person of an Irish pauper, who arrived from Glasgow on Saturday last, was received into the Belfast Union Fever Hospital Wednesday morning. It appears that the patient had lived for some months back in a close in the Horse Wynd, Edinburgh.

The Cholera at St. Petersburg.—Since the commencement of November the cholera has re-appeared at St. Petersburg, where it rages at present with more intensity than in July Amongst the first victims were an aide-de-camp of the Emperor, and M. Lejars, formerly an equestrian at the Cirque in the Champs Elysées, and who was director, when he died, of the Circus at St. Petersburg.

Temperature of Houses for the Reception of the Dead.—Dr. Hofmann recommends, in order to obviate the danger of interring persons alive, to place the bodies of those supposed to be dead in a place sufficiently warm to favour restoration to life, so that if this does not take place, putrefaction will be hastened. He recommends also that a physician should be appointed, who shall inspect the bodies, and give a certificate of decomposition having commenced. For the poor, he proposes that very warm coverings should be used to envelope their bodies.

MORTALITY TABLE.

For the Week ending Saturday, Dec. 2, 1848.

Causes of Death.	Total.	Average of Five Autumns.
All Causes	1,167	1,154
Specified Causes	1,167	1,149
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	372	270
Sporadic Diseases:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	50	52
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	126	127
Diseases of the Lungs, and of the other Organs of Respiration	193	222
Diseases of the Heart and Blood-vessels	38	38
Diseases of the Stomach, Liver, and other Organs of Digestion	52	67
Diseases of the Kidneys, &c.	12	12
Childbirth, Diseases of the Uterus, &c.	5	14
Rheumatism, Diseases of the Bones, Joints, &c.	10	8
Diseases of the Skin, Cellular Tissue, &c.	1	2
Old Age	38	64
Violence, Privation, Cold, and Intemperance	35	32

TO CORRESPONDENTS.

"Dr. S. Wright, Birmingham," is thanked for his kind communication.

"B. A."—The University has nothing whatever to do with the College, which has a curriculum of its own.

"Dr. Stiff, Nottingham."—We shall feel obliged by receiving the promised communications.

"Dr. D. J. Hall, Eastbourn."—The paper shall be inserted.

"Dr. H. W. Fuller, Half Moon-street, Piccadilly."—Communication received.

"Mr. L. J. Crummey, Stokesley, York."—The paper is unavoidably postponed.

"Mr. Pincott, Chipping Ongar."—The request shall be attended to.

"Mr. Wm. Smith, King-street, Belper."—The communication shall be forwarded.

"Discipulus, Charing-cross Hospital."—Yes.

"Mr. Wm. O'Connor, George-street, Portman-square."—A private letter shall be sent.

Will our Correspondent who signs himself "Pilula," forward his address, as it has been mislaid? A letter is lying for him at our Office.

"Medicus, Tunbridge Wells."—Edinburgh, probably—Glasgow—Aberdeen certainly—and the London College of Physicians, if the Diploma has been obtained after examination.

"A. I. C."—Apply at the Westminster Ophthalmic Hospital.

Other Correspondents must stand over till next week.

ORIGINAL LECTURES.

LECTURES ON THE ASIATIC CHOLERA.

By GEORGE ROSS, Esq., Surgeon to the Western City Dispensary, and Author of "Papers on Typhus Fever," and "Essays on the Processes of Digestion and Nutrition."

[Continued from page 90.]

There are certain facts referring to the hygiene of cholera, which have not been comprised in any of the preceding Lectures, but which are important elements in the consideration of the question of the propagation of this pestilence by infection. I do not intend now to discuss this question in all its bearings, nor to pronounce a decided opinion upon the matter, because I confess that I have not made such an arrangement and revision of the facts as are satisfactory to my own mind, and, consequently, have not formed upon them a conclusive judgment. That I have not adopted a strong opinion, it would be absurd to deny, but I desire to refrain from dogmatism. If I have aimed at one thing rather than another, in these Lectures, it is to show up the utter nothingness of theoretical disquisitions on this disease, and I shall hardly now fall into the error I condemn.

I have already stated, that the filth of towns and a low level, either absolute or relative, are influential causes of the production and propagation of cholera; and, as I consider that these points have been already demonstrated, I shall not bring them again under review. There are, however, other causes, of a peculiar and interesting character, which have attracted the attention of observers. It has been remarked in India, that masses of men—independently of local influences—have the quality of retaining the morbific poison, and of propagating the disease. In the admirable Reports from Surgeons in the Madras Presidency recently published by Mr. Rogers, the opinion is frequently expressed, that human beings, *in the mass*, have the property of carrying about with them and disseminating the morbific influence; but, if the mass be broken up into smaller sections, or still further resolved into its individual components, and distributed abroad, this power would be gradually diminished, or altogether lost. A mass of 1,000 men on the march would convey the disease, in its highest intensity, to a distant part, whilst an individual of the mass would entirely lose the power of communicating it beyond the main body. The Indian surgeons, therefore, whilst asserting this peculiar property possessed by human beings in the mass, are, nevertheless, strict non-contagionists.

Mr. Rogers states, that all the authors of these Reports, except Dr. Lorimer, who afterwards, he has reason to think, modified his opinion, have pronounced for the non-contagiousness of cholera; and he also states, that "it is received as an axiom by all non-medical persons, both European and native." On the other hand, the whole volume abounds with evidence of the fact of masses of men transporting the disease, and of losing it when divided into smaller detachments. So strongly does this conviction prevail among the army surgeons in India, that Mr. Kellie, in an excellent Report, suggests, that, when the corps is passing through a district "where the disease is liable to occur, the regiment should be broken up into detachments,—no detachment to exceed two companies, and to be separate from each other by at least one day's journey."

It would appear, that the disease is retained among masses of men in consequence of the impure emanations. Mr. Kellie says: "The number of tents supplied for the accommodation of both European and native troops, when in encampment, has always appeared to me quite inadequate for that purpose. The heat, from the crowded condition, is excessive, and the air soon becomes thoroughly vitiated,—a state of matters at all times prejudicial to health, but which, when attended by a choleroid state of the atmosphere, cannot fail to be, in the highest degree, predisposing to its attack."

Such is the influence that masses of men are found to exert in producing and retaining the disease in our Indian armies, and we cannot presume to impeach the correctness of the observations, inasmuch as the gentlemen who report them have had the most favourable opportunities for carrying out their investigations. Do these statements also hold true in reference to life in towns?

"At Juggernaut, it (the cholera) is an annual visitant. 'The town of Pooree contains 35,000 inhabitants, and the number of pilgrims sometimes amounts to 150,000. The inhabitants are usually quite healthy before the occurrence of the festival, which takes place in June or July; but, immediately on the arrival of the pilgrims, and when the lodging-houses are literally crammed with inmates, cholera suddenly breaks out, and, in the space of a few days, hundreds are cut off by it. *This is not an occasional or accidental occurrence,—it is an invariable one;* and the disease which had thus been generated, as suddenly disappears on the dispersion of the crowd, a few isolated cases only occurring for two or three days after the departure of the pilgrims.'"

This paragraph is quoted by Mr. Kellie from a letter from Dr. Cumberland, Pooree. The fact that the cholera invariably breaks out with the arrival of the pilgrims, and disappears at their departure, shows the great influence which the hiving together of human beings has in the development of the disease. There is other testimony of a similar kind. During the last invasion of the epidemic in Egypt, it is reported to have been distinctly traceable to the congregation of pilgrims in some of the principal towns. I will now quote a portion of a notice in the *Medical Times* of August 26. It says: "The cholera has broken out throughout all Egypt with more or less intensity. It made its first appearance about the middle of last month in a town of the Delta, called Tantah, where an immense number of people, amounting to about 165,000, were assembled in pilgrimage from all parts of Egypt and Syria, to celebrate the festival of a Mohammedan saint." "Before the people dispersed at Tantah, it is said that there must have been upwards of 3,000 deaths from this disease."

The same Journal, on a previous date, (Aug. 12,) says: "A communication just received from Cairo announces the appearance of cholera, and that 374 deaths are reported by the Board of Health up to the evening of the 20th ult. Some cases had, about a fortnight since, occurred at the Lazaretto; *and, as the pilgrims among whom these had arisen* have since proceeded to Cairo on their way to Mecca, public opinion is disposed to attribute the importation of the malady to these creatures." It goes on to state, however, that a Report, drawn up by some medical gentlemen, takes other grounds, and cites certain barometrical phenomena as indicating an atmospheric cause for the disease.

There does not appear, then, to be any reasonable ground for doubting that masses of men will evolve the disease, and even transport it from one place to another. It is not probable, however, that the mere accumulation of human beings can generate the disease, or the peculiar poison that excites it, otherwise it would be an ordinary result of undue concentration. It will appear that the vitiation of the atmosphere, caused by the excessive packing together of human beings, debilitates the system, and predisposes it to receive the impression of the cholerific virus. Let us now apply these observations to the condition of our large towns. Here men, women, and children are permanently crowded and pressed together in dark garrets and fœtid cellars; emerging like ghosts into the light of day, with cadaverous complexions and emaciated bodies, fearing death as a curse, and hating life as a burden. Exsanguine, etiolated, their vitality is impaired, and disease is already nestling in the cells of the lung, or gnawing at the heart. Such people are the ready recipients of the first plague that comes; they are its proper tabernacle; they welcome it, lodge it, feed it, and die with it. Hence it is that cholera frequents the localities where these wretched people struggle through life; it clings to the mass, decimates it, and thins it, until the atmosphere is no longer sufficiently rank to foster the virus. It is not, therefore, to bad drainage or filth that we must look for the aids to the development of this disease, so much as to overcrowding, and to the impure atmosphere which it begets.

It will, no doubt, be asked by many gentlemen, if human beings, in the mass, can develope, retain, and propagate the disease, why may not individuals convey it in like manner? This is the question of contagion, as it is called. My answer, at present, is, that those observers who maintain the first position, reject the second. This is the testimony of experience. Facts, in their opinion, sanction one position, but subvert the other. The very discrimination which is implied in the conclusions these gentlemen have arrived at, confers considerable authority on their dogmas. In the next place, it is not contended, that human beings in the mass generate a specific poison, but only induce circumstances that predispose to the reception of the epidemic. These circumstances belong to the mass, and are destroyed by individualization. It does not appear, after an examination of such facts as have come under my observation, that any specific poison is transmitted from individual to individual; nor have I yet seen any evidence that would incline me to pronounce the probability of such communication. I should, however, desire to treat it as an open question. There is much yet to be ascertained respecting the transference of disease by infection. No good is gained by shutting up a question upon which the truth is so obscurely known or stated, that among a dozen learned men one half would stoutly deny what the other half would as valorously maintain. I have already sapped so many erroneous notions during the course of these Lectures, that I conceive I shall have sufficiently shaken established opinions, though I should refrain from breaking any more new ground. I may perhaps investigate the subject of contagion as a separate topic at a future time.

I must now conclude this series of Lectures upon one of the most appalling scourges that can afflict our race, and only hope that my researches, not pursued without toil, may be productive of benefit both to science and to humanity. It may happen that certain gentlemen may think their opinions hardly used, and their peculiar practice severely judged: I cannot help this; for when there is such wide diversities of opinion I could not please all, and I therefore resolved, without fear or favour, to discover truth, to publish it, and to abide by it, knowing that, after all, by this standard must the utility of these Lectures be tested. I do not presume to think that every argument I have used is correct, or every conclusion just; but independently of the desire to be exact, which I presume I feel in common with every other author, I have collected and arranged facts with laborious care, and have guarded my arguments with a watchful jealousy of their truth, so that I might not eventually deceive others by first deceiving myself. If errors may hereafter be proved against me, they will be few; but few or many, the sooner they are declared the better for the cause of science. The same liberty that I have used with the writings of others will, I doubt not, be employed on mine: this is a privilege that I do not fear; if I had, I should never have written

I have endeavoured to develope and demonstrate the law of diffusion and mortality of epidemic cholera,—an abstruse investigation, which the facts, as they are ordinarily stated, will neither refute nor defend. Inquiries upon this subject must be carried out on the principles upon which mine are based. I have also established the injuriousness of the stimulant system of practice in cholera, against what I believe to be the general opinion and practice of the profession. It is difficult to find a practitioner who would not declare his determination to resort to the stimulants, in case a patient afflicted with cholera should require his professional services. If I have dethroned this arbitrary and life-destroying opinion, I shall consider that I have promoted the interests of humanity. This conviction will be sufficient for me.

Meanwhile, let me ask, why should questions of this vast importance be committed to the unaided labours of individuals? Of what value, in a scientific point of view, are our public Hospitals, if not

to determine the best methods of treatment of disease? These institutions have abdicated their privileges by neglecting to use them; they are falling behind whilst everything else in medicine is in advance. There should be a medical Board in this metropolis to superintend the investigation of these subjects from data which our Hospitals could provide, and thus the records of disease, that are now kept in these institutions, might be made increasingly useful to the cause of science, instead of being thrown aside, as waste paper, or merely appropriated to the use of a few, perhaps industrious but favoured officials. It is probable that something of this kind may be done, when a little more honourable emulation is infused into the minds of our professional brethren. Our Hospitals should be the altars of science, where her lamp should be kept constantly burning; there is plenty of oil, if there were but zealous priests to tend the flame.

ORIGINAL CONTRIBUTIONS.

MEDICAL SCHOOLS AND UNIVERSITY TOWNS OF GERMANY.

By J. STEVENSON BUSHNAN, M.D., Fellow of the Royal College of Physicians of Edinburgh, &c. &c.

In these days of advanced knowledge and universal research it is highly desirable that the English medical student should be familiarly acquainted with the German language and its medical literature, in order that he may avail himself of their treasures, and turn them to professional account; and this is best effected by a residence in the countries where it is spoken. No one should dream of attempting to acquire a foreign language, at least so as to speak it, at home; it is time thrown away and labour lost; and he who does so will probably find, when he reaches the continent, and ventures upon a sentence in his best school-room French or German, that he is not understood. Again, at home, we always begin to learn a language at its wrong end; we invariably begin with its grammar, in which, in fact, very little progress ought to be made until the student has acquired considerable facility in speaking, with us almost impossible, since so few opportunities for conversation occur. But let the student repair to the continent, and there he will learn in six months, more, I may almost venture to say, than in as many years at home. Well, then, let me suppose that the student has passed his examination; let him be either surgeon or physician; the hope of future success and reputation induces the desire to be enabled to avail himself of the discoveries of the great physicians and philosophers of the Fatherland; although not too old to learn, he is still too young for practice; so let him repair to Germany.

The object, then, of the present series of papers is, to assist the student, so inclined, to choose his whereabouts; and I propose, in the following familiar and desultory sketches of the medical schools and university towns of Germany, to give

1. A short history of the university under consideration; its faculties, number of professors, private teachers, and students; and under what circumstances degrees are granted both to foreigners and natives.

2. The medical school and facilities for study. Hospitals and maternities. Dissecting rooms; and means of supply. Chemical laboratory.

3. Scientific societies, museums, libraries, botanic gardens, public and private collections, and means of access.

4. Sketches of student life.

5. General society afforded by the town; habits of the people; expenses of living for a student, &c., &c., &c.

And now, since the disturbed condition of the German States, and the lead their students are taking in the great political movements of the day, render, at this time, a residence at almost any one of their universities, neither agreeable, prudent, nor beneficial to a foreigner, I will first introduce him to one, in which, although not of Germany, the language of the Fatherland prevails; I mean that of

ZURICH,

the only important university and medical school of German Switzerland, quiet and undisturbed by revolutionary ideas and the spirit of change and political agitation; and although of comparatively modern date, possessing great facilities for instruction and study, and one of the best conducted hospitals with which I am acquainted. It is easy of access, either by the Rhine, or through Belgium and Luxemburg to Strasburg and Basle; or through Paris and France to Basle; or by Besançon, Neufchatel and Berne; and by either route for a sum of less than 10*l*.

The University of Zurich was founded so late as 1832; and since that time to the present, it has boasted among its medical professors very distinguished names; for instance,—Schoenbein, Arnold, Henlé, Kolliker, Hassé, Engel, &c., &c. The two latter still adorn it, but the former, having there founded their reputation, have been removed to some of the most celebrated Universities of Germany, and to wider fields for pecuniary remuneration and emolument. As in most Universities, that of Zurich has its peculiar police, to which, and not to that of the town, matriculated students are subjected. Of this the rector and deans of the four faculties are the chiefs. The number of Professors is very considerable; in the medical faculty there are five, and one Demonstrator of Anatomy or Prosector. These are paid, by the Government, from 50*l*. to 100*l*. a year, according to their standing; and this independent of students' fees, which average for each pupil about twelve shillings per session. There are numerous private teachers, who give lessons in their several departments, at the rate of about a franc to a shilling per hour. The average number of medical students is about seventy. The matriculation fee of a student for the term of three years is twenty Swiss francs, about 1*l*. 4*s*. Each course of lectures costs from ten to thirty Swiss francs, and a student who attends lectures during six hours a day, will have to pay, at the most, for the session, from 120 to 130 Swiss francs, 7*l*. to 8*l*. The doctorial degree is obtained by producing certificates of having attended the required courses, undergoing an examination, and publishing a thesis; but few degrees are granted, since they do not qualify for practice out of the canton. The expense is about 18*l*.

Among the establishments for medical education, that of the hospital is the most distinguished. It contains 300 beds, and offers great facilities for study. Attached to it, but in separate buildings, are the Fever Hospital, the Small-Pox Hospital, and the Maternité; in the latter, the student may witness, under the superintendence of Professor Spoendli, on an average, 120 births during the session. The medical department of the hospital, which includes syphilitic and cutaneous diseases, is under the care of Professor Hassé, who speaks English. The surgical offers a wide field for study, and is directed by Professor Locher. Every patient who dies in the hospital is examined; and the greater part, or those who do not pay a small contribution to the funds, are appropriated to the dissecting rooms, as are also the bodies of all who are found dead in the canton, or who die in other charitable institutions or in prisons, or whose friends decline to pay the cost of burial. In this manner more than 150 bodies are annually placed upon the dissecting tables; all these are divided among the students, and at a cost of less than 3*l*. for the session. A diligent student need never want a subject for dissection, or for surgical operations. The Demonstrator, Dr. Mayer, speaks English.

The laboratory is an excellent institution, and offers great facilities for the study of practical chemistry, being possessed of an extensive apparatus and materials for experiments. It is under the direction of Professor Löwig, who, as a practical and, at the same time, a most scientific chemist, is much to be preferred as a teacher to his rival, the theoretical Liebig; and I have no hesitation in asserting, that the student may apply himself to the study of chemistry with far greater advantage, and at considerable less expense, at Zurich than at Giessen. Professor Hassé, who speaks English very fluently, is the physician to the hospital, and the lecturer on medicine; he is well known in England by a translation of the first volume of his Pathological Anatomy, published by the Sydenham Society, while in Germany he ranks high among her most rising men. Dr. Mayer, the demonstrator and lecturer on anatomy, who also speaks English, has greatly distinguished himself by his anatomical and physiological researches, and is most willing to direct the student in his dissections, and guide him to sound knowledge and practical ability. Dr. Engel, formerly of the University of Vienna, is the lecturer on physiology, and a well known German authority in his own department. Dr. Locher is the professor of surgery. In the various departments of natural history Zurich boasts of several eminent men. The celebrated Oken fills a chair; Schinz is professor of general zoology and ornithology; Heer, of botany; and Nägeli, of vegetable physiology. Indeed, whatever faculty we would analyse, we shall find that the University of Zurich is second to none in which the German tongue prevails.

Student-life in Zurich is only remarkable for there being fewer clubs, less beer drinking, less duelling, and fewer follies than in other German universities. At the commencement of the session a meeting—a "commerce," as it is termed—is held, at which the new students, called "foxes," are "burned" or initiated, by being made to pass, or ride on the backs of chairs, through alleys of the old students, who wave lighted paper torches, well greased, in their faces; accidents, however, seldom occur, and, although from the quantities of beer that is drunk, challenges are sometimes exchanged, good fellowship generally prevails, and the only result is, that the town has to pay for a few broken lamps, and to replace a few door-bells and water-pipes, which the foolish boys may have removed or destroyed in their progress to their various homes. Every challenge that is given must be referred to the Students' Court of Honour, a body chosen from amongst themselves at the commencement of the session; and without their permission, after having heard the parties, no duel can take place. And even when this is accorded, the combatants are so well padded, and so many precautions taken, that a fatal result can scarcely occur. They fight with long rapiers, and in the fashion of the English play of single-stick; the seconds interfere at every blow that is received, and not more than twenty are allowed to be exchanged: and since these are generally given with the flat sides of the sword, in general little blood is spilt, although sometimes a student is disfigured for life by long wounds on his face and head. A surgeon with ligatures and plasters is always in attendance, and a professed *maitre d'arme* assists the seconds in deciding upon the fairness of a blow.

Zurich boasts a very good Natural History Society, established in 1745, by the celebrated John Gesner and his cotemporary Heidegguer. Meetings are held every fortnight in the Rhuden House, when papers are read, specimens exhibited, and discussions take place. The Society possesses a rich library, of more than 8,000 volumes, including a large collection of voyages and travels. It publishes a small monthly journal, in which the meteorological tables merit great praise.

The Zoological Museum in the University comprises the magnificent collection of Professor Schinz, and consists of more than 400 mammalia, 2,000 birds, with the eggs of the greater part, particularly those of Europe, 300 fishes, 4,000 insects, besides numerous skeletons, fossils, &c., &c.

The Botanical Garden dates from 1747, when it was commenced by the great botanist, John Gesner, and now occupies that portion of the demolished fortifications called the Cat's bastion. It contains a gardener's house, a lecture-room, and a long range of glass. A portion of the ground is appropriated to Alpine plants, of which there is a great collection and in good condition, offering much facility to the student. The garden is under the able direction of Professor Heer and Monsieur Regel. Hegetschweiler's herbarium is preserved here, and in it and in the collections of Dr. Nägeli and Professor Heer,

the student will find specimens of almost every Swiss plant, and, by the kindness of these gentlemen, he may obtain many valuable duplicates.

In the University is an extensive mineralogical and geological collection, the latter being very rich in fossils from Italy and the Alps; and in the town several private collections are highly interesting; among these that of Mr. Escher-Zollikofer is remarkable for its extensive series of Brazilian butterflies and beetles; and Professor Mousson's for its land and fresh water shells.

The Town Library possesses more than 50,000 volumes; among its curiosities are some manuscripts of Quintilien, letters of Lady Jane Grey to Bullinger, of Frederick the Great, of Henry the Fourth, and Catharine of Navarre, besides many an ancient Bible. There is also in Zurich an excellent reading-room, possessing most of the leading European newspapers and scientific journals, besides a collection of more than 2,000 volumes of the lighter literature of the day.

As regards society, that, as it is generally elsewhere constituted, is almost unknown in Zurich; and what does exist is, to the foreigner, quite without sociability and kindliness.

Every Zurichois is a tradesman, merchant, or an *employé* of one kind or another, and there does not exist what may be regarded as an equivalent to the independent gentleman of other countries. At an early hour the Zurichois leaves his home for his shop or his bureau; there he remains till mid-day, when he returns to his dinner, which is hastily swallowed for the delights of the coffee-house, where he enjoys, undisturbed by wife or child, his cup of coffee and his cigar or pipe. He is again to be found at his business from two to six, when he sometimes sups at home, or more frequently at some house of public entertainment with his boon companions; at any rate, should the whisperings of economy induce him to partake of his family "nacht essen," that over, he again seeks the pleasures of an atmosphere redolent with the fumes of tobacco and the exhalations of reeking beer-glasses. The men tell you the reason for this is, that the coffee-house is a rendezvous where they meet their friends and talk politics; and that, occupied all the day with business, they must have some "*point de réunion*" where they may exchange their views, and discuss, not only the scandal of the town, but the events of the world around them. And there may be some truth in this; but perhaps another reason may be found in the habits and characters of the women. Generally speaking—for there are exceptions—the husband and grown-up sons have no inducement to remain at home; the females of the family have not a thought, scarcely an idea, beyond their household Lares; rarely have they quitted their canton, and seldom are they educated in more than household affairs, to which, indeed, they are perfect slaves. They rise early, prepare the morning coffee, and the mid-day meal; and since very few families, however numerous and wealthy, keep more than two servants, and by far the greater number but one, it is not unnatural to suppose that other duties fall also to their hard lot. Thus, a Zurich lady is never visible until after dinner, when, the duties of the *ménage* over, she dresses for her friends, and the little world around her. Intrude upon her before two o'clock, she would, in all probability, be found "on household cares intent," probably in her kitchen, in her night-cap and the short white jacket which, in France and England, are unknown beyond the precincts of the bed and dressing-rooms. But there is nothing wrong in all this; on the contrary, it is praiseworthy, and might with advantage be elsewhere practised. However, it is not all; for, with the exception of the occasional meetings of kith and kin—and these meetings are strictly confined to relatives—the members of almost every family are, in their intercourse with their neighbours, quite independent of each other. The gentleman's society is found chefly in the beer and wine shop, and his Sunday club; the lady has her own private circle or *gesellschaft*, and the young people of both sexes are allowed to meet together and amuse themselves, either at their own houses or at some favourite country coffee-house. Mothers have their friends, to whom their daughters are unknown: and they, in their turn, do not think it necessary to present their associates to the seniors of the family. But the untravelled Zurichois, and no difference can be more palpable than that which exists between the few who have travelled and the many who have not, is essentially an egotist, and he is half a century behind his most civilized countrymen of Geneva and Lausanne. Nowhere is the Swiss character, of which we sometimes read, more plainly shown to be a fable than in Zurich. "Grossier comme un Zurichois" is a familiar and no false proverb; and the German saying, that two Jews will only equal one Swiss, is there well illustrated. And although the country is beautiful, the laws are such as must prevent strangers making it their residence, and benefiting the people by their travelled civilization, while they lead them unconsciously to shake off their absurd prejudices and escape from their barbarisms. No stranger can live in Zurich, except in an hotel, in which case his name is daily paraded in the newspaper, or as a matriculated student, without depositing several hundred francs with the police, or giving other security for his good conduct; and that done, and his house taken, his landlord has the right to demand the whole rental in advance, or a security for its payment. Even then the stranger is regarded with suspicion and distrust; his actions are watched; he becomes an object of curiosity; and if he changes a note, or receives money, the banker's clerk, through whose hands it passes, has been known to run to those with whom the foreigner has dealings, to communicate the fact, and recommend that the bill should be sent in.

But still, however unsuitable as a family residence, Zurich offers to the student many inducements to proceed there, which are not easily to be found elsewhere. The surrounding country is beautiful, and it is in the neighbourhood of the most magnificent scenery of Switzerland. And then, for ten shillings a week, a student may find not an uncomfortable room, and three meals a day, in some boarding-house; while a small additional sum will add to the luxury of his furniture, and supply any deficiency he may find in his table. As a medical school—and it is to students I address myself—it has, as I have shown—peculiar advantages. True, there is no society for the foreigner; but if a student, that is not his object, and he will find ample compensation in the medical klinik of Professor Hassé, and the Practical Anatomy Rooms of Professor Mayer. Both these gentlemen speak English fluently; they are, also, foreigners, and may be supposed to have some sympathy with those who, like themselves, are strangers and sojourners in the land.

THE LATE LORD GEORGE BENTINCK; "DEATH AT THE HEART."

By G. CORFE, Esq., Middlesex Hospital, Author of "The Physiognomy of Diseases," &c.

[Continued from page 142.]

In continuation of the remarks upon the alleged cause of the sudden death of Lord George Bentinck, permit me to observe that Rokitansky of Vienna was the first pathologist who described the morbid changes which, as I believe, usually give rise to "spasm of the heart." But since the valuable discoveries of this indefatigable pathologist were published, many more recent and equally valuable additions have been given to the profession by Professor Paget, in a series of lectures on "Nutrition, Hypertrophy, and Atrophy," delivered at the Royal College of Surgeons during the summer of 1847.

It may, however, be premised, that the essential feature of the disease consists in a fatty degeneration of the muscular fibres of the heart, immediately beneath the endo-cardium, and which Mr. Paget appropriately designates "granular degeneration" of the organ.

I may observe, that the ordinary fat hearts, such as the late George the Fourth laboured under, are not productive of this "spasm" of the organ; but that such an overloaded viscus usually relieves itself by inducing dropsy of the pleura, (hydrothorax,) or by a supervention of dropsy of the lung, (œdema pulmonum,) or of both of these diseases, as was the case in his late Majesty. These effusions gradually lead on to anasarca, and the accumulation of serum upon the organs of respiration rapidly cuts off the patient's life. But in the disease now under our notice, Mr. Paget has observed, that it is not connected with general fatness of the body. The deposition of fat is not seen along the furrows where the coronary vessels lie, and where fat is ordinarily met with in otherwise fat people; "it is not the result of an encroachment of the natural fat of the heart upon the fibres themselves, although it sometimes, yet I think seldom, exists together with increase of the external fat of the heart. Its chief seat, near the inner walls of the heart's cavities, and on the fleshy columns, where is little or no fat in the natural state, would prove this; and the microscopic examination leaves no doubt, for you may not find more than the usual quantity of fat outside the fibres." "Neither is it all necessarily connected with general fatness of the body." (a) But these changes are seen then on the *inner* portions of the muscle and beneath the endocardium, and the fibres are supplanted by these fatty degenerations, giving to the organ a "tawny buff or ochre-yellow hue," and the whole viscus presents a general paleness and flabbiness of texture, such as I have already observed to occur in fatal cases of delirium tremens.

This "soft, doughy, inelastic, unresisting heart," which Mr. Paget describes as though it seemed never to have been in the state of *rigor mortis*, is precisely analogous to the condition of the heart noticed by myself in the year 1832, and a description of which has since been published by me, as well as by a former house-surgeon of this hospital. But I was not then aware that such morbid features in this organ depended upon a granular degeneration, or fatty deposition, within the muscular fibres of the heart itself, until I had the gratification of perusing Mr. Paget's instructive lectures; and they well deserve the attention of every practitioner.

But allow me to digress for a short time from the subject, in order that I may add a few comments upon the third case adduced by Mr. Paget. "A strong man, about 30 or 40 years of age, and a hard drinker, is the subject of delirium tremens, after receiving a slight injury of the head. He continues his work during four days after the blow, but feeling ill, and having head-ache, he lays up, and leaves off all strong drink. In three days, signs of delirium tremens commenced, and he was brought to the hospital. In the course of the second day after the beginning of these symptoms, while they were pursuing an ordinary course, he took 140 drops of laudanum (upwards of seven grains of opium), but no beer or spirits till in the evening, when the opium seeming to have been sufficiently administered, brandy was given him and beef tea." He dosed, it appears, all night. "In the morning he was placed in a chair in order that his bed linen might be changed, when he suddenly died before he could be again placed in bed."

I am inclined to think that subsequent pathological researches will shortly unveil to us the fact, that this "granular degeneration," described by Mr. Paget as the cause of sudden death in this instance, is especially brought on by the constant abuse of alcoholic drinks, and that any large amount of narcotism forced upon such a system, whilst labouring under delirium tremens, will be often followed by a false sleep. I say false sleep, because I have witnessed several instances where opium has been administered in large doses, as in the case quoted by Mr. Paget, and sleep has truly been induced, but it has been the sleep of death. The patients have continued dosing for eight or twelve hours, and have then been carried off, either by an epileptic fit or by a sudden arrest in the heart's action; and in all such cases, this organ has presented the exact dough-like, inelastic, pale, and flabby condition already described. But let me repeat a few words concerning the successful treatment of this disease without in-

(a) Professor Paget's Lectures, 1847.

ducing narcotism. "A large proportion of the cases of this disease (delirium tremens), which have been admitted into the medical wards of this hospital during the last two or three years, have been most successfully treated by full doses of calomel and sperients, whilst opium, as a narcotic, has been almost wholly abandoned; and whenever the former drug has acted briskly upon the hepatic circulation, and has brought away, for several days successively, a large amount of chocolate-coloured, offensive bile, the hallucinations have disappeared, tranquil and refreshing sleep has followed, and convalescence has rapidly succeeded. But, although the authority of so eminent a physician as Dr. Watson is directly contrary to this practice, yet it is impossible to have witnessed the gratifying results of the purgative treatment without being fully convinced that this course of practice is both safer, and is based upon pathological principles more consistent than is the treatment of drugging a semi-maniac, whose system is already poisoned by morbid secretions, with another narcotic, the action of which directly tends to check the separation of those morbid agents from the constitution which light up the disease." (a)

But to return now to the subject immediately under investigation; such a change in the fleshy columns of the heart must render it liable to become impeded in its functions, or arrested in its action by the least amount of exercise; and I would venture to inquire, whether many of those fatal cases, which our forefathers were wont to describe as the effect of accumulative doses of digitalis, were not rather the fatal issue of such granular degenerations of this organ, and that they did not arise from any deleterious influence which this valuable, but much abused drug, had produced in the system. Many practitioners are aware that, in combination with albumenuria, or Bright's disease, there is not only a deposition of fatty matter throughout the vascular portion of the kidney, but that the heart is feeble in its impulse, faint in its sounds, and dilated in its cavities,—in other words, that it is a weak heart, so that the exhibition of digitalis is contra-indicated, whilst the use of moderate doses of steel, with an occasional purgative, is a far more judicious line of practice. In this morbid condition of the heart, there is frequently an analogous fatty degeneration of the liver. Small wood-cut drawings of intra- and inter-lobular fat globules, found in the structure of the latter viscus, were published in the papers on the Physiognomy of Diseases; and I have already remarked, such degenerations in the fibres of the heart are frequently met with in those who are the subjects of delirium tremens: hence, it occurs to my mind, that the treatment of this formidable disease, by anodynes or narcotics alone, should be cautiously adopted, since the very agent administered as a remedy may produce a sudden halt in the action of this once nicely-balanced engine.

"Fat, accumulated in tissue round a part, is very different,—probably, an essentially different thing from fat within it: the one is compatible with perfect strength, the other is always a sign of loss of power."

Mr. Paget then cites the three fatal instances of cardiac granular degeneration; and after carefully examining the heart of the man on whom the inquest was held,—referred to in my last communication,—and comparing this gentleman's description of the disease in question, there was left no doubt on my mind, but that death at the heart ensued from a sudden arrest in the action of its muscular fibres; and thus the blood was stopped in its progress from chamber to chamber, whilst the fatal paralysis ran through the fleshy columns of this organ, and its delicate flood-gates—the valves—were debarred from performing their important office.

Allow me, then, to remark, that this disease does not furnish us with any unequivocal symptoms of its existence during life; and after death, even, to use Mr. Paget's words, "the change is such as I think none but a practised eye could have discovered, and nothing but microscopic help could have enabled us to describe or understand. The condition of the heart was alike in all the three cases, and very characteristic, though, indeed, to an unpractised eye, it might seem unimportant. Let me add, for caution, that, serious as the effects of the disease are, the change of structure may escape any but a very careful and practised examiner; for often the change is hardly manifest to the eye, though, while it affects the whole heart, it may have destroyed life."

Notwithstanding the insidious nature and obscure character of this disease, yet I do think that certain negative evidences are valuable, in ascertaining how far such a malady does or does not exist. Thus, if there is no "breast-pang," as in angina pectoris, no disturbance of the circulation on moderate exercise, or in ascending a hill or a staircase, —no distress experienced after a hearty meal, as in hypertrophy of this organ,—but that there is an habitually slow and regular pulse—a faint systolic sound, and a weak impulse at the apex of the heart; and if the patient is occasionally subject to fits of transient syncope, but yet enjoys good general health, and is, moreover, of a robust and somewhat hardy disposition, then, so far as our present limited knowledge extends in clinical medicine, we might be warranted in suspecting the existence of a pale, flabby, and degenerated heart, and our grounds of suspicion would be much supported if we can ascertain that the individual has, at any period of his life, become addicted to alcoholic drinks, and has grown fat upon such immoderation.

It may be remembered that Bichat, in his "Recherches sur la Vie et la Mort," speaks of three modes of death, namely, death at the head—death at the heart—and death at the lungs. Apoplexy, cardiac spasm, and suffocation, as by drowning, are instances of each of these forms of death. But the latter mode of death is sometimes brought about by "spasm" also—"spasm of the glottis." The arytenoidei obliqui and transversi muscles refuse to allow their antagonist powers to exert any influence over the rima glottidis, and closure of this inlet to the respiratory apparatus is the fatal result. We have had a painful instance of this formidable disease; formidable, I say, inasmuch as neither the patient nor the medical practitioner may have the slightest suspicion of the impending crisis, as was the case in the following occasion. A gentleman's servant, a robust and well-formed man, was recovering from a smart attack of "scarlatina anginosa." The eruption had quite disappeared, and the skin was beginning to desquamate. The throat had been severely affected; but the tonsillitic swelling had so far subsided that he sat up in bed, and ate his breakfast with comparative ease. About two hours after this meal, I paid my usual morning visit to the ward, and examined this patient's throat; there was but slight enlargement of the tonsils, and the voice, which had been faint and raucous, was fast regaining its natural tone. I had left the room, and had reached the female side of the building, when the nurse came in breathless anxiety informing me that the patient was either dead or in a fit. I hastened across the ward, and found, alas! that the poor fellow was a corpse. He had been sitting up in bed after I left him, and was conversing with his neighbour in the adjoining bed, when he suddenly became altered in his countenance, flung his arms wildly about him, and fell back in the bed and died. I pulled out my lancet, and drove it through the crico-thyroidean ligament, placed the shirt over the wound, and breathed into the opening, but it was all in vain: death had been instantaneous. The only morbid appearance in the body which we could detect at the *post-mortem* examination was perfect closure of the rima glottidis with œdema of its mucous surface. There was no subcutaneous inflammation around the cervical glands, nor enlargement of these bodies, as is often the case in such instances of death by suffocation; and, therefore, the fatal disease, I apprehend, deserves to be termed "Spasm of the glottis," just as the case under our notice merits the title of "Spasm, or death at the heart."

Let it not be supposed, from the foregoing observations, that every case of death at the heart springs from this fatty or granular degeneration of its muscular fibres. It is evident that the cases cited by Mr. Paget, the instance of sudden death in the Irish labourer, and lastly, the melancholy case of the deceased nobleman, were ensamples of true granular degeneration of the heart; and I have reason to believe, that in the case of a lady who fell dead at her husband's feet upon receiving the sudden intelligence of the death of a most beloved and amiable sister, that the same changes in the fibres of the heart had likewise taken place. There are, however, other and equally important alterations in the structure of this central organ of the circulation which may escape the notice of an inexperienced eye. The "syncope anginosa" of Dr. Jenner, or the "angina pectoris" of Heberden and modern writers is a disease of middle life, and depending, as it often does, upon the coral-like state of the nutrient arteries of this viscus, we can readily understand why sudden death, according to Jenner's explanation, should be so frequently the issue. But it has been my painful lot to witness several instances of sudden death in individuals, especially in men, who were known to labour under simple hypertrophy of the parietes of this viscus. They had derived more or less relief from the treatment under which they were placed; their spirits were buoyed up with the improvement they experienced; they had passed two hours (a) of cheerful excitement with some relative who had unexpectedly arrived from the country to visit them; when perhaps, as soon as the ward was left to its former quietude, and the patients have been calmly talking over the events of the day, or were in the act of taking their tea, such sufferers from cardiac disease have fallen back in their bed, or dropped on the floor, and death has seized them before I could reach the ward. In such instances the only deviations from healthy structure in the heart have been an hypertrophied condition of its ventricular chambers, with or without valvular disease; and to such cases the term "spasm," or "death at the heart," might be appropriately given.

In conclusion, it may be stated that this obstacle to the free exit of the columns of blood becomes suddenly aggravated by mental or bodily excitement, when an irregular contraction of some of the fleshy fibres of the organ, without any proportionate relaxation of other fibres of this viscus, momentarily seizes it. The whole hydraulic machine faulters,—becomes paralysed,—is arrested, and failing to throw out what it already contains, and overwhelmed with additional columns of vital fluid passing into it, the stroke of death instantaneously ensues.

Middlesex Hospital, Dec. 7, 1848.

(a) The Physiognomy of Diseases.—*Medical Times*, p. 114.

THE LOODIANAH FIELD HOSPITAL, WITH REMARKS ON THE STATE OF THE ARMY MEDICAL DEPARTMENT IN INDIA.

By JOHN MURRAY, M.D., Field Surgeon.

Fertility in resources, with a reserve of expedients, is the foundation of success on active service, when original defects appear and deficiencies arise which cannot be rectified or replenished from the usual resources. Concentration renders shattered forces effective, and order produces copious results from scanty means. The following history of the Field Hospital at Loodianah is an illustration of these points. It is written in the hope that others may benefit by the experience there gained. Some of the expedients were very serviceable, the arrangements were successful, and the results satisfactory.

On the 14th January, 1846, the Sikh force, under Rungour Sing, consisting of 20,000 men and 60 guns, crossed the Sutledge at Philore, and encamped on the left bank of the river, about five miles to the north of Loodianah. On the 17th they moved to Barenharah, a small village three miles west of Loodianah, on the right of the Ferozepore road. The British force under Col. Godby, consisted of about 3,000 men and 4 guns,

(a) The period allowed by the Board for friends to visit the patients.

(a) with 1,300 convalescents, and men belonging to the corps that had marched to Ferozepore; there were also some irregular troops belonging to the Rajah of Patealah, for escort duty with supplies. The force was encamped under the guns of the Fort. It is a native work, with high puckah circular bastions, a deep ditch and steep glacis, mounting 12 guns. The houses of the city extend close to the gateway on the south-side. On the northern-side there is a deep winding nullah.

As we were in daily anticipation of an attack, Surgeon T. B. Hart, of the 1st Light Cavalry, and I, examined the buildings in the vicinity of the Fort, and selected for an hospital an extensive puckah building, with numerous out-houses, surrounded by a high wall called "*The Palace.*" It was proposed to collect cots, and entertain an hospital establishment, and make preparations in this building for the wounded; but this arrangement was not authorised. We then arranged that the wounded should be sent from the field to a small bomb-proof barrack in the Fort, then occupied as an hospital by the sick of the depôt of H. M. 50th Foot. Amputating instruments, with a supply of dressing and bandages, were placed there on the 16th, under charge of Dr. Barlow, of H. M. 50th Foot. The troops were drawn up every day at the western end of cantonments, opposite the Sikh camp.

On the 18th our cavalry chased a party of Sikh horse into their camp, which immediately turned out their whole force. They advanced in regular order, within a mile of our position, looked at us for half an hour, and then marched back again.

On the 20th, the Sikhs marched to Budewal, to intercept the division under Major-General Sir Harry Smith, K.C.B., which was coming from Ferozepore to our relief. It consisted of about 3,500 men and 18 guns. (b)

On the 21st, the Loodianah troops moved out at 9 o'clock to form a junction with the Ferozepore division, which was accomplished by noon, about four miles to the east of Budewal. We heard a good deal of firing during the march, which arose from the Sikhs having moved out from Budewal, and attacked Sir Harry Smith's division. The attack was gallantly repulsed, and the troops moved on steadily. The Sikh guns did considerable execution till silenced by our artillery; and at the same time a large body of horse moved round to the rear and intercepted a considerable portion of the baggage, and nearly all the hospital establishments, dhoolies, instruments, &c. The day was very hot, and when the junction was formed, the troops and the artillery horses were much exhausted by a long march in heavy sand. The united force marched to Loodianah, and encamped at the south-west end of cantonments.

There were 23 Europeans and 46 natives wounded. Some were operated upon and dressed where the troops joined. All were taken to the fort, where our previous arrangements proved most opportune and sufficient for their treatment, though at first the wounded were much crowded.

On the 22nd, Sir Harry Smith ordered a general field hospital to be established; appointed me field-surgeon, and ordered officers commanding departments and corps to attend to my requisitions. I possessed the full confidence of the General, and my instructions were—"Do what is necessary—quickly."

The general field hospital was established in the artillery lines, consisting of one European and two native hospitals, an European barrack, and four ranges of stables. These buildings are in a continuous line, and convenient for supervision. Six hundred cots and charpoys were ordered; and part immediately collected and arranged. Hospital clothing for 200 Europeans, and the hospital establishment for an European corps were ordered; but there was considerable difficulty and delay in procuring these hospital supplies, as Loodianah had been besieged, and many of the inhabitants had left. Cots, charpoys, and a little bedding were collected from the old hospitals, and in some cases the bedding from the dhoolies was used for some days. Resais were easily procured; but shirts and sheets were not supplied till a week after the action.

The following arrangements were made for the advance of the force to action, by which mutual assistance was rendered, and an efficient field hospital formed from the previously crippled regimental establishments:—(c)

1st. Each of the European Corps to bring two hospital tents on their elephants, in the rear of the column; to be pitched at a place selected by me for a Field Hospital, near the field of action. The other hospital tents to be brought to the same place in the afternoon.

2nd. All the medical staff and subordinate medical establishments not required in the field, to be sent to this Field Hospital. The rest to join after the action. Every medical officer to bring six wax candles.

3rd. Each medical officer to follow in the rear of his corps, out of range of musketry and grape, with four or six dhoolies. The remainder of the dhoolies to be collected at the Field Hospital, from whence they would be forwarded in detachments to the field under charge of Soewars.

This arrangement was to guard against the dhoolie bearers leaving their dhoolies from fear when the action commenced, or for plunder after the victory had been gained, and to insure their knowing the situation of the hospital.

4th. The elephants, with their pads, to follow in the rear, to bring in the slightly wounded.

The elephants moved out for this purpose on the 23rd, and on the 29th they were very useful in transporting the wounded from the field to the general hospital in Loodianah. A *foot-board* to the pad would have been a great comfort to the men. Each elephant could carry six sick or slightly wounded men; and if a chajamah, or slight framework, were provided, many would prefer this conveyance to a dhoolie. The ordnance elephants, with Brigadier Wheeler's force on the 17th and 18th Feb., were to be available for this purpose after the action. It would be of great advantage if light stretchers were supplied to the band men of each corps. They would keep in the line, and bring the wounded from under fire to the dhoolies; the bearers are not fighting men, and cannot be induced to advance so near the enemy.

(c) PRESENT STATE of the REGIMENTAL HOSPITAL ESTABLISHMENTS of the LOODIANAH FORCE, on the 23rd January, 1846.

STRENGTH.	Surgeons.	Assistant-Surgeons. &c.	Apothecaries.	Assistant-Apothecaries.	Stewards.	Assistant-Stewards.	Hospital-Apprentices.	Native Doctors.	Compounders.	Dressers.	Dhoolie Bearers.	Dhoolies.	Camels and Trunks.	Hackeries.
3 Troops Horse Artillery,	4	15	1	4	2	1	5	19	3	11	383	56	14	10
1 Field Battery,	6	4	3	1	2	1	1	3	7	8	1,016	176	34	14
8 European Corps,	10	19	4	5	4	2	12	22	10	19	1,399	232	48	24
1 Detachment European Recruits,														
9 Native Corps.														
Present 23rd January, 1846	4	15	1	4	2	1	5	19	3	11	383	56	14	10
Marched to complete	6	4	3	1	2	1	1	3	7	8	1,016	176	34	14
Total	10	19	4	5	4	2	12	22	10	19	1,399	232	48	24

5th. Assistant-Surgeon A. M. Crozier, Medical Store Keeper, accompanied me to the field, with instruments, dressing, &c., &c. Assistant-Surgeon C. A. Elderton, and the apothecary and steward, remained in Loodianah, to attend on the sick and wounded, to arrange the hospital, and to have warm sago and wine, and other little comforts, prepared for the arrival of the wounded from the field of action.

As there was the prospect of an immediate attack by the Sikhs, surgical instruments were urgently required. There were several boxes of medical stores detained at the Post-office, in consequence of the communication with Ferozepore being unsafe. These were opened, and all the corps supplied with instruments on the 22nd and morning of the 23rd; and on the 24th all the medicines necessary for active service were supplied. An excellent substitute for sticking plaster was made from materials obtained in the bazaar. Assistant-Surgeon Batson, from whom the recipe was obtained, has observed that it sometimes caused irritation of the skin; but it produced no bad effects, and answered every good purpose in the Field Hospital. (d) Four hundred field tourniquets were made up and distributed. They are simple and very efficacious, consisting of four feet of double kite string (procured in the bazaar) rolled round a small piece of wood. The whole is about the size of a cheroot. It is applied by taking a double turn over the clothes, above the wound, and tying the string pretty firmly. The stick is then inserted under the free coil (*i.e.*, that without the knot), pulled up, and twisted. The end of the stick is then secured by tying it on the knot with the long ends of the string. Medical officers were recommended to supply these to the non-commissioned officers of their corps, and to show the proper method of applying them.

When the force advanced to Budewal on the 23rd all the sick were left in the General Field Hospital, and the severe cases of sickness originating in camp were sent back. The sick were removed to "the Palace," as the commanding-officer considered the artillery lines too exposed; but in these the arrangement of cots, and other preparations for the reception of a large increase of wounded, were ordered to be continued.

On the 23rd of January the Sikhs retired to Aliwal, and on the same day the British force advanced to Budewal, where it halted four days, and active measures were adopted to render every branch effective.

On the 25th the Shekawattee Brigade (consisting of about 1,200 men and 4 guns) joined from Jugraon, bringing up 800 dhoolie bearers, and most of the hospital establishments of the Ferozepore division, who had returned to Jugraon, on the 21st, when intercepted by the Sikhs. A few of the medicines were brought back, but none of the instruments, stores, or dhoolies.

(a) 4 guns of the 2nd Troop 3rd Brigade Horse Artillery—European.
1st Regiment Native Light Cavalry.
30th and 36th Regiment Native Infantry.
Sirmoor and Missecra Battalions—Goorkah.

(b) 1st and 3rd troops, 2nd brigade horse artillery—European.
No. 6 light field battery—Native.
H.M.'s 16th Lancers—European.
3rd Regiment of Native Cavalry.
H.M.'s 31st and 53rd Foot—European.
24th and 47th regiments Native Infantry.

(d) Assistant-Surgeon Batson's recipe for sticking plaster:—Rosin (Dhoonah) pounded, 1 pound; white wax (Moom), 2 ounces; gum kahurbah, pounded, 1 ounce; boiled linseed oil (Teesu ke tale), 2 pounds. Boil the oil, then add the wax, then the rosin and kahurbah by degrees,—when thoroughly boiled it is fit for use. When the rosin is not pure, a larger proportion of it must be used.

On the 26th, Brigadier Wheeler's Brigade (a) (consisting of about 2,500 men and four guns) joined from Durm Kote. The hospital establishments were incomplete, in consequence of the previous actions at Moodkee and Ferozeshah. They were supplied with instruments and medicines. They brought 80 dhoolies, and 60 men procured from Loodianah, forming, with those already mentioned, nearly 200 dhoolies available with the force, which was now increased to 12,800 men, with 32 guns.

On the 28th January, at dawn of a clear cool day, the troops got under arms, and advanced across a level cultivated country to the village of Puraine, which overlooked an extensive plain, on which the Sikh army was drawn up in front of their camp. Their flanks rested on the villages of Aliwal and Boondree; in their rear was a bend of the river Sutledge, and a dry nullah extended along their front, in which the guns were placed under cover. They were about a mile and a half distant. The British force formed on the plain, and advanced steadily, as on parade. The Sikh guns opened along their whole line; they were soon answered by ours; their left was turned, though resting on a bend of the river, and in two hours our troops were in their camp, and they were in full retreat across the river, where many perished.

The Field Hospital was established at Puraine in a field, close to a large well surrounded by trees. The dhoolies were drawn up in a regular line along the ridge, where their red colour gave them the appearance, from a distance, of a line of infantry. Two of the hospital tents were pitched when the action commenced; the rest, with the hospital establishments, ran back to Budewal. The absence of the guard of Soewars prevented this being checked. The dhoolies, with the wounded, soon began to arrive, and others were sent to the field under charge of the band boys and the orderlies who accompanied the wounded officers. When all the reserve dhoolies had been sent off, further requisites were supplied by removing the slightly wounded cases, and sending back their dhoolies; by this means some of them performed three trips. About half-past four, as few wounded had arrived for some time, I went down to the field of battle, and found twenty-five dhoolies under charge of a native doctor ready to supply any demands; but he reported that all the wounded had already been sent off. I crossed the field, joined the troops on the banks of the river, and received a similar report from the medical officers, who then accompanied me to the Field Hospital. The hospital establishments had now arrived, and sixteen tents and several pauls were pitched. All the Europeans and many of the natives were arranged in them, and operations continued by candle-light. Some of the less severely wounded remained in their dhoolies outside the tents during the night. They were well covered up, and the place was sheltered by trees, so that none of the wounded suffered from cold. On the following morning (the 29th), four or five straggling cases were found on the extreme left of the field and brought in, and a few of the cases, on consultation, were amputated (b).

In the afternoon of the 29th, all the Europeans and most of the natives were sent to the General Field Hospital in Loodianah, which was eleven miles distant. The severely wounded were sent in dhoolies, and the slightly wounded on elephants. The cases requiring it got a little sago and wine on starting, and on their arrival at Loodianah, which they reached in safety about eight o'clock.

The dhoolies returned in the afternoon of the 30th, and next morning the remainder of the wounded were sent in. Four medical officers and a small subordinate medical establishment accompanied the wounded to Loodianah. On the 1st February the force was ordered to Ferozepore, and as there was no prospect of another action before joining the head-quarters of the army of the Sutledge, I returned to Loodianah.

It had not been considered safe to occupy the Field Hospital in the artillery lines, as they were about a mile from the fort. Any danger was now removed, and as the men were much crowded in "the palace" and surrounding buildings, and in the fort, and as some cases of erysipelas had appeared, they were immediately removed to the Field Hospital. All the Europeans wounded were arranged, by the morning of the 3rd, in the following order:—

97 in the Artillery European Hospital, men belonging to the Artillery, H.M. 31st, 53rd Foot, and European Recruits; they were placed under charge of Assistant-Surgeons A. W. Crozier, medical store-keeper, and C. N. Fasson, H.M. 53rd Foot.

65 in the Artillery Native Hospital, men belonging to H.M. 16th Lancers, under charge of Assistant-Surgeon J. G. Kemp.

82 in the 73rd Native Infantry Hospital, and in the fort, men belonging to H.M. 50th Foot, under charge of Assistant-Surgeon N. Barlow, H.M. 50th Foot.

An hospital-apprentice was attached to each medical officer, and the slightly wounded assisted in dressing their comrades. There was considerable difficulty in procuring hospital-servants. As there were no European officers to receive charge of the men, an hospital-sergeant was appointed to each European Hospital. The men were very orderly. They were sent to join their corps as soon as they recovered, and were able to walk about.

There were 200 Natives wounded, and 305 sick, belonging to the different corps of the force, and to the depôts left at Loodianah. The wounded were arranged in the European Artillery Barrack, and the sick in two ranges of stables. They were placed under charge of Assistant-Surgeon C. A. Elderton, and eight native doctors (c). Surgeon Hart, and the medical officers of Brigadier Wheeler's Brigade, rendered great assistance on the 12th. Assistant-Surgeons J. Wood and H. N. Elton joined and received charge of a portion of the wounded Natives. A Havildar was appointed for their general superintendence, and a Naick to each corps. Lieutenant O. Cavanagh of the 4th Irregular Cavalry received charge of the Natives; but the benefit from his services was lost in a few days by his leaving to join his appointment in Calcutta. They were greatly inconvenienced from wanting money to purchase food. They were fed on sago (the usual hospital diet allowed for Natives), which is very nourishing, but not very savoury. Natives have to provide their own diet when in hospital. This is inconvenient on active service; and injurious in cantonments, as it removes from the surgeon's control one of the most important remedies in the treatment of diseases.

When Brigadier Wheeler's force advanced into the Punjaub, I accompanied it, with a Field Hospital establishment, consisting of six European tents, and twenty dhoolies. Similar arrangements were made as before Aliwal, and the elephants belonging to the siege-train were to be held in readiness to carry the wounded.

As opposition was anticipated when the force carried the Sutledge at Tulwundee on the 17th February, five medical officers joined me in the forenoon from the General Field Hospital. The force advanced on the 18th, and took possession of the fort Philore which fortunately had been evacuated by the Sikh garrison during the night. It is an old square, Badshahee Serai, fortified by two lines of walls, and numerous circular bastions, with a very deep puckah ditch. There were only eight guns found in the fort, and these were old and honey-combed.

As there was no further prospect of resistance, the five medical officers rejoined the Field Hospital at Loodianah, in the afternoon of the 18th, and I followed on the 19th with the Field Establishment. I was informed that its appearance produced a very favourable impression on the troops.

On the 15th February, 47 recovered men were ordered to rejoin their corps, *viâ* Ferozepore.

On the 20th a Medical Committee assembled, by orders from head quarters, and classified the European patients as follows:—

1st. Those likely soon to recover.

2nd. Those whose recovery would be protracted.

3rd. Those not likely to become fit for duty.

The following is an abstract of the Report, including 30 men belonging to the depôt of H. M. 50th Foot, who were never in the Field Hospital:—

CORPS.	1st Class.	2nd Class.	3rd Class.	Total.
Artillery	8	5	...	13
H. M. 3d Lt. Dragoons	1	...	...	1
H. M. 16th Lancers ...	18	16	14	48
H. M. 31st Foot	24	5	7	36
H. M. 50th Foot.....	69	31	6	106
H. M. 53d Foot	6	3	10	19
H. M. 62d Foot	2	...	3	5
Total	128	60	40	228

The detachment of convalescents, (in the 2nd class), left for Landour, on the 2nd March, under medical charge of Assistant-Surgeon C. H. Fasson. They arrived safely, on the 21st, and ultimately recovered. The detachment of invalids, (in the 3rd. class), left for Ferozepore on the 5th of March, under medical charge of Assistant-Surgeon J. Esdaile, M.D., and arrived safely on the 11th. They embarked in boats at Ferozepore, and went *viâ* Bombay to England. Ten men of the 2nd and twelve of the 3rd class were detained in the Field Hospital, as moving at that time would have been dangerous, owing to the state of their wounds. Five of these detained cases proved fatal, the remainder convalesced very satisfactorily.

These detachments were provided with a tent for every ten men. The severe cases had dhoolies, the others a covered hackerie for every three men. Each had a mattrass and pillow, on which he sat during the day, and slept at night. They were furnished with a complete set of hospital clothing and servants, and each detachment was accompanied by a baker and butcher. As the men were all *patients in Hospital*, and would receive the food and wine considered best for them, by the medical officer, I recommended that they should receive no money, during the march, except for the purchase of clothes and tobacco. This produced more real comfort and less drinking during the march, than is usual in similar detachments.

The men of the 1st class rejoined their corps as they passed near Loodianah; on the 9th, 23rd, and 30th March, and on the 31st three of the detained artillery-men were transferred to the Artillery Hospital, and four of the detained Lancers, (of the 3rd class) were transferred to the Hospital of H. M. 50th Foot. The other detained cases had rejoined their corps in passing.

In a similar manner 15 of the Native wounded were sent to Umballah to be invalided; 405 rejoined their corps, and 51 were transferred, on the 31st March, to the Station Depôt Hospital. Thus rose, progressed, and terminated, the General Field Hospital at Loodianah.

The gunshot wounds in the accompanying Table were chiefly from cannon or grape shot. The result will bear a favourable comparison with that of

(a) 1st Troop 1st Brigade Horse Artillery—European.
5th Regiment Native Light Cavalry.
Governor-General's Body Guard—Native.
Her Majesty's 50th Foot—European.
42nd and 48th Regiment Native Infantry.

(b) RETURN of KILLED and WOUNDED at the BATTLE of ALIWAL, on the 28th January, 1846, with those who died of their wounds up to the 1st July, 1846.

Strength, 12,800.	Officers.		Europeans.	Natives.	Total.
	European.	Native.			
Killed	4	3	72	72	151
Wounded	25	6	173	209	413
Died of Wounds	1	...	15	20	36

(c) These Native doctors were with the sick of the depôts, the severe cases of which were ordered into the Field Hospital, and about 400 convalescents discharged to duty. Each native doctor attended to the sick of his own corps, and to the wounded of another corps, making each charge about 50 men. There was an establishment of a dresser, bhestie, cook, and sweeper, with each native doctor.

similar wounds received in battles in Europe. The mortality amongst the Europeans wounded at Loodianah, was 10·16 per cent., and amongst the amputated 14·63 per cent., whilst, during the Peninsular war, the mortality amongst the wounded was 11·68 per cent., and amongst the amputated 33·85 per cent., as appears from various Tables in Mr. Guthrie's excellent Work on Gunshot Wounds. The ratio amongst the natives approaches more closely the continental mortality.

		Admissions.	Deaths.	Ratio per cent. of Deaths to Admissions.
Wounds.	In the Peninsular War, in 1813 and 1814	1,712	200	11·68
	In the Loodianah Field Hospital—Europeans	187	19	10·16
	Do. Do. Natives	200	22	11·00
Amputations.	In the Peninsular War, in 1813 and 1814	1,022	346	33·85
	In the Loodianah Field Hospital—Europeans	41	6	14·63
	Do. Do. Natives	31	11	35·49

In the Peninsula returns, nineteen cases of tetanus occurred, which all proved fatal. In the Loodianah returns, four cases of tetanus occurred amongst the Europeans, of which two recovered, and one case amongst the natives, which proved fatal.

It is generally supposed that the mortality from injuries is less in natives than in Europeans. In this Table, the mortality, particularly after amputation, is greatest amongst the natives. Natives bear severe injuries better, but loss of blood worse, than Europeans. The latter are more liable to inflammation and fever; but they rally better than the former, in whom, if there has been great loss of blood, or if extensive suppuration supervene, low hectic fever and diarrhœa very frequently appear, which are very difficult to overcome. In a native, an extensive flesh wound in the thigh would require the removal of the limb, or the limb might be saved with a wound in the knee-joint; when the decision would be reversed were the sufferer an European.

The following general rules were confirmed by the cases that occurred at Aliwal:—

1st. When a shot passes through the thigh-bone or knee-joint, or both bones of the leg or fore-arm, the limb ought to be amputated as soon as the patient rallies from the shock. Delay only prolongs the suffering of the patient, and the danger from hæmorrhage. In some of the cases, where an attempt was made to save the limb, inflammation supervened, which proved fatal; and in others, where secondary amputation was performed, equally severe constitutional disturbance followed, and the ultimate recovery was more protracted than in primary amputations.

2nd. The *circular* is preferable to the *flap* operation. The circular operation is more troublesome, and requires a few seconds more time for the removal of the limb; but there is less oozing from the stump, the vessels are more easily secured, and the whole operation is completed in less time than when the flap operation is performed. Both formed good stumps and healed readily.

The nature of the wound modified the operation in some cases. There were two cases in which cannon shot passed through the thigh bone near the trochanter, in one case carrying away the outside of the thigh, in the other the inside. In these cases a flap was formed from the sound side of the thigh, and the former case recovered. A sepoy had the top of his right shoulder, including the deltoid muscle, acromion process, and head of the humerus carried off by a cannon ball. The vessels and nerves, on the inside of the arm, were uninjured. I removed the fragments of bone, and cut off the lacerated soft parts, and formed a flap from the flesh of the arm down to the elbow-joint. It covered the wound very satisfactorily, and he recovered.

3rd. All the bleeding arteries ought to be secured, and the stump closed and dressed without delay.

The feeling that the operation is over, that he has done with "*the Doctor and his knives*," is more soothing to the mind of the patient, than having the stump open for five or six hours, with an undefined idea of danger, and something more to be suffered before he can sleep. Besides, on the field of battle, there are neither time nor attendants to watch lest the oozing from the stump should prove fatal. There was no hæmorrhage from any of my cases during their removal next day to Loodianah;—out of 41 amputations on Europeans 35 recovered; one died from other wounds in the body, one from small-pox, one from delirium tremens, and three from the operations and the previous injury.

The following cases are interesting, and the result of the treatment practically important:—

Secondary hæmorrhage.—Case 1. A musket-ball entered the mouth of a private of H.M. 16th Lancers, broke the lower jaw, and was cut out from the same side of the neck. Seven days after very profuse hæmorrhage from the mouth suddenly came on. He was collapsed when I saw him, but there was still considerable oozing of blood. I cut down over the centre of the wound, but found no large vessel bleeding, though the carotid lay bare under my finger. After removing several spiculæ of bone, and bathing the wound with cold water, the bleeding ceased. The wound was filled with dry cotton and cold water applied, and the bleeding never returned. He was very low for two days, but he is now quite well, and can use the jaw.

Case 2.—A trooper of the 1st Native Light Cavalry was shot through the neck. A musket-ball entered opposite the thyroid gland, passed under the sterno-mastoid muscle, and out at the back of the neck. Four weeks after the action, when the wound had nearly healed, he was suddenly seized with profuse hæmorrhage from both orifices, and the whole neck was distended with blood. I made a free incision along the inner edge of the sterno-mastoid muscle, and removed all the coagula. There was considerable oozing of blood, which ceased on the application of cold water. He was treated like the last case, and recovered without a return of hæmorrhage.

Tetanus.—Case 3.—A private of H.M. 31st Foot, whose right leg and a part of left foot had been carried off by cannon balls, became feverish on the fifth day, and the stumps assumed an angry sloughing appearance, and lock-jaw supervened. The spasms became general and very intense; calomel and opium were given, and carrot poultices were applied to the wounds, which gradually became healthy, and the tetanic symptoms slowly subsided, and at last disappeared. The stumps were nearly healed when he rejoined his corps on the 9th March.

There were only three more cases of tetanus amongst the Europeans. They occurred in the hospital occupied by the men of H.M. 50th Foot, when cold-water dressing was chiefly employed for the wounds. One of these cases had a grape-shot through the centre of the thigh; tetanus appeared on the fifth day, and rapidly increased till he died.

Case 4.—Another private had a musket-wound on the upper part of the left leg, grazing the tibia. Three weeks after the action, when the wound looked healthy and nearly healed, tetanus came on. The wound was freely laid open, and opiates and carrot poultices applied, and calomel and opium given internally. There were several long intermissions in the spasms, but they returned severely, and ultimately proved fatal.

Case 5.—Another private in the same corps had a musket-ball lodged in the middle of the shaft of the right tibia, having entered on the fibular side. The wound looked healthy, but symptoms of tetanus appeared three weeks after the action. The foot was spasmodically contracted, and violent spasms occasionally extended up the thigh. I made a free crucial incision through the wound to the tibia, and removed some spiculæ of bone. A carrot poultice was applied, and he got opiates for two or three days. The spasms rapidly disappeared. The ball was removed at Landour in May, and the wound healed.

There was only one case of tetanus amongst the natives. He had a grape-shot through the centre of the thigh. Tetanus came on three weeks after the action, and proved fatal.

Dr. Esdaile tried mesmerism on cases Nos. 3 and 4, (as well as on several natives,) as an auxiliary to the other treatment, but without any perceptible effect. It was patiently persevered with, as it caused no injurious effect, and did not interfere with the other treatment. It diverted the attention of the patients, but I saw no physical symptoms induced by the manipulations of the mesmerist, and the patients said they felt nothing peculiar.

Case 6th.—The popular fallacy regarding the power of the wind of a cannon ball, was shown in the case of an officer of the 48th Regiment, Native Infantry, who saw a cannon-ball pass between his left arm and side. It carried off part of the sleeve of his coat and shirt, leaving a blue mark on the centre of his arm. It also tore off part of the coat and shirt from his side, and broke two of his ribs. There was an emphysematous tumor at this place, which, on coughing, puffed out like a bladder when he arrived at the Field Hospital. He was very low, but slowly rallied under the use of wine and water. The inflammation was afterwards kept down by depletion, bandages were applied, and he is now perfectly recovered.

Two of the horse artillery men had their sword belts cut from their sides by cannon balls, leaving bruised wounds, from which they recovered. As in these instances the balls must have been in contact with and bruised these parts, by their mechanical presence and impetus, and as there was no other effect, (except the bruise,) it may be inferred there was no other cause capable of producing injury.

Erysipelas.—There were a few cases of erysipelas, with an irritable sloughing state of the wounds, showing a tendency to hospital gangrene; but they yielded readily to freely puncturing the inflamed surface, smearing it with mercurial ointment, and applying carrot poultices to the wounds. I have frequently found this last remedy very beneficial for sloughing sores. Great care was taken to isolate these cases.

There were four Europeans brought in from Budewal on the evening of the 23rd Jan., which had been wounded on the morning of the 21st by cannon-shot, two of them through the knee, and one through the thigh, and the other through the leg. Their wounds had been dressed by the Sikhs, by being rolled up in numerous folds of cotton cloth soaked in ghee or oil, with pieces of bamboo for a splint, surrounding the limb. They had lain in the open air, and occasionally got a little bread and water. They were very low and exhausted when they arrived at Loodianah; but after getting a little sago and wine two of them rallied, and their limbs were removed. One of them recovered, and the stump of the other was nearly healed when he caught small pox and died. Another also rallied, but he had almost lost the power of moving his arms and legs from a blow on the back of the neck; he died two days after. The remaining man never rallied—he died in a few hours. A sepoy was brought in at the same time, shot through the leg, which was amputated, but he died.

The medical department has greater difficulties to contend against, on active service in India, than in Europe. Independently of the difference of climate, in Europe, the churches, the public and private buildings, the food, cooking utensils, &c., of the inhabitants in the vicinity of the field of battle, are available for the wounded; whilst, in India, the temples would be polluted, and the huts are uninhabitable by Europeans, and the Natives generally will neither dress our food nor lend their cooking vessels. A Hindoo sepoy refused to give an officer a drop of water out of his lotah on the field at Ferozeshah. Our own cantonments were the only buildings available for hospitals on the line of the late campaign.

During war, the sick and wounded, besides proving an incumbrance to the army, would be injured by being constantly moved. This renders their removal from the Regimental Hospitals necessary, and implies the existence of a General Medical Staff

The deficiency in this branch of the service was severely felt during the late campaign, particularly when the force moved after an action. The Regimental Medical Staff was incomplete, in many instances. In the 13 regular regiments at the battle of Aliwal, there was a deficiency of 9 surgeons and 9 assistant-surgeons, whilst the General Medical Staff consisted of one Field-Surgeon and two Assistant-Surgeons. The deficiency of medical officers was more severely felt at Ferozepore, when the proportion of wounded was greater.

The system of intermediate grades, necessary in the military, would prove equally beneficial in the medical department. The superintending-surgeon of the army of the Sutledge, (amounting to nearly 50,000 men), had no intermediate grades, through whom he could communicate instructions or receive reports from the regimental surgeons. The following General Medical Staff appears efficient and not superabundant, for an army taking the field. :— 1 Superintending Surgeon at Head Quarters; 1 Staff-Surgeon to the Forces, to each division; 1 Field-Surgeon (under whom the regimental surgeons would act), with a medical store-keeper to each brigade; 1 Assistant-Surgeon, 1 Native Doctor, and 1 Dresser attached to each corps; and 1 Assistant-Apothecary and 1 Assistant-Steward to each European corps, to be available for the General Staff.

Tents (carried on elephants) and dhoolies for five per cent. of the force, and one per cent. of stretchers, with the hospital establishment of an European corps, would form the establishment of the field-surgeon.

There are men in the ranks of most mounted corps in this country who, in England, were medical students, apothecaries, or medical practitioners, whose services may be rendered useful on an emergency. When I removed the apothecary from my troop of horse artillery to the Field Hospital, one of the gunners, who had been an apothecary in England supplied his place.

The following was proposed by one of the most experienced medical officers of the French armies, for an army of 100,000 men :—

"50 physicians, 50 staff-surgeons, 75 assistant-staff-surgeons, 400 mates, 50 principal apothecaries, 75 assistants, and 200 dispensers, with 50 stewards, 200 clerks, 400 hospital upper servants, and 1,200 orderlies, exclusive of heads of the department, regimental medical officers, and commissariat de guerre. This certainly appears to be a preposterous calculation; but it was made by an officer of upwards of twenty-three years' field experience."—Millingen, p. 253.

What I have proposed would have answered for the emergencies of the late campaign, and these are not likely to be exceeded on any future occasion. It would cause some expense; but a deficiency of medical attendance entails much misery, and the loss of many valuable lives.

Landour, 1st July, 1846.

RETURN of the EUROPEAN and NATIVE SICK and WOUNDED in the LOODIANAH FIELD HOSPITAL, from the 22nd January to the 1st April, 1846.

		Officers.		Europeans.										Natives.						
		Admissions.	Deaths.	Admissions.	Deaths.	Rejoined, 23rd Feb.	Landour, 2nd March.	Invalided, 5th March.	Rejoined, 9th March.	Rejoined, 21st and 30th March.	Transferred, 31st March.	Amputated.	Deaths after Amputation.	Admissions.	Deaths.	Invalided.	Rejoined.	Transferred, 1st April.	Amputated.	Deaths after Amputation.
Gunshot	Head	...	...	13	2	1	6	...	1	3	...	...	...	10	...	...	9	1	...	...
	Trunk...	1	1	22	5	6	3	1	5	1	1	...	...	21	3	...	15	3	...	...
	Superior extremities..	2	...	67	1	16	10	17	9	11	3	28	2a	44	2	7	33	2	13	1
	Inferior extremities..	8	...	61	10	7	5	7	7	24	1	12	4b	94	13	8	58	16	18	10a
Incised and Punctures.	Head	...	...	4	...	1	...	...	...	3	...	...	...	4	...	...	4	...	...	...
	Trunk...	1	...	4	1	1	...	2	...	...	...	...	...	5	...	...	5	...	...	...
	Superior extremities	...	...	12	...	6	2	...	2	1	1	1	...	10	2	...	7	1	...	...
	Inferior extremities..	...	...	1	...	...	...	...	1	...	...	...	...	2	...	...	2	...	...	...
	Burns...	...	...	3	...	1	...	...	2	...	...	...	...	10	3	...	6	1	...	...
	Total Wounds ...	12	1	187	19	39	26	25	29	43	6	41	6	209	22	15	139	24	31	11
Diseases	Fevers	...	...	13	...	...	10	...	...	3	...	...	...	163	6	...	153	4	...	...
	Liver	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dysentery ...	...	...	11	1	...	7	...	...	3	...	...	...	35	5	...	28	2	...	...
	Other diseases ...	...	...	48	2	3	6	2	19	9	1	..	...	107	1	...	85	21	...	...
	Total Diseases ...	...	...	73	3	3	24	3	19	15	1	...	...	305	12	...	266	27	...	...
	Grand Total ...	12	1	260	22	42	50	28	48	58	7	41	6	505	34	15	405	51	31	11

a One died from wounds in the body, and the other from *delirium tremens*.

b One died from small pox.

Four cases of tetanus occurred amongst the Europeans, of whom two recovered. One case occurred amongst the natives which proved fatal.

JOHN MURRAY, M.D., Field-Surgeon, Loodianah.

GLOSSARY.

Badshahee serai—Royal palace.
Bheestie—Water-carrier.
Hackeries—Bullock-cart.
Havildar—Native sergeant.
Naick—Native corporal.
Puckah—Brick, or stone.
Resais—Quilts, wadded with cotton.
Sowars—Irregular cavalry.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

ACADEMY OF MEDICINE.

ANNUAL MEETING—DISTRIBUTION OF PRIZES.

M. Royer Collard, in the Chair.

After an address by the Chairman, the Annual Secretary announced that the Academy had not received any memoirs worthy of prizes,—but that the following encouragements had been awarded :—

Prize of the Academy.—Subject: The use of Emetics in Inflammatory Disease, £80,—an encouragement of £32 to Dr. L. D. Crozant.

Civrieux Prize.—Subject: Suicide. No prize was awarded, but an encouragement of £24 to Dr. A. Chéreau;—of £12 to Dr. L. Bertrand;—Dr. E. Robertet, and Dr. E. Lisle. Honourable mention was made of two other competitors, viz.: Dr. Rissot and Dr. Letertre Vallier.

The subjects for the prizes to be distributed in 1850 were then announced, and the Perpetual Secretary, Dr. Dubois, read the panegyric of Broussais, and the meeting adjourned at 5 o'clock.

HISTORICAL ACCOUNT OF THE DISEASE AND DEATH OF IBRAHIM PACHA.

BY DR. PRUS.—(Union Méd.)

For the last fifteen years Ibrahim Pacha had suffered from bronchitis. Towards the middle of July of the present year, inflammation of the right lung was observed, and removed by phlebotomy and the application of leeches. On the 30th of July the patient had, in a great measure, recovered, and left Alexandria for Rhodes. Exposure to cold again occasioned the reappearance of viscid and rusty sputa, and venesection was a second time resorted to. A few days afterwards, during a fit of laughter, abundant hæmoptysis took place,—about six ounces of blood were thus rejected. The lancet was a third time put in requisition, and although the illustrious patient suffered less, still one day did not elapse without the expectoration of blood,—the pulse was not feverish. Such was the condition of Ibrahim when he went to Constantinople to receive the vice-royalty of Egypt. The fatigues of diplomatic intercourse which he underwent whilst in the capital, induced him to shorten his residence there as much as possible; but during his journey homewards the weakness and emaciation rapidly progressed. On his return, he consulted Drs. Clot, Gestani, Diamanti, Mustapha Effendi, and Prus, who recognised the existence of a tubercular excavation under the left clavicle, and of an œdematous condition of the posterior portion of the pulmonary organs. On examination of the heart, a distinct souffle was detected at the apex of the viscus, not propagated to the arch of the aorta; this morbid sound was referred to ossification of the bicuspid valves, a circumstance which readily accounted for the co-existence of pulmonary œdema. The pulse was at 84. The spleen was slightly enlarged. A violent pain occupied the forehead, and vision was even slightly impaired. The headache and disturbance of sight, after a well-marked remission, usually appeared at midnight, and were removed by sulphate of quinine, but this improvement lasted only a short time. The expectoration increased. The nocturnal perspiration became profuse, and the respiration more frequent. But the intellectual faculties were unchanged to the last, and the patient expired on the 10th of November, fulfilling the prophecy of Mehemet Ali, who had said that his son would die before himself, and of consumption, like his mother.

TREATMENT OF UTERINE CATARRH.

By E. Strohl, Prof. Ag. at the Faculty of Strasbourg.

Mr. Strohl recommends against this malady uterine injections, which were some years since brought into notice by Dr. Robert and Vidal de Cassis, but almost entirely abandoned since that period, from the fear of occasioning peritonitis, by the passage of the injection into the abdomen through the fallopian tubes. In order to obviate this danger, Mr. Strohl recommends the injection to be made very slowly, and through a long caoutchouc catheter introduced about three lines into the os uteri. This instrument should not fill up completely the orifice of the womb, in order that the injected fluid may be permitted to return immediately; thus exercising no pressure against the apertures of the fallopian ducts. The liquid recommended by the author is the liq. plumbi acetatis, or a solution of ʒi. of iodide of iron in ʒ xij. of distilled water. The injection is not painful, and rapidly modifies the nature of the uterine discharge. In twenty-nine cases, Mr. Strohl states that the average duration of the treatment was fourteen days. In three instances only, some unimportant hysterical symptoms were observed. (Revue Méd. Chir.)

TREATMENT OF SCABIES BY LOTIONS WITH LIME WATER.

ʒ xij. of lime dissolved in six pints of water, constitute a solution which is in common use amongst the working classes of Lyons, for the treatment of the itch; the epidermis desquamates, and the disease is radically cured. (Journal de Méd. de Lyon.)

TREATMENT OF NEURALGIA BY ESSENTIAL OIL OF TURPENTINE.

Dr. Leriche, of Lyons (*ibid*).

Dr. Leriche brings forward a series of twenty-one

cases of neuralgia successfully treated by the exhibition of small doses of essence of turpentine. The quantity daily administered to the patients did not exceed ℈ j.

PARACENTESIS ABDOMINIS.—INJURY OF THE SPLEEN.

A child, aged 12 years, was suffering for 18 months from rebellious intermittent fever. The spleen was considerably enlarged, and abundant effusion of serum had taken place in the peritoneum. Paracentésis was determined upon, and the trocar was introduced in the usual region, *i. e.*, at equal distances from the umbilicus, and the left anterior superior spine of the ilium. The spleen was wounded by the instrument, and about one ounce and a half of florid blood escaped from the canula. The result of this accident was peritonitis and death.—(Revue Méd. Chir.) We have reported this unfortunate case merely to point out once more the necessity for caution in the performance of this operation: had the operator endeavoured to ascertain by percussion the size and situation of the spleen previously to introducing the trocar, he would doubtless have avoided the misfortune which deprived the patient of life. We will also remark, that the blood which escaped from the spleen was scarlet,—a circumstance which is not in accordance with the opinion generally entertained since Vesalius, of the dark colour of the blood contained in the spleen.—D. M'Carthy, M.D., Physician to the British Embassy.

IRELAND.

[From our Dublin Correspondent.]

DUBLIN PATHOLOGICAL SOCIETY.

The first meeting of the above Society for this season was held on Saturday the 9th instant, in the Anatomical Theatre of Trinity College. The chair was taken by R. Adams, Esq., V.P. It may be necessary to mention, that the rules of this Society are peculiar in many respects. No discussion is permitted at the public meetings. The exhibitor of a specimen gives a short account of the history of the case, and points out whatever he considers to be remarkable or characteristic in the morbid appearances. The transactions of the Society are published; but before any communication is permitted to appear in them, it is subjected to a strict scrutiny by the Council. On this account the descriptions in the published transactions are often very dry and formal, but for the same reason they are authentic and accurate. Students are admissible to the meetings; and this, indeed, constitutes one of the most advantageous features of the School of Dublin, for the opportunities which they in this manner possess of acquiring a knowledge of morbid anatomy are very great. On the present occasion some interesting specimens were exhibited, of which I send you a Report.

AREOLAR CANCER OF THE TESTICLE.

A man of about forty years of age came under the care of Mr. Hamilton in the Richmond Hospital for swelled testicle. He first perceived the enlargement about eleven months ago. It was long since he had suffered from any venereal affection, so that Mr. Hamilton thought it unlikely to have been syphilitic sarcoma, and was inclined to consider it chronic sarcoma. It was at the time of being first examined about twice the size of an ordinary testicle, hard, with the epididymis particularly enlarged. He was put under the influence of mercury, and the disease appeared to improve for some time; but at length he was seized with acute pain, and an abscess seemed to be forming. In a few days it was thought that fluctuation could be detected, and a small canula and needle were introduced. No pus flowed, however, and it being thought that something might have obstructed the canula, a puncture with a lancet was made. This was not more successful, but Mr. Hamilton found that a grumous matter had been brought away on the point of the lancet, which upon examination he was satisfied was of a malignant nature. He now told the man that it would be necessary to remove the testicle, and at the time he appeared to be willing to submit to the operation. Shortly afterwards he was unfortunately attacked with influenza, and his health becoming much broken, Mr. Hamilton advised him to go, for a short time, to the country to recruit, and then return to the hospital. Probably through reluctance to undergo the operation, he remained away for several months, and when he again presented himself the disease had considerably advanced. His countenance now had acquired that sallow tinge so often seen in cases of malignant disease: the size of the testicle had greatly increased; it had an uneven, unequal feel, and it was manifest that some fluid was contained in the tunica vaginalis. The operation was performed in the usual way, the liquid referred to having been previously drawn by a canula. The epididymis was found of considerable size, and a section of the testicle having been made, it was seen to be a good specimen of the areolar cancer of Cruveilhier. The glandular structure of the testicle itself did not seem to be much altered; but it was traversed in every direction by firm bands of fibres, which, crossing each other, left spaces filled with nodules of a greyish yellow substance. The consistence of the testicle was very firm, but near the epididymis it became soft and medullary. The tunica vaginalis was vascular, with some adhesions. Mr. Hamilton remarked, in respect to the history of this case, on the extreme difficulty of diagnosing cancer of the testicle in its early stages. When a testicle becomes very large, very hard, knobbed, and the countenance the peculiar sallow tinge, or when the organ, having acquired the size of a small loaf, is found in whole, or in parts, to have a soft or semi-elastic consistence, and large blue veins are seen traversing the scrotum, it may be easy enough to tell that one or another variety of malignant disease is present. But at the period of the disease at which he first saw the case under consideration, he is not aware of any means whereby it can be distinguished from ordinary sarcoma.

CONDITION OF THE INTESTINE IN OLD HERNIÆ.

An old woman came into St. Vincent's Hospital, labouring under the symptoms of strangulation of a crural hernia. According to her own statement she had rupture for many years, and had on several occasions symptoms of strangulation, which always became relieved by an active purgative. Her favourite remedy, castor-oil, had, however, on the last supervention of those symptoms, failed to relieve her. She had an egg-shaped tumor in the usual situation, prostration, obstinate constipation, stercoraceous vomiting, &c. The person who first saw her on her arrival at the hospital, states, that upon perceiving the symptoms, he was about proceeding to examine the tumor, when, upon placing his hand on it, it suddenly sank, without any, or, at most, very trifling pressure on his part. Her spirits instantly rose, and when Dr. O'Ferrall, who described the case, first saw her, about seven hours after her admission, she was quite sanguine about being soon perfectly well. But it was evident to him that the woman was dying. Her bowels had been freely purged by an injection; yet although the stercoraceous vomiting had ceased, a gurgling regurgitation of a kind of mucous matter was constantly taking place. She acknowledged that she had considerable tenderness all over the abdomen. She was nearly pulseless. In short, it was manifest that she was suffering under the combined influence of a low form of peritonitis, and of profound collapse. She died shortly afterwards. Dr. O'Ferrall brought the case forward, chiefly, to show the results of repeated, easily reduced, strangulations. At the autopsy it was manifest, from the great size of the ring, the reason why the protruded intestines had always been so easily reduced. The sac was thick and of a leathery consistence. The intestine in the neighbourhood was found in loops, the adjacent peritoneal surfaces being bound by false membranes as strong as those often found binding the lobes of a lung in cases of ancient pleurisy. The angles thus formed in the intestinal passage were necessarily very acute, and must have seriously impeded the passage of fæcal matter; and this opinion was strengthened by the dilated condition of the intestine before the place where it was thus looped, and its contracted state in the after part of its course. The walls of the gut were likewise thickened in zones at a short distance from each other for some inches. The peritoneum, generally, was coloured, and had adhering to it flakes of soft pultaceous lymph. Dr. O'Ferrall thought the case interesting, as it explained how the recurrence of trifling, easily-reduced strangulations, by the local inflammations they produce, predispose to ileus, and how the latter disease, so induced, may kill, after the reduction of the strangulation.

MITRAL VALVE DISEASE, AND SPLENEFICATION OF LUNG.

Dr. Maine brought before the attention of the Society the heart of a gentleman of 37 years of age, who had been an adjutant in a Cavalry Regiment, and who had been seized with the first symptoms of the disease which caused his death, while speaking to his commanding officer on parade. These symptoms were dyspnœa and palpitation so severe, that he was obliged to retire to his room, and send for the surgeon of the regiment. From that period he became subject to fits of palpitation and dyspnœa upon the slightest exertion; yet, for a considerable time, his medical attendants could not decide as to the organic nature of his disease, but were inclined to regard it as simply functional. He came to Dublin, and consulted some of our leading men, who declared it to be decidedly organic, and recommended him to leave the army, and live quietly, as the only chance of prolonging his existence. He accordingly sold out, and lived for several years, still subject to dyspnœa and palpitation upon exertion until last August, when he became attacked with chest symptoms, which made him imagine he had got consumption. It was upon this occasion that Dr. Mayne first saw him: and, upon examination, the first thing that attracted his attention was his pulse, which he found to be habitually 130. He imagined that this might have proceeded from some feverish exacerbation; but the patient assured him, that every physician he had previously consulted had remarked the same thing. The lower part of the left lung was dull on percussion, and a kind of crepitus, larger and finer than that of pneumonia was perceptible in the same situation. There was dulness also in the region of the heart, extending more towards the left side than to the sternum; the rhythm was natural, but a systolic bruit was audible at the apex. This bruit became much less perceptible towards the base of the heart, and disappeared along the sternum, but down the left side of the spine posteriorly it was more distinct than even in the region of the heart. The jugular vein pulsated in a remarkable manner. When Dr. Maine first saw the case, he was induced to suspect, from the dullness in the lower part of the left lung and the loud bruit, louder than that at the apex of the heart in the same locality, that probably there was not only disease of the mitral valve but also an aneurism of the descending aorta. Dr. Law, who saw the case along with him, however, was satisfied that there was not any aneurism, and the subsequent progress of the case led Dr. Mayne to the same opinion. Both these physicians agreed that treatment should be principally directed to the low inflammatory action that seemed to be going on in the lower part of the left lung. Whatever means the strength of the patient would admit were accordingly employed to combat this lesion. His mouth was made sore, and repeated blisters were applied, but all without effect, and he at length sank. At the autopsy, the lower part of the lef lung was found of a very dark colour, resembling spleen, exuding bloody mucus when squeezed. The heart was enlarged, particularly on the right side, the right ventricle forming the apex. The auricles and right ventricle were much dilated. The right auriculo-ventricular opening was large enough to permit three fingers easily to be passed through it, and the mitral valve, which was thickened, was studded along its margin by large vegetations. Some of the chordæ tendineæ were broken, and

from the care that was taken in opening the heart, it was manifest that this was not a *post-mortem* accident. Dr. Mayne said, that what principally attracted his attention in this case was, the difference of symptoms which it offered to those present in crescentic narrowing of the left auriculo-ventricular valve, the disease described for the first time by Mr. Adams. In this case, there never was any œdema of the extremities either upper or lower; there was no hæmoptysis; no head symptoms. It was on these accounts he thought it worth while bringing before the notice of the Society.

ANOMALOUS TUMOR OF THE NECK.

Mr. Hutton showed a tumour which he had removed from the neck of a man aged 35. It was very slow in growth, about the size of a turkey's egg, and situated just below the jaw-bone towards the left side. It was covered merely by the platysma and fascia, but the man said he was sure it had a deep root. It was easily removed. A crucial incision, consisting of a horizontal cut, along its inferior margin, and another perpendicular to the former, carried over the body of the tumor through the parts external to it, displayed upon being reflected the cyst in which it was contained. This cyst consisted of loose cellular tissue, so easily torn, that, with very slight effort, the tumor was turned out. One or two vessels bled so slightly that they did not require to be tied. The finger carried to the bottom of the wound could nearly penetrate to the spine, and could easily feel the pulsation of the carotid. Mr. Hutton remarked the difficulty of deciding as to the nature of this tumor. Mr. Liston has described similar tumors in his work on surgery. He (Mr. Hutton) was inclined to regard it, although resembling carcinoma in appearance, and although nucleated cells could be detected in it, as not of an actually malignant character, and he augured favourably of the case.

VESICULAR MOLE.

Dr. Montgomery had exhibited to the Society, about two years ago, a mole having hydatids in it. This was to be considered as pathologically distinct from the bunches of hydatids sometimes discharged from the uterus; for in that case the substance shown was a true mole, which had a few hydatids distributed through its structure. The specimen he brought forward on the present occasion was of a similar nature, and resembled the former case in a particular to which he would wish to draw the attention of the Society. The case he had formerly brought before them was one in which there was the positive evidence, that the mole had remained in the uterus for a period of ten months. He had not the same positive evidence on the present occasion; but the presumption was very strong, that the mole which he now exhibited must have remained in the womb during twelve months. The case was this:—A lady came to him, about a year ago, complaining of pain in her side. She had ceased to menstruate in October, and had, when he saw her, all the symptoms of early pregnancy as strongly marked as they usually are at that period. She continued in the same state until the 14th of February in the present year, when she got a sudden and profuse discharge of a fluid apparently menstrual. From that time all the symptoms of pregnancy ceased; but the size of the uterus remained undiminished. After a time she began to suffer from a discharge similar to size, interspersed with flakes, which he could best compare to shreds of parchment. Upon examination, he detected several tumors about the size of peas clustered about the orifice of the uterus. These he incised, and found them to contain, internally, a matter of a sizy consistence. He touched the part from which he had removed them with nitrate of silver, and it cicatrized healthily, but the unnatural discharge from the womb still continued. On the 20th of November, this lady was seized with labour-pains, and after sufferings severer than he recollected to have seen either in child-birth or abortion, she was delivered of the mole which he now showed to the Society. She has since done well, but the discharge still continues, and it is Dr. Montgomery's opinion that the mucous membrane lining the uterus is in a diseased condition.

ROYAL DUBLIN SOCIETY.

DISCOVERY OF NEW PLANETS.

The first sectional scientific meeting of this Society took place on the evening of the 8th inst.; Mr. Mackay, the author of the "Flora Hibernica," was moved to the chair. An interesting account was given by Professor Harvey, of the discovery of some new additions to the Irish Flora, the Erica Ciliaris, the Saxifraga Andrewsii, and the Phylandrium Bicolor. The first of these plants was discovered by Mr. Bergen, under curious circumstances. Shortly after the Erica Mackaiana, so named in honour of the Chairman by Sir W. J. Hooker, had been recognized by botanists as a distinct species, Dr. Harvey and some friends went down to the part of Connemara, where it had been discovered, to look for specimens. They found plenty of it, but did not observe any other species, except the ordinary heaths of the country. A couple of months afterwards, Mr. Bergen, accompanied by Mr. Clibburn and Mr. Jennings, went there for the same purpose; when Mr. Bergen being (unfortunately as he supposed) attacked with the gout, was obliged to remain on the car, while the other gentlemen set out on an exploring expedition across the bogs. Tired with waiting for them, and the gout getting better, Mr. Bergen at last got off the car, and hobbled to the ditch on the road side, when he saw a fine bunch of heath, which he pulled; and soon after the other gentlemen returned, and all parties went on to Roundstone. There they met Mr. M'Calla, the discoverer of the Erica Mackaiana, who as soon as he saw the bunch of heath in Mr. Bergen's possession, instantly recognized it as a species new to Ireland. The second addition to our Flora, and indeed to botany, was discovered under circumstances equally remarkable. Mr. Andrews, the secretary of the Dublin Natural History Society, being in Kerry some years ago, collected a number of plants not at the time in flower, and whose leaves he did not recognise. Amongst these was one very like a daisy; and when he returned home he planted this along with the others in his garden. Years passed over, and nothing remarkable was observed; some of his imported plants died, and others throve and flourished, but until the last year the plant already alluded to did not show any disposition to inflorescence. Then, however, it did so, and proved to be a saxifrage. Mr. Andrews was himself inclined to consider it a new species, but he thought it better to submit it to Professor Harvey, who decided upon its being a species, not only new to Ireland, but to botany. The shape of the leaf is most peculiar and distinct from all the rest of the genus, except the saxifraga pyramidalis found in Portugal. The calyx, also, is adnate to the germ, with the lepals patent, a character only found besides in saxifraga nivalis. The third new discovery mentioned by Professor Harvey was that of the phylandrium bicolor, a plant of the South of Europe, found wild in the neighbourhood of Derrynane, by Mr. Thaddeus O'Mahony, tutor to the sons of Maurice O'Connell, Esq.

ON THE SWIMMING BLADDER OF FISHES.

After the conclusion of Professor Harvey's address, a very interesting paper was read by Dr. John Barker, on the swimming bladder of fishes. He described the various theories which had been from time to time proposed to explain the use of these organs, and demonstrated the fallacies of each. For example, he showed that the doctrine that they were for the purpose of varying the specific gravity of the fish, so as to enable it to swim at different depths according to will, was not tenable; and he proved that the experiment usually employed at physiological lectures to demonstrate this supposed function was fallacious. This experiment consists in causing to sink a little glass balloon containing air, placed in a jar of water, by compressing the air contained in the upper part of the jar, when the balloon will again rise upon discontinuing the pressure. But Dr. Barker demonstrated, that if the balloon be accurately balanced so as barely to reach the surface, it will, upon compressing the air, sink; but if the jar be a deep one, it will not rise again, for the pressure of the water will keep the air contained in it in a compressed state. In Dr. Barker's opinion, the air-bladder situated just before the spinal column serves to lower the centre of gravity of the fish, on the very opposite principle upon which ballast is used in ships.

DRACŒNA-DRACO.

Mr. Baines then described a very curious experiment which he has lately performed on a dracœna-draco, in one of the conservatories of the College botanical garden. This endogenous plant was growing too high for the conservatory, and the problem was, to save the life of the dracœna without raising the roof of the house. Mr. Baines was enabled to solve this problem in the following manner:—He had the stem of the dracœna sawn across, a little at a time, taking care to dry well each fresh cut, and cover it with lime. After a time he would saw a little further, and again dry and dust with lime, until at length the stem was completely cut through. He then removed the lower portion of the stem, together with the roots, and the upper part of the stem having been from the first firmly supported, remained together with its foliage suspended in the air, until at length it threw out roots from between the thickened portion resembling bark, and the adjacent tissues. When these had acquired a sufficient development, he had the stem gently lowered into a pit in the soil prepared for it, and waiting for some time to observe whether any of the new roots were injured, he finally surrounded with sand and compost. The success of the experiment, which has been complete, is interesting both in a physiological and practical point of view.

SCOTLAND.

EDINBURGH.

CHOLERA.

Cholera, that all engrossing subject of interest here, which broke out on the 4th of October, has continued gradually to make progress, and to extend its ravages to various localities, besides those in which it originally made its appearance; showing a decided predilection for such as were dirty, or over-crowded and deficient in ventilation. In this respect, however, it has not always adhered to what seems its general law, for the cases which have occurred in Loanhead originated in the cleanest and most airy portion of the village.

To meet the exigencies caused by the approach of this fearful malady, the parochial authorities of the city took immediate steps. They increased the staff of their medical officers, and opened cholera stations for dispensing medicines in various parts of the town. They likewise opened what was formerly the Surgeons' Hall in Surgeon Square, as an hospital for the reception of such cholera cases as could not be conveniently treated at their own homes. This building, which is a spacious one, containing several large well-ventilated wards, is well adapted for the purpose, having been used as a fever hospital during the late epidemic by the managers of the Royal Infirmary, and was handed over by them with all its necessary furniture to the Parochial Board for their use on the present urgent occasion. It was placed under the superintendence of Dr. William Robertson, one of the physicians to the Royal Infirmary, assisted by two resident medical officers, Dr. Lamb and Mr. Balfour. The exertions of these gentlemen have not been wanting by night or day, in combatting this fearful disease; and if their success has not been commensurate with their exertions, it can be attributed only to the unmanageable nature of the malady,—for their exertions have been untiring even under the most discouraging results. There have now been upwards of 200 patients under treatment in the hospital, and the number of deaths average fully 60 per cent. Dr. Robertson has published in the last number of the "Edinburgh Monthly Journal of Medical Science," a short account of

the practice in the hospital, so far as it had gone at the time he wrote, from which it appears that the number of female patients, who have fallen victims, greatly exceeds that of males, and he deems it not improbable that this may be in some degree connected with the states of pregnancy, lactation, or menstruation, rendering females peculiarly susceptible to the influence of the disease; appearances indicative of recent menstruation having been observed on dissection in the uterus and its appendages, while some of his patients "have distinctly admitted that they were seized with cholera during a catamenial period." Among many expedients tried, the injection of the veins with a saline fluid has not been overlooked; and since the publication of his paper, Dr. Robertson has availed himself of a more perfect mode of injecting, namely, the pressure produced by the weight of a column of the heated saline fluid contained in a long glass tube, terminating in a caoutchouc pipe, with a stop-cock, to which the ordinary silver nozzle is fitted. By this mode the pressure is more uniform, and the risk of forcibly injecting the cellular tissue of the arm is avoided, at the same time that it prevents the possibility of throwing in any deleterious matter caused by the action of the saline fluid on a metallic surface. I do not think, however, that the use of this instrument has made any difference in the results. The most successful practice seems to have been the abstraction by venesection of a large quantity of blood, when the patient was seen in an early stage of the complaint,—a practice which was much followed at the commencement of the former cholera epidemic.

While every thing has thus been done to overcome the virulence of this dire malady, where the patient has been brought to hospital, and placed in circumstances the most favourable for cure; it has been the duty of the district surgeons to ferret out the disease in its lurking places—in the dismal abodes of wretchedness and want, where it chiefly locates itself. Armed with little dark lanterns, to guide them through the gloomy and intricate wynds and stairs with which the older part of our city abounds, and with portable cases of the requisite remedies for immediate exhibition, these gentlemen have been ready at a moment's call to proceed on this, the forlorn hope of humanity; and many is the scene of squalid misery, filth, and wretchedness, which their visits to the habitations of the poor in some of these localities have unfolded. In a majority of instances, from the want of proper appliances in these wretched abodes, little could be done beyond the administration of some remedy suited to the nature of the case, and getting the patient conveyed immediately to the hospital. But the duties of the district surgeons, though in some degree lightened in this way, have been, nevertheless, very harassing; the alarm naturally existing in the minds of the public, has caused frequent calls for their attendance at times and hours not too seasonable, and when such attendance was not at all requisite.

In addition to the precautions before stated, the Parochial Board opened a large building, lately erected in Forrest-road for an Industrial School, as a quarantine house, whither the families of those seized with cholera have been sent, and kept until their houses could be properly cleansed and fumigated. The good effects of this isolation of the families of the affected cannot be doubted; and, I believe, there is only one instance of cholera having occurred in the quarantine house since its opening.

The opinions of the non-contagionists here have been somewhat staggered by the fact, that three of the nurses of the Cholera Hospital having fallen victims to the disease. These women had been in constant attendance on the sick, and had not left the hospital, nor are they known to have been exposed to the epidemic influence in any other quarter for some time. I am informed, however, that none of them were noted for temperance. In a great majority of cases, the parties who have fallen victims to the disease have either been those of dissipated habits, or their health had been previously broken. From whatever cause it arises, certain it is that the disease now, though not less fatal, is much less rapidly so than when it first broke out. More of the cases get over the stage of collapse, but die eventually of the consecutive fever. When the disease first made its appearance, so rapidly fatal were its effects, that it gave rise to the suspicion of poisoning; and as the three individuals first attacked had not been properly seen during their illness, the Sheriff ordered an examination of their bodies, which was conducted by Dr. Douglas Maclagan, and Dr. George Paterson, who confirmed the positive statements of their attendant physician,—that their disease was cholera.

In many of the cases, where a *post-mortem* examination has taken place, the colon and lower intestines have been found much ecchymosed. In other instances, probably where the purging has been intense, the villous coat of the intestines was completely denuded of its epithelial covering, and presented a white woolly appearance, having been apparently rapidly and entirely deprived of its vitality. The blood, when examined, has been usually found to contain urea, connected, no doubt, with the suppression of urine, which is so marked a symptom of this disease.

Although it was stated and expected, that the advent of cholera would swallow up other ailments, and particularly that we should have a decrease of fever, this is by no means the case, as the statistics of the Royal Infirmary show.

CHOLERA AND FEVER.

The average number of fever cases in our hospital at the end of September, in ordinary years, is between 40 and 50. On the 30th September, 1846, just before the late fever epidemic began, the number was 55. Of course, during the epidemic, the number ran prodigiously high; but for ten weeks previous to the 2nd September last, there had been a gradual diminution of 6 or 7 cases per week, until it stood at 86 at that date. From that time, till the breaking out of cholera, the amount slightly increased, being, at the 7th October, 102. There has again been a slight decrease, until the number has come to nearly what it was on the 2nd September, being quoted on the 2nd December as 85. This is obviously considerably above the average amount of fever cases in ordinary years, as stated before; and the same applies to other diseases, the number of which have not decreased since the appearance of cholera. The Colleges of Physicians and Surgeons here have appointed a Joint Committee for the purpose of procuring evidence regarding the present epidemic; and this Committee has issued schedules to be filled up by the various practitioners who come in contact with the disease; we may shortly expect the publication of these inquiries in a mass of statistical information, both as regards the nature and treatment of cholera, which will form one of the most valuable documents on the subject extant. J. M.

UNIVERSITY OF EDINBURGH.

The Winter Session of our University has opened this year with renewed vigour. There has been an accession of 102 students more than matriculated last year, and of these the Medical Faculty, though not quite in equal proportion with the others, has its share. The return of our able and excellent Professor of Clinical Surgery has been hailed as a good omen of the continued prosperity of the Edinburgh Medical School, and the more than ever-crowded state of his class gives evidence of the esteem in which he is held as a teacher of the science. The lectures of this eminent Professor differ from any which it has been our good fortune to hear. They are mostly delivered in a conversational, off-hand style; just as the patients are brought before him, and without any previous study. It is here that he shines. His admirable powers of diagnosis bring home the subject to his students, and render the lectures invaluable to his hearers. With his permission we purpose to give our readers a short analysis of some of these remarkable lectures.

Dr. John Hughes Bennett, the newly-appointed Professor of the Institutes of Medicine, delivered his opening lecture to a crowded audience in the Materia Medica class-room, his own being too small to contain the auditory. The subject he chose was the doctrine of cell formation. Dr. Bennett will prove a valuable acquisition to the Faculty of which he is a member, as he has undertaken to share the duties of the Chair of Clinical Medicine in conjunction with Professors Alison and Christison.

A slight indisposition for a short time prevented the Professor of Midwifery from lecturing; but he is now again at his post.

The success of the Anatomical class this year, and the energy with which it is conducted by Professor Goodsir is without a parallel since the days of Monro Secundus; a proof of which is the fact that, since the opening of the session on the 2nd November, no fewer than thirty-nine bodies have been dissected, or are in progress of dissection.

A severe illness, produced by exposure to cold on his return from a tour on the continent, has hitherto prevented Professor Gregory from resuming the duties of the Chemical Chair; but the Senatus possesses many men of varied acquirements, and his place has, in the interim, been ably supplied by Dr. Traill, the Professor of Medical Jurisprudence.

On the whole, the prospects of the session are most flattering, and the citizens of Edinburgh have reason to congratulate themselves that, in spite of all the opposition which has lately sprung up in other quarters, the star of their Alma Mater, and its reputed Medical School, is still in the ascendant.

J. M.

TREATMENT OF ASIATIC CHOLERA.

Roast any quantity of common rye (secale cereale) in the same manner as coffee, so as to colour it a shade darker than cinnamon. When roasted, leave it to cool in a covered jar, and keep it in a dry place till required. When wanted, a small quantity is to be bruised to a coarse powder. It is better bruised than ground. To make the tincture, take about a coffee-cup full of the fresh powder, and place it in a bottle with four such measures of alcohol;—to remain corked up for a week, shaking it daily; pour off the clear liquor and preserve it for use. A mixture of equal parts of this tincture of rye and strong spirits of camphor, and the remedy is then ready for use. It is recommended, that where the disease is expected, each person should be prepared with a small phial of this mixture, to carry about with them, and upon the least feeling of indisposition showing itself to avail themselves of the remedy. A person is rarely attacked suddenly *with all the intensity* of the disease, and in those cases where it does develope itself gradually, the person is to take *one* or *two* drops upon a piece of sugar or bread, or it may be applied direct to the tongue. If the attack is a slight one, it will be sufficient to repeat the dose every three or four hours till it subsides. In more serious cases, the same dose may be taken every half-hour, and, in dangerous cases, every fifteen, ten, or even five minutes, increasing the quantity to four, six, or ten drops at a time, being guided by the strength of the patient and the violence of the attack. It is very necessary that the patient be well covered and friction used, and in extreme cases the clothes may be wetted with the tincture, especially if the attack assumes a spasmodic form. As soon as the disease declines, diminish the dose, and increase the interval between each till the patient is convalescent. This remedy may also be used as a preservative, taking a single drop once or twice a day. When this malady attacks a small town, or a part of a large city, it continues in its intensity five or six weeks; after this period it visibly loses its violence and soon disappears. This is because the population become seasoned to the contagion, and thus lose their susceptibility. However, after an exemption of some months, it may recur, because the population have regained a susceptibility for the contagion. During the first three or four weeks (*i. e.*, when the epidemic is at its height), this remedy, if taken as a preservative, may be used more freely, to the extent of three or four doses daily, in two-drop doses, especially before going out of doors. When cholera has declared itself in a place, the third and fourth, and sometimes

the second week, are the most destructive to life; therefore, that period would be the proper time for all to avail themselves of this remedy upon the *slightest indication* of any ailment. In adopting its use, it is strongly recommended, that after each dose a sip should be taken of the infusion of the roasted rye-powder, made in the same way as strong coffee. No fear need be apprehended in the use of this remedy, as the effects soon disappear.—*Dr. Jno. Hall, Eastbourne, Sussex.*

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THE MEDICAL TIMES.

SATURDAY, DECEMBER 16, 1848.

DR. ROUTH'S PAPER ON THE ENDEMIC PUERPERAL FEVER OF VIENNA.

We beg to call the attention of our readers to the fact, that the substance of Dr. Routh's paper on the causes of the endemic puerperal fever of Vienna, communicated by Dr. Murphy to the Royal Medical and Chirurgical Society, and reported by us in our last number, has already appeared in our pages, having several months since formed a portion of one of Dr. Bushnan's sketches of the progress of German medical science.

We make this statement, not for the purpose of underrating the value of Dr. Routh's communication, or his merit in bringing so important a subject before the Royal Medical and Chirurgical Society; we merely do so in justice to ourselves and to our valued Correspondent, and to show our readers that we are not backward in laying before them foreign intelligence. We take, moreover, this opportunity of stating, that we hope ere long, with the assistance of Dr. Bushnan, whose sketches have been so favourably received by the profession, to render this portion of our journal still more perfect and efficient, and to be enabled to present our readers with an abstract of all that is important and interesting in the medical journals and literature of Germany.

QUACKERY IN ENGLAND AND AMERICA.

If we cast our eyes abroad upon the world, we find, amongst the people of Europe and America, a singular tendency to encourage quackery. Legitimate medicine is a thing which most civilized governments profess to patronize, but which few efficiently protect, a crowd of ignorant adventurers being tolerated, if not encouraged, in their efforts to amass riches by pretending to cure diseases.

It is one of the weaknesses of human nature—a predilection for quackery—and there is no disguising the fact, that *genuine* empiricism has been a more fertile source of worldly emolument than legitimate medicine. The ancient medical heresiarchs were probably men who coveted more an immortal name than a splendid fortune,—modern quacks care little for *post-mortem* renown, their chief anxiety being that which has reference to the breeches' pocket. The world has had a thousand proofs of the utter worthlessness of empiricism, and yet it continues to give it encouragement, as though the voice of warning conveyed no wisdom, and experience gave no sanction to reproof. We might have expected that the increased light which has dawned upon the nations would have exposed the hollow pretensions of medical impostors;—it has, however, failed to do so, and they are now as extensively consulted and as liberally rewarded, as the ancient priests of the once-famed temple at Delphi.

The leaning of the public towards quacks and quackery has acted injuriously upon the members of the medical profession. Some, allured by the prospect of acquiring speedily an ample fortune, have renounced legitimate medicine, and gone over to the ranks of empiricism. Among that renowned fraternity of "silent friends," there are individuals who boast of possessing the College diploma, which is held up to the view of "inexperienced youth," in order that, to their other indiscretions, they may add that of fooling away their money. The "impotence" of the victims is lamentable enough; for in opening their hearts and pockets to quacks, they act like the silly Trojans, who admitted the big Grecian horse within their walls, pregnant with destruction. Even the renowned founder of the "British College of Health" could number amongst his disciples members of the English College of Surgeons, who scrupled not—we will not say with what object—to use his nostrums. We believe that some of these have been urged to engage in empiricism by necessity: the acquiring a livelihood by the honourable practice of their profession probably appeared almost impossible, and quackery was chosen rather than starvation. We are told occasionally in the newspapers, that there are many members of the medical profession who are railway porters; and Dr. Murray, in his article on the "Loodianah Hospital," published to-day in our columns, informs us, that nearly in every mounted regiment in India there are members of our profession who, from some cause, have been compelled to enter the army as private soldiers. These men are entitled to our sympathy, for, in betaking themselves to the profession of arms, even in the ranks, they choose a more honourable calling than those who trifle with human life for the base purpose of obtaining money.

Quackery in England is not, however, that rampant and barefaced thing it is in America, for there the profession is unprotected by any penal enactments. It has been thought by some in our country, that the slight protection afforded to those who undergo a regular medical education and receive an authority to practise, should be taken away. Sir James Graham, misled by the advocates of free trade in physic, endeavoured to carry out these views by a legislative enactment; but, happily, the remonstrance of an indignant profession prevailed. Had he been acquainted with the state of the medical community in the United States, we think it would not have been necessary for the general practitioners of England to have associated, agitated, and petitioned, in order to deter him from his purpose. We admit, that neither the *status* nor the education of medical men is what it should be; yet we maintain, that both have been greatly benefited by rendering the practice of medicine without a qualification penal. The founding of the College of Physicians by the Government, was the means of elevating the professional character of the physician. The passing of the Apothecaries' Act, defective as it is, has been instrumental in raising the education and status of the general practitioner, and, as a consequence, we are exempt from the display of quackery observable in the Transatlantic Republic.

We stated, a fortnight ago, that Medical Education in America is exceedingly low; and we attributed this to the unprotected state of the profession there. The Executive has chartered universities and colleges in abundance, with the power of granting medical degrees;—but as these degrees are not absolutely necessary in order to practise, what is the consequence? A system of diploma-mongering prevails worse than was ever known in the English College of Surgeons. Medical Education in the States is a mockery, and an examination for a doctor's degree a farce,—for the one is prosecuted without the pupil having any practical opportunities of studying disease, and the other instituted without any intention of testing his professional or general learning.

The American Medical Association has appointed a Committee to look into this matter, for it has felt that the standard of qualifications essential to the attainment of the Doctorate of Medicine is far higher in the nations of Europe than in the United States. The Association plainly states, that the cause of this is the active competition existing amongst the medical colleges, and the facility with which charters for medical corporations are obtained. What then are the results? They are two-fold;—the overstocking of the profession, and the abounding of quackery. We are informed that such is the difficulty of young physicians obtaining places of settlement where there are prospects of supporting themselves is so great, that in many instances some are known to travel thousands of miles. And the Association further tells us, that the difficulty of finding a suitable residence induces frequently the young practitioner to abandon his profession, and seek, in other and less dignified pursuits, that prosperity, which he is no longer permitted to expect from his legitimate vocation.

It is estimated, that there are 20 millions of inhabitants in the United States. The number of Graduates in 1847, at 24 of the Medical Schools, was 1,188, or one to every 16,835 of the population. These returns, however, were only from about two-thirds of the schools. The annual number of new Medical Graduates

cannot be far from 1,500, or one to every 13,333 of the population. On the supposition that these calculations approximate to accuracy, the proportional supply of Graduates in Medicine in the United States is five times as great as in France.

In the eager competition which thus results from the excessive supply of medical men, the Convention believes that much of the prevailing empiricism finds its origin. In the large American cities the major portion of the most successful charlatans are those who have been partially educated at the schools, but have failed to obtain employment in the regular way.

Some pains have been taken to ascertain the exact amount of medical men practising in the various States, with their qualifications. The Association has published, in its "Report," the number in the State of Virginia, 972. Of these, 678 have received diplomas from regularly constituted medical schools. 249, *more than one fourth* of the whole, practise without any authority whatever. Of these, one has attended two courses of lectures; ten have attended one course of lectures; four are stated to have studied medicine without attending lectures; and three, to have been licensed by a medical society, whose authority to do so could not be ascertained. Thus, we have in one State, (a specimen of the whole); so large a number as one-fourth of the individuals practising medicine who do not pretend to have devoted one hour to the study of the profession before entering upon its responsible duties!

So much for free trade in physic! and we trust that this will serve as a lesson to those who would hereafter legislate upon medical matters in this kingdom. Let it be understood, that the grand means of checking quackery in and out of the profession is by raising the standard of medical education. Let it be remembered, also, that this is the most effectual means of preventing the profession being overstocked; and we are quite sure that a right course will be pursued by right-minded individuals. Quackery, in all probability, will never be completely suppressed, but it may be kept within very narrow limits. If our law-makers will only act as experience teaches them, we have no fear for the future advancement of the profession in all that relates to its honour and usefulness. The educated portion of American physicians are looking to us for example and encouragement. We earnestly hope they will not look to us in vain.

TYPOGRAPHICAL BLUNDERS IN THE PUBLIC HEALTH ACT.

The public have frequently complained, that the business of law-making is frequently carried on in a very slovenly manner. We have a multitude of new laws enacted yearly, avowedly for the purpose of benefiting the people; but most of these contain so many ambiguities and blunders, that many parts are utterly unintelligible, even to the most sharp-sighted lawyer. Some of our modern enactments seem to have been more particularly constructed for the purpose of developing forensic ingenuity, and the blunders of our law-makers are sources of profit to our law expounders.

It has recently been discovered, and announced in the daily *Times*, that not only are our British senators—"the collective wisdom" of the empire—liable to pass crude and unintelligible laws, but that Her Majesty's printer occasionally commits errors which make "confusion worse confounded." A typographical mistake, under ordinary circumstances, is of little consequence; but, in an Act of Parliament, may so change the sense of a clause as to make it speak that which the Legislature never intended. Anything which tends to shake the confidence of the public in the editions of Acts of Parliament, published by authority, is a serious evil, as such documents are received by all "judges, justices, and others," as authentic and accurate copies of the written law of the land. This is, of necessity, the case; as it would be quite impossible to refer, in our courts of justice, at all times, to the original manuscript. The very purpose of appointing a Queen's printer, we conceive to be to insure accuracy in the published documents.

The Public Health Act, which has recently become law, is not only obscure in many of its clauses from the blunders of Parliament, but the real meaning of som Seections has been completely disguised by the mistakes of a compositor.

Mr. Edward Lawes, the Editor and draughtsman of the Public Health Act, has discovered and pointed out some of these errors. He informs us, that "the text of the whole has undergone the closest examination: in some few copies it will be found to vary from the copies issued by the Queen's printers previously to the 9th of November; but, whenever a variance occurs, the text of this edition has been verified by the original roll, and will be found to correspond with the Queen's printers' copies issued since that date." Some of these mistakes are of little consequence; but there is one in Section 40 which totally alters the effects of a provision.

The local Board of Health may appoint a fit and proper person to be an officer of health, who must be, according to the printed edition of the Act, "a legally qualified medical practitioner, *or* member of the medical profession." Now, the latter clause of this sentence appears to be explanatory of the former, the word *or* being used to avoid the periphrase of *that is to say;* and thus every member of the medical profession not legally qualified to act, in England and Wales, would be excluded from holding an appointment of officer of health. The manuscript, however, appears to read thus,—"being a legally qualified medical practitioner, *or a* member of the medical profession;" so that gentlemen possessing diplomas obtained from the Colleges of Ireland or Scotland, are as eligible for the office as those who hold English diplomas. It is important that the profession should be acquainted with this fact; and we are glad that no gentleman will be excluded who has received a regular medical education, tested by examination.

We hope that, during the next session of Parliament, means will be adopted to render more clear legislative enactments, and that a law will be passed which will unite and consolidate the medical profession of the Three Kingdoms.

THE PRESENT STATE OF THE MEDICAL PROFESSION—NECESSITY OF REFORM.

The present position of the medical profession must strike the reflective mind with the conviction of its political imbecility—an imbecility, bearing, as it does, an inverse ratio with its social importance. Under a second visitation of a frightful disease, which has as yet happily committed but partial ravages, the Government and the public alike turn to the profession as their refuge, their tower of strength, their shield.

Yet, with so great responsibilities, medical men not only fail to make themselves represented adequately in the Senate, by members chosen from their own profession, but the majority of them hold no definite ground in the great field of the British Constitution. If this anomaly has recently puzzled our statesmen, so likewise has it bewildered, as well our constitutional lawyers, as the public at large. Intelligent foreigners, in the *coteries* of the scientific, are struck with the phrase, "medical man." "A physician?" say they. "No; a medical man!" "A surgeon?" "No, not exactly,—but a medical man." "What!" say all intelligent foreigners, and, we may add, all reflecting persons of our own country also,—"A medical man, but not a physician! As well might you say, a clerical man, but not a clergyman—a military man, and not a soldier—a counselling man, but not a counsellor—a legal man, but not a lawyer." "Oh," but some one shall say, "Mr. So-and-So is a surgeon." What! a surgeon, without having the requisite medical knowledge to take charge of disease! Have not all our eminent surgeons, so called, deliberately declared, that "he who has not the knowledge requisite for making a good physician, must make a bad surgeon." And has it not equally been asserted by our most eminent physicians, that "no man deserves that appellation, who is ignorant of the principles and practice of surgery." None of us affect to be ignorant, that the great majority of cases attended by the consulting surgeons of this metropolis are decidedly medical, and a still greater majority of those ordinarily coming under the charge of the so-called rural surgeon. Whence has arisen all this confusion, and how are we to account for our low position on the scale of political importance? He who reads the history of his profession, from the Charters of Henry VIII., to the Apothecaries' Act of 1815, will be at no loss for an explanation. "He who does not strenuously oppose the first infractions of his right," says Coke, "has already lost considerable advantage in any conflict which may be necessary for its defence." The Charter of Henry VIII. commences with this recitation:—"*Whereas we think it part of our Royal duty to consult for the happiness of our subjects, and that such happiness will be eminently promoted by curbing the attempts of impostors, who practice rather for the sake of plunder, than from any conscientious conviction of their own utility, by which an ignorant and credulous public suffer considerable damage; therefore, following the example of*

other nations, [*&c. &c.,*] *we appoint John Chambers, Thomas Linacre, and others* [to do what?] *to examine and to license all and singular persons presuming to take charge of diseases; all which said persons, so licensed, shall aid and promote, as well by their example as by their authority, the president, the censors, and elects;*" thus establishing, that all persons so licensed became physicians of the realm, and that the Charter contemplated no exclusion, no degradation of any body of men. And, thus fitted to take charge of disease, we defy any man to show that any practitioners could be excluded at that time from the College, except on the ground of immoral character; and we will go further and say that, up to the period of 1815, the terms apothecary, and surgeon-apothecary, as applicable to a medical practitioner, however growing into use in common *parlance*, were terms unknown to the British constitution. It will be worth while to trace how the great masses of the medical community have, in the lapse of time, been juggled out of all benefit of the Royal Charter; in other words, how the physician of Henry VIII., under the rapid march of intellect, became the surgeon-apothecary of our own time—a task which the lapse of events would enable us to perform without personal invective, and even without personal allusion, except to names which are now become legitimately historical.

THE LATE SAMUEL COOPER, ESQ, F.R.S.

In a short notice of this distinguished surgeon, which we copied into our last Number from the daily Press, reference was made to his misunderstanding with some of the Professors of University College, which led to Mr. Cooper's resignation. A correspondent has requested us to publish the following statement:—

It is true that a statement, substantially to the effect contained in this extract, was made by Mr. Cooper under some mistaken impression, and generally circulated by him in last spring; but it is equally true, that soon after it had been put into circulation, a resolution of the Council of the College, which was published at the time, showed the statement to be altogether erroneous; for that in fact no Professor but Mr. Cooper himself had had communication with the Council, or with any one of that body, either directly or indirectly, respecting their decision on the arrangement proposed by Mr. Cooper.

The portion of the resolutions of the Council which bears on the subject referred to in the Obituary, and which ought to have set the matter at rest, runs as follows:—

"Resolved unanimously, that . . . . Mr. Cooper has been strangely imposed upon, if he has been informed that any member or members of the Council have been influenced, directly or indirectly, by any of the Professors, or by any other parties in the course pursued. On the contrary, no communication whatever was held with any one out of the Council," &c.

This unanimous resolution of the Council was come to, the following members being present:—George Bishop, Esq., F.R.S., James Booth, Esq., F. Boott, M.D., Charles Crompton, Esq., The Baron de Goldsmid, F.R.S., James Heywood, Esq., M.P., R. Hutton, Esq., J. W. Mylne, Esq., John Lewis Prevost, Esq., H. Crabb Robinson, Esq., Edward Romilly, Esq., the Rt. Hon. Sir Edward Ryan, the Rt. Hon. Edward Strutt, John Taylor, Esq., F.R.S., John Wood, Esq.; and the gentlemen who, on the part of the Council held the communication with Mr. Cooper, which led to his resignation, were John Elijah Blunt, Esq., F. Boott, M.D., the Solicitor-General, M.P., Henry Warburton, Esq., John Wood, Esq.

REVIEWS.

Reports on Asiatic Cholera in Regiments of the Madras Army from 1828 *to* 1844; *with Introductory Remarks, &c.* By Samuel Rogers. London: Pelham Richardson and Co., Cornhill.

Plain Directions for the Prevention and Treatment of Cholera. By Thomas Allen. Oxford: Published by J. Vincent.

A Letter to Lord Morpeth, and the Members of the General Board of Health, on the Question—Is Cholera Contagious, or Not? By Wm. Reid, M.D. London: Highley.

On the Treatment of Asiatic Cholera. By Archibald Billing, M.D., A.M., F.R.S. London: S. Highley, 32, Fleet-street.

Practical Observations on the Prevailing Epidemic called Cholera, &c. By James Keir, M.D., Knt., &c. Edinburgh: W. F. Watson, 52, Princes-street.

Remarks and Observations on the Cholera, &c. By J. Lamprey. London: Simpkin, Marshall, and Co.

Observations on Malignant Cholera, &c. By Andrew Buchanan, M.D. London: Published by John J. Griffin and Co.

Some new Views respecting Asiatic Cholera. By Arthur Leared, A.B., M.B. London: H. Baillière, 219, Regent-street.

Revelations on Cholera, &c. By Samuel Dickson, M.D. London: Chas. Gilpin, 5, Bishopsgate-street, Without.

Cholera, or Orotra; an Essay on the use of the Liquor Potassæ and Liquor Alkalinus in the Treatment of Malignant Cholera, with numerous Cases. 3rd edition. By Henry Wilkinson Dodd, M.R.C.S.L. London: Whittaker and Co.

Practical Observations on the Nature and Treatment of Cholera. By G. Hamilton Bell, F.R.C.S.E. Edinburgh: Oliver and Boyd, Tweedale-court.

Report by the Acting Committee of the Edinburgh Homœopathic Dispensary, on the Treatment of Asiatic Cholera, &c. Edinburgh: Sold by Wm. Headland, 15, Princes-street; and London: Hanover-square.

The Homœopathic Treatment and Prevention in the Asiatic Cholera, &c. By R. E. Dudgeon, M.D., Ed. London: G. Barron, 213, Oxford-street.

Cholera; its Electrical Origin, Electro-Galvanic Phenomena, and Treatment by Isolation and Oxygen Gas. By Henry Holmes, M.D. London: John Churchill, Princes-street, Soho.

Etiological, Pathological, and Therapeutical Reflections on Asiatic Cholera, &c. By A. Henriques, M.D., F.R.C.S.L. London: H. Baillière, 219, Regent-street.

Diet and Cholera, &c. By W. B. Boddy, Esq. London: S. Highley, Fleet-street.

The Code of Causes, Effects, Safety, and Aids, as well of other Epidemical Forces, as also of Asiatic Cholera. By G. F. Collier, M.D. &c. London: Longman and Co.; Simpkin and Co.

A Few Thoughts on Cholera, &c. By Michael Thomas Sadler. London: Longman and Co.

A Few Plain Directions for the Homœopathic Treatment and Prevention of British and Asiatic Cholera. By Dr. Laurie. London: J. Leath.

Should the Cholera come, what ought to be Done? By J. Challice. London: Henry Renshaw, Strand.

The True Pathological Nature of Cholera, &c. By George Stuart Hawthorne, M.D. London: Simpkin, Marshall, and Co.

Our Library Table exhibits a most admirable disorder. Heaped up, strewed, smothered, its poor back already showing symptoms of premature decrepitude, it is literally groaning under the weight of cholera pamphlets, which have been lately forwarded to us for review. The epidemic has produced a species of intellectual diarrhœa, not less profuse than the copious effusion that distinguishes its physical operation. We cannot say, however, that in this inundation of pamphlets any very extensive straining off of ideas has been effected; it would appear rather that the more aqueous constituents of thought had escaped into print, the usual reservoirs of the fluid materials that are squeezed out of a congested psychical organism. The process of filtration will enable us to exhibit and analyse some of the more solid particles for the benefit of our readers.

The most worthy of notice, as it is the most assuming in external form, of the various books in the list we have enumerated, is the Collection of Reports on Asiatic Cholera by Mr. Rogers. We regard this volume as a most valuable addition to our literature on this subject. It contains nineteen Reports, more or less able, from surgeons practising in India, conveying the results of their practice in cholera, and their opinions upon the various questions, such, for example, as its cause, contagiousness, nature of the disease, and treatment, which have so long occupied the professional mind. These Reports first appeared in the *Madras Quarterly Medical Journal*, of which Mr. Rogers was the editor, and are now reprinted by that gentleman, who has also accompanied them with some introductory remarks, and a summary of treatment, in which the most useful portions of the Reports are brought immediately under the eye.

Perhaps one of the most curious topics in the volume, is the existence and causation of cholera at Bellary, a fort built upon a rock, remote from any swamp or other apparent geologic cause likely to originate the disease. Mr. Rogers writes—"The fort of Bellary has at all times suffered much from the disease; so much so, indeed, that Dr. Parry remarks "that it may there be considered indigenous, and justly entitled to the designation of endemic. The seeds of the poison appear to be, as it were, sown in this place."

"The climate and situation of Bellary is thus described:—'An intense heat, a cloudless sky, great glare, with strong gusty hot winds, are the predominating features of the climate in the day-time, with considerable reduction of temperature at night; *very little rain* falls in this part of India.' 'Around Bellary the soil becomes granitic, from the debris of the granite mass of rock round and on which the forts are built. The regur soil forms nearly *a level surface;* but from Bordeaul the copper mountains vary, and bound the scene on the west.' Here we look in vain for the usual sources from which cholera is known to emanate; and yet it is found year after year that the disease visits the inhabitants inside the fort, breaking out suddenly without any appreciable change in the state of the atmosphere, and at a time when it is unknown in the surrounding country." Mr. Rogers, after making this observation, refers to an epidemic described by Mr. M'Gregor, which appeared "to have been first excited by a sudden atmospheric change," and then goes on to say:—"But we find it has been, and still, I believe, continues to be an annual visitant to this ill-fated spot; and so mysterious have these attacks been, and so strictly confined to the locality of the rock, that it has been suggested by several whether the formation of the rock itself may not in some way be instrumental in its production, by being the medium through which some peculiar electrical state of the atmosphere occurs;" and Mr. Rogers then refers to the evolution of *sulphuretted hydrogen*, but confesses ignorance in the matter.

Our own belief is, that geological states have considerable influence in the causation of cholera, acting probably through electrical agency, in the manner indicated by Mr. Rogers; but we have not evidence at present to determine the correctness or the falsity of this opinion. At the first outbreak of cholera in India, the fort of Kotah, likewise built on a rock, was severely scourged by the epidemic, and these circumstances were often the subject of discussion in reference to the production and propagation of the disease.

On the present occasion, however, we do not

think that Mr. Rogers does the subject full justice. The admirable Report by Mr. M'Gregor points out one condition ancillary to the disease which was, as Mr. Rogers admits, instrumental in diffusing it on one occasion, but which, in all probability, if the facts had been carefully recorded, would be found to have exercised a more frequent influence. Mr. M'Gregor, after making some calculations relating to the amount of space allotted by regulation for each man, and the actual infringement of these regulations, owing to the construction of the barracks, says that, "if we place the men's cots so as to prevent their being opposite to doors and windows, there will not be *any* interval between the cots, which are two feet seven inches in breadth. From the very nature of the regulations, the troops are liable at any time to be crammed in this way." It appears, that according to *regulation orders*, each man is allowed only 560 cubic feet for his sleeping berth, and this occurs, too, in the burning climate of India, where the atmosphere, from the copious exhalation of animal effluvia under such circumstances, must necessarily become suffocating. These remarks apply to the barracks in the lower fort of Bellary, where Mr. M'Gregor states, "it (the cholera) has scarcely been a whole year absent since its arrival, breaking out in great severity every two or three years, while it confines its range very closely to that *particular locality*, and only occasionally attacks, and that generally to a very limited extent, the native troops stationed outside beyond the circle of its more prevailing influence, which seems to be concentrated about the bottom of the rock." The wonder would be, not that it was ever present in those lower forts, but that it was ever absent. When men are thus crowded by regulation orders, and still further crammed together by incidental causes, how is it possible that they can escape this annual decimation? The comparative immunity of other portions of the fort proves that the unhealthiness of these particular barracks arises out of the gross neglect of sanitary laws. Mr. M'Gregor dwells upon these mal-arrangements with great force and earnestness, and proves himself to be a man of enlightened and comprehensive mind.

Mr. Sutherland reports a sudden attack of Choleroid disease at sea, on board the Ship Claudine, 500 miles distant from the nearest land. It appears that no cause, so far as could be ascertained, existed in the ship for the developement of the disease, and the only remarkable natural phenomenon observed at the time was an immense number of phosphorescent bodies covering the surface of the sea for many acres with their beautiful glow. This phosphorescence of the sea, so curious and lovely to the eye of the mariner, is yet a problem in physics. It is supposed to be caused either by insects *molbuscæ* or the putrifying relics of dead fish. None of these suppositions,—although each cause assigned may be and is productive of phosphorescence on a limited scale,—is satisfactory to our mind, to account for that peculiar and brilliant light which a vessel dashes from her bows like drops of molten gold, and which she seems to trail after her like a galaxy of stars, as she moves silently over the smooth and tranquil waters of a summer sea. Mr. Sutherland concluded that in this instance "the disease was produced by the decomposition of floating organized matter."

A considerable portion of these reports is occupied with dissertations on treatment, and, perhaps, the plans that occupy most attention are those of *cold affusion* and *warm saline enemata*. The cold affusion was first employed in Persia, and the experience of it in Hindostan has been pronounced to be highly favourable to its employment. These reports state, that many patients rallied under this treatment from the stage of collapse, and were suddenly restored from the lowest state of prostration, to comparative vigour and animation. There can be no doubt that, in the early stages it is an excellent remedial measure. Mr. Lamprey, in his clever pamphlet, informs us that cold affusion was practised with success at Berlin; that patients recovered even from the pulseless stage, and "that in some cases the patient began to perspire profusely and recover immediately after the first or second application."

In applying this remedy the patient should be supported in a sitting position whilst an assistant dashes a bucket of cold water on his head and back; another bucketfull should then be dashed against his face, chest, and abdomen;—the patient should now be wiped dry, and hot jars applied to his feet. In Berlin, it would appear, the patient was wrapped up in a cold wet sheet on the hydropathic plan.

There is a report in Mr. Rogers' book from Dr. Dickson, whose pamphlet on cholera is enumerated in our list. Dr. Dickson, of chronothermal repute, is now a bold denunciator of bleeding in every form of disease, but in this report he states "Venesection in every case, it appears to him, ought to be tried, because if blood will flow in sufficient quantity there *is every hope*; and if it only come away in a few ounces, it can neither influence the disease *for the better or the worse*." Mr. Rogers slily appends this table as an illustration of Dr. Dickson's practice:

	Admitted.	Recovered	Died.	Remaining.
Men	20	3	17	3
Women.....	8	3	3	2
Children ...	6	2	4	0

It is not surprising that the Doctor has a holy horror of bleeding when such are its results.

Large doses of calomel are now going out of fashion in India; they are comparatively rarely employed. Mr. Rogers states, "that large doses are thought by many to hasten death in bad cases; and in those which recover, the salivation, which it often occasions, retards convalescence." Doses of four grains repeated at intervals, are more frequently given. *Opium* is advised to be administered with caution; and *stimulants*, said to be useful in the early stages, are, nevertheless, declared pernicious in the more advanced forms of the disease. Mr. Rogers says, in his Summary, "During the existence of complete collapse stimulants are worse than useless." We should think that Mr. Ross's Tables will settle this question for ever; the more we read the more we find the experience of judicious men to corroborate the results exhibited in these important Tables. Dr. Billing, for example, who regards the cholera as a species of fever, as do many other intelligent physicians, although we think this matter is still open to inquiry, inasmuch as the febrile stage is found only or chiefly outside the tropics: in the warmer latitudes the typhoid fever does not exist,—Dr. Billing states, that it will be difficult to induce those who hear this doctrine for the first time, "to use the proper remedies, namely, fever medicines, and to avoid what is hurtful, *i.e., stimulants*." Dr. Buchanan, too, in a pamphlet showing great perceptive powers with sound judgment, states, "stimulants have appeared to me to tend only to inflame the stomach, and to be of no use in exciting the heart to a salutary action." We could quote numerous other authorities; but it is unnecessary, as Mr. Ross has already judged the question.

We must not omit to state, that the hot saline enemata employed in India were found useful, although not possessed of the specific virtues at first ascribed to them. Mr. Lamprey informs us, that chloroform, of whose virtues so much has been said and written in this country, was also employed at Berlin, though without success sufficient to afford any encouragement of an extensive use of the remedy. It was, however, administered only to two persons, one of whom died immediately after its employment, and the other received only temporary benefit.

Dr. Reid's pamphlet is on the subject of the contagiousness of cholera. The Doctor promises to be brief, and hopes that he shall not be obscure,—yet with so little space to spare he actually consumes six pages out of sixteen in shampooing the members of the General Board of Health. Beyond this, the Doctor's pamphlet is readable, but inconclusive; it is ingenious, but denuded of facts. Mere reasoning cannot settle this question. It is such a dissertation as a clever man might pen at a sitting overnight, and which a wise one would burn on the following morning. The Doctor is an advocate of contagion.

We read Dr. Keir's dissertation with great attention, or at least desired to do so, as we wished to be informed of the views and practice of the Russian physicians in this disease, which none could communicate so well as Dr. Keir, as few have had equal opportunities. The pamphlet, however, contains nothing about the practice in Moscow, registers no facts, nor records any opinions, except those of Dr. Keir himself, and, therefore, might have been written as easily and as usefully by a physician living in an English country town. If there were any peculiar advantages in Dr. Keir's position at Moscow, he has foregone them all. We Englishmen should have liked an analytical Report of the disease in Russia, the only practical good as regards science that could result from any individual physician's sojourn and experience in that country. Dr. Keir recommends warm brandy and water, and hot baths, as remedial measures, and advocates the latter on the ground that the induction of sweating "when the disease has made some progress, is done *with difficulty*." We hardly know what Dr. Keir means by sweating; but all we know of the disease, informs us that the patients in the advanced stage are literally drenched with sweat. We think we may let Dr. Billing answer Dr. Keir.

Dr. Billing says, in the course of some critical remarks of the instructions of the Board of Health, "One of the instructions of the Board is, in a word, to do everything practicable to procure a warm general perspiration, until the arrival of the medical attendant." Did the writer of this ever see cholera? Can any human means procure a warm general "perspiration"? The first change, whether beneficial or otherwise, must be into a gradual restoration of *dry* warmth, not *perspiration*, which, as shown above, caused many to be deceived as to the operation of stimulants. Thus doctors disagree: we will not interfere, for we think with Sir Lucius O'Trigger, that it is a very pretty quarrel as it stands. It is clear, that the only mode of avoiding these contradictions, is by collecting and comparing facts.

Mr. Allen's pamphlet is intended for the public rather than the profession. It is written with care, and displays much good sense. If the treatment he recommend be not based on sound principles, it is not, on the other hand, sufficiently active to do great harm. We must, however, stop here. There are many other pamphlets that we shall not be able to particularise; and if we pick out one or two, we shall be doing an injustice to others equally worthy, but not equally fortunate to lie immediately under our critical eye. We must, therefore, quit the subject for the present, with this exhortation, that future writers will limit themselves to observing and recording *facts*,—the only mode in which they can benefit humanity, or gain credit for themselves. We may not be always in so gentle a spirit, nor so benignly tolerant of theoretical vagaries, and nonsensical quirks of practice; but if any author will only contribute one new fact or two new ideas, for ideas are cheaper than facts, to the history of this appalling disease, we will promise him a generous and kindly reception.

A Treatise on Diseases of the Heart and Great Vessels, and on the Diseases which may be mistaken for them, comprising the Author's View of the Physiology of the Heart's Action and Sounds. By J. Hope, M.D., F.R.S.

This is a reprint, in a convenient form, for reference in practice of Dr. Hope's admirable work on "Diseases of the Heart." This work is now so thoroughly appreciated by the profession, both in our own and foreign countries, that any word of recommendation is unnecessary. Its present cheap form will introduce it to students, who, although the plates are necessarily omitted for the reasons that will insure the volume a wide circulation, will find in it an invaluable assistant to their study of the diseases of the heart. The student in after-life will find a correct knowledge of no class of diseases more necessary to his success in practice than this, and we, therefore, hope that he will avail himself of

this the best and cheapest book upon the subject in the language.

Chemistry as Exemplifying the Wisdom and Beneficence of God. By GEORGE FOWNES, F.R.S., &c. Second Edition. London: John Churchhill, 1848. Pp. 160.

This excellent essay has deservedly received the patronage of the public, and the author has been called upon to issue a second edition of the work. We cannot speak too highly of its object, and of the manner in which Mr. Fownes treats the subject he has chosen to exemplify the wisdom and beneficence of God. In the essay we have discussed the chemical history of the earth and the atmosphere,—the peculiarities which characterize organic substances generally,—the composition and sustenance of plants,—and the relation existing between plants and animals.

Chemical Manipulation and Analysis, Qualitative and Quantitative. By HENRY M. NOAD, Lecturer on Chemistry at St. George's Hospital, &c. London: Robert Baldwin, 1848. Part II, Quantitative.

This work recommends itself to the chemist, on account of its cheapness. It contains the principal methods used in qualitative analysis; and those who have not Rose's great work will find this a valuable help to them in their chemical studies.

REPORTS OF SOCIETIES.

LINNÆAN SOCIETY OF LONDON.

(*Selections from its proceedings.*)

Communicated by Dr. W. H. BROWN, F.L.S.

Read a memoir "On the Muscles which move the Tail and Tail-coverts of the Peacock." By G. C. Heming, Esq., M.D., F.L.S., &c.

Dr. Heming first refers to the mechanism by which the elevation of the feathers of birds in general is effected, either by a contractile power of the *cutis vera*, or by various modifications of subcutaneous muscles analogous to the *panniculus carnosus* of certain *Mammalia*; and then proceeds to the more immediate subject of his paper, the motions of the tail and train of the peacock, in which the apparatus for this purpose is far more complicated than in any other bird. This apparatus consists of two parts: the one intended for raising the caudal vertebræ and the feathers inserted into the groove of the last vertebra, and the other confined to the movements of the upper tail-coverts. As regards the former, Dr. Heming adopts, with little modification, the description of the muscles of the tails of birds given by Cuvier; the latter he describes in the following terms:—

"Upon the *sacro-coccygeal* muscle, which is exceedingly large and powerful in this bird, there is placed a mass of cellular substance somewhat of a triangular shape, measuring about five inches at the base, and each lateral line extending from the base to the apex about six inches; the base is situated towards the tail, and extends in this direction almost as far as the last caudal vertebra; thus there is not the space of an inch between the quills of the upper tail-covert and those of the true tail, while the apex of the triangular mass extends nearly to the lumbar extremity of the sacrum; it is wider than the muscle upon which it lies, and extends over it at each side full half an inch. This triangular mass is much thicker below than above; here it is full three-quarters of an inch thick, whilst at the apex it is not half this thickness. It is covered on its sacral surface by a thin fascia, and is connected to the muscle beneath it by loose cellular texture, which can be easily broken down by the handle of a scalpel; but it has a membranous and closer connexion, and towards its base it is more intimately attached by muscular fibres proceeding from the elevator muscles beneath, which are lost in the fascia covering its sacral surface.

"The quills of the upper tail-covert are inserted obliquely into this triangular mass of cellular substance, each quill having its peculiar capsule, which seems to be formed of condensed cellular membrane: between each quill there are small muscles, the fibres of which run in parallel lines extending from one quill to the other; and besides these muscles there are smaller ones, the fibres of which run obliquely in such a direction as somewhat to resemble the letter V; the interstices of these muscles are filled with cellular substance.

"By the powerful action of the *sacro-coccygeal* and the *sacro-supracaudal* muscles, the true tail is elevated, and at the same time the upper tail-covert is raised perpendicularly and supported by the proper tail, and perhaps the swelling of these muscles in their contraction exerts some influence in spreading the feathers of the upper tail-covert. The principal agents in this office are the small muscles situated between each quill, by the contraction of which the quills are brought closer together, and consequently the opposite ends of the feathers are proportionately separated from each other. The small muscles of which the fibres diverge have not only the power of contributing, by their contraction, to the spreading of the feathers of the upper tail-covert, but they exert considerable influence in raising the feathers perpendicularly. There can be no doubt, also, that the slips of muscular fibres coming from the *sacro-coccygeal* and *sacro-supracaudal* muscles exert their influence in the same office.

"Although these small muscles are very powerful, they would be quite inadequate, alone, to the office of raising perpendicularly, spreading the feathers, and maintaining them for any considerable time, were it not that the feathers of the upper tail-covert are partly raised and maintained in this position by the elevation of the true tail."

The paper was accompanied by coloured drawings, representing in detail the muscular apparatus in the tail of the peacock. June 18, 1844.

Read a memoir "On the *Medusa proboscidalis* of Forskähl." By Professor Edward Forbes, F.L.S., &c.

The author met with this Medusa on the coast of Asia-Minor, and communicates the result of his examination of its form and structure. The umbrella of the specimen described measure two inches and three-quarters in diameter, and was perfectly hemispherical and transparent. The margin had a pink border, from which sprung, at regular intervals, six very long extensive tentacula, at the base of which is a minute ocellus. Opposite, and above the origin of each of these tentacula, and on the inner surface of the bell, is a phylli-form space, of a different tissue from the rest of the umbrella. These have hitherto been described as stomachs, but are in reality the ovaries; through the centre of each runs a narrow canal, and between each in the interspace are seven lanceolate, truncate markings. From the centre of the inferior surface, springs a proboscis or peduncle, four inches in length, down which the gastric vessels run; this peduncle is marked by six longitudinal bands of pinkish contractile tissue; at its extremity it bears a hollow bell-shaped body, bordered by six triangular lips: the cavity of this is the true stomach; the gastric vessels spring from it, and go to open into a circular vessel, surrounding the margin of the umbrella.

The author's observations, demonstrating the true position of the stomach and reproductive organs in this animal, do away with the anomalous definition formerly given of the genus *Geryonia*, to which it belongs, and require the substitution of a new generic character, which may be expressed as follows:—

Geryonia, *Eschscholtz.*

Umbrella hemispherica; ovariæ plures phylliformis in circuitu disci; cirrhi marginales distantes; ocelli nudi; pedunculus elongatus, pyramidatus, ventriculum parvum in extremitate gerens; ore lobato, fimbriato. Type, *Geryonia proboscidalis.*

November 5, 1844.

INJUSTICE OF POOR-LAW GUARDIANS TO THEIR MEDICAL OFFICERS—HEXHAM UNION.

[To the Editor of the Medical Times.]

SIR,—From the great interest you take in the welfare of the Poor-law medical officers, I am induced to beg the favour of your inserting the accompanying Summary in the pages of your very valuable and much-esteemed Periodical, at your earliest convenience,—a list of cases, &c., attended by me, as medical officer of the first district of the Hexham Union, Northumberland. Eight months ago, it was proposed by James Kirsopp, Esq., J. P. of the Spital, and seconded by the Rev. C. Bird, vicar of Chollerton, that a gratuity of 20*l.* be presented to me by the Guardians, on [account of the great and unforeseen increase of patients, and necessary consumption of medicines, during the last year. An amendment, however, was proposed by Mr. Matthew Smith, and seconded by Mr. John Ridley, that the motion be considered that day six months, which was carried. I need not add, that it is the case in this, as, I have no doubt, in many other Unions, that a great proportion of the Guardians attend only on days when any finance question is to be considered, and vote against right and reason, so that it may save them a farthing.

I remain, Sir, a subscriber for many years,

THOMAS STAINTHORPE,
M.R.C.S. of England, and L.A.H.

Hexham, Northumberland, Dec. 11, 1848.

HEXHAM UNION—MEDICAL RELIEF OF THE POOR.

A Summary of Cases attended, and Visits, &c., supplied to Poor-law Patients in the 1st District, including the Workhouse and Fever Wards, for the Years ending 25th March, 1847 and 1848.

MR. STAINTHORPE, Surgeon.

Number of Parishes, 7. Area, 1,821 Acres. Population, 6,159.

	Year ending March, 1847.	Year ending March, 1848.
	£ s. d.	£ s. d.
Annual salary	30 0 0	35 0 0
Amount received for extras, including midwifery fees, &c.	17 9 0	18 0 0
Total received	£47 9 0	£53 0 0
Number of cases attended	547	875
Attendances at the workhouse and fever wards, upwards of	365	365
Collective number of visits to patients in workhouse and fever wards ...	4,029	6,988
Ditto ditto, in the district ...	1,781	2,521
Consultations at my own residence...	876	1,092
Total	6,686	10,601
Number of cases of Typhus Fever, included in 875, the number attended year ended March, 1848 ...	...	153
Average Amount received per case ...	s. d. 1 8½	s. d. 1 2½

THE ELECTRIC LIGHT.

[To the Editor of the Medical Times.]

SIR,—There certainly never was a period during which so many new discoveries have been brought to light, as during the last fifteen or twenty years. We are led to wonder how it is that mankind have been surrounded by such strange secrets, and never lighted upon them before. We are surprised to see the greatest results brought about by the simplest means. As illustrations, I need only allude to the application of steam in a thousand forms; to the electro-telegraph, which gives a facility of intercourse that even we ourselves,—much less our fathers,—a few years ago, could not have imagined possible; the discovery of anæsthetic agents, which so materially affect the well-being of the human race; and, last of all, the electric light.

I would throw out as a suggestion, merely,—May not the light which we receive from the sun proceed from a phenomena of a similar kind? May not the luminous atmosphere which surrounds the sun consist simply of an electrical fluid, so impressed upon by an influence proceeding from the sun's body as to become luminous? I do not think that the absence of heat in the electric light at all invalidates the correctness of this supposition; as we know that in the electric fluid, concerned in its production, is contained an influence which is able to produce all the effects of the most intense degree of heat, as the deoxidation of potass, &c. And the sun's influence over the electric fluid may be such as to cause the development of heat and light simultaneously; and I hesitate not to pronounce it as my opinion, that as, in the oxy-hydrogen blow-pipe, the interposition of a piece of lime causes that jet of flame which was before exerting a high degree of calorific power to be-

come brilliantly luminous, so will it be found that, in the electric light, the principle of heat is as intensely present as that of light, and may be, by the employment of proper agents, as powerfully developed.

I am, Sir, your obedient servant,
Dec. 7, 1848. SPERANS.

THE ILL-TREATED NAVY ASSISTANT-SURGEONS.

[To the Editor of the Medical Times.]

SIR,—Knowing the interest you take in the welfare of our profession, and that you are ever ready to redress its grievances, I beg to send you a few extracts of a letter just received from a senior assistant-surgeon in the Mediterranean fleet, by which your numerous readers can judge of the feelings of dissatisfaction very naturally entertained towards this most illiberal service, as my correspondent justly styles the navy:—

"I have now been in H. M. S. ——, have been on one of the best stations, and in the most interesting parts of the world for the last four years, yet I am not one bit more reconciled to this service. The more senior I grow both in the service and in years, the more humiliated I feel at the position I occupy in life.

"When I consider my present position, and reflect upon the bright hopes which I indulged in, when leading with you the happy life of a student, I almost curse the day I ever entered the navy. My habits, my disposition, my very nature has changed. I was then full of hope, now a disappointed dissatisfied man—ashamed to state candidly to my friends at home the unmanly position this illiberal service compels me to occupy. Would to heaven I could foresee some prospect of leaving it."

Thus writes an accomplished man, and one who has received many honours at college—

"*Ex uno disce omnes.*"

I have the honour to be, Sir,
Your very obedient servant,
MORTAR.

Portsmouth, December 12.

ON THE USE OF DIURETICS IN DIABETES.

[To the Editor of the Medical Times.]

SIR,—Of the various remedies tried for the cure of diabetes, I have not anywhere heard of diuretics, which I think are indicated in this disease. True, there is a profuse evacuation in it, by the kidneys; but this evacuation is not urine. Now, these remedies for deficient secretion of urine seem very likely to have their influence at this time also. Opium has been given with avail to some extent; but how does it act? Is it the astringent, or the narcotic, or the stimulant powers, that act? Perhaps all of its properties are requisite for it to produce its effect. As colchicum is diuretic, it suggests itself also for trial. There are many others, however, which may be tried. All I wish is, to suggest diuretics in diabetes.

I am, Sir, most respectfully,
J. B.

Newcastle-on-Tyne, Dec. 6, 1848.

UNIVERSITY OF LONDON.

MD. EXAMINATION.—1848.

MONDAY, November 27.—Morning, 10 to 1.

COUSIN AND BUTLER'S ANALOGY.

Examiner, Mr. Alford.

1. To what school of philosophers does Locke belong? Illustrate its character and tendency from his works.

2. Who were his most celebrated followers? Trace the tendency of the school through their writings.

3. What great mistake, according to M. Cousin, has Locke committed at the outset of his Essay? Give the substance of Cousin's remarks on Locke's confusion of the logical and chronological conditions of our ideas, and exemplify them. Do those remarks appear to you to be just?

4. Give a brief outline of the contents of the Essay on the Human Understanding.

5. Explain the word "Analogy" as applied to Butler's argument: and give a summary of the principal points treated of in his Part I.

6. State at length the reasoning by which he establishes the *justice* of the moral government of God.

MONDAY, November 27.—Morning, 10 to 1.

BACON AND STEWART'S OUTLINES.

Examiner, Mr. Burcham.

1. In what sense is the word *axiom* used by Bacon? What objections may be made to such a distribution? Explain accurately his inductive method, and point out the difference between that and other methods of induction.

3. "Doctrina de Idolis similiter se habet ad interpretationem naturæ, sicut doctrina de Sophisticis Elenchis ad Dialecticam vulgarem." Explain the above, and give Bacon's classification of the general sources of error.

4. What does the term *consciousness* denote? Why cannot we properly be said to be conscious of our own existence? How do you explain the question of *mental identity?*

5. "La philosophie, oubliant ce qu'elle doit aux signes de la pensée, a quelquefois accusé la parole d'être un obstacle au mouvement de l'esprit et aux progrès de la raison. Aucune erreur ne semble plus naturelle quand on songe aux vices des langues, aux abus qu'on en ont toujours fait, et que ne cessent d'en faire les passions et l'ignorance. Combien, cependant, une telle erreur est éloignée de la vérité! car, si l'intelligence de l'homme est l'ouvrage de l'analyse, que serait elle sans des signes, instruments nécessaires de l'analyse? Que serait elle, surtout, sans le signe par excellence, la parole?" Translate the above, and show that language is necessary to intellectual improvement.

6. State and criticise Clarke's *à priori* argument for the existence of a Deity.

MONDAY, November 27.—Afternoon, 3 to 6.

COMMENTARY ON A CASE IN MEDICINE.

CELSUS DE RE MEDICA.

CASE IN MEDICINE.

Examiners, Dr. Billing and Dr. Tweedie.

A. M., aged 22, of intemperate habits, was subject to occasional attacks of articular rheumatism, one of which was accompanied by severe pain in the left side, cough, and expectoration tinged with blood. Seven days afterwards, the pain and swelling of the joints suddenly disappeared, and the pectoral symptoms became much aggravated.

The breathing was accelerated, the pulse quick and hard, and the sputa tenacious but uncoloured. The heart was felt to pulsate two inches to the right of the sternum under the fourth rib: the lower two-thirds of the left side of the thorax were dull on percussion, as well as a portion of it two inches to the right of the middle of the sternum. Over the upper third of the left side of the chest the respiratory murmur was pure but intense: in the lower two-thirds it was absent, with the exception of a blowing tubal sound heard at the side of the spine. It was natural over the right side, except over the lower portion, where it was rather coarse. Œgophony was strongly marked behind the left side and slightly behind the right. A fine friction-sound was audible over a very small spot to the right of the lower end of the sternum, which ceased when the breathing was suspended. The disease progressed, and death took place three weeks from the commencement of the symptoms.

State your opinion, 1. as to the nature of the disease; 2. describe the morbid appearances you would expect to find on inspection of the body after death; and 3. mention the indications of treatment, and the measures you would have adopted.

CELSUS.

Examiners, Dr. Billing and Dr. Tweedie.

Nonnunquàm etiam lentæ febres sine ullâ remissione corpus tenent: ac neque cibo neque ulli remedio locus est. In hoc casu medici cura esse debet, ut morbum mutet: fortassè enim curationi opportunior fiet. Sæpè igitur ex aquâ frigidâ cui oleum sit adjectum, corpus ejus pertractandum est, quoniam interdùm sic evenit ut horror oriatur, et fiat initium quoddam novi motûs; exque eo, quùm magis corpus incaluit, sequatur etiam remissio. In his frictio quoque ex oleo et sale salubris videtur. At si diù frigus est, et torpor, et jactatio corporis, non alienum est in ipsâ febre dare mulsi tres aut quatuor cyathos, vel cum cibo vinum benè dilutum. Intenditur enim sæpè ex eo febris; et major ortus calor simul et priora mala tollit, et spem remissionis, inque eâ curationis ostendit. Neque herculès ista curatio nova est, quâ nunc quidam traditos sibi ægros, qui sub cautioribus medicis trahebantur, interdùm contrariis remediis sanant. Siquidem apud antiquos quoque ante Herophilum et Erasistratum, maximèque post Hippocratem fuit Petro quidam, qui febricitantem hominem ubi acceperat, multis vestimentis operiebat, ut simul calorem ingentem sitimque excitaret. Deindè, ubi paulùm remitti cœperat febris, aquam frigidam potui dabat; ac si moverat sudorem, explicuisse se ægrum judicabat: si non moverat, plùs etiam aquæ frigidæ ingerebat, et tùm vomere cogebat. Si alterutro modo febre liberaverat, protinùs suillam assam et vinum homini dabat: si non liberaverat, decoquebat aquam sale adjecto, eamque bibere cogebat, ut movendo ventrem purgaret. Et intra hæc omnis ejus medicina erat: eaque non minùs grata fuit his quos Hippocratis successores non refecerant, quàm nunc est his quos Herophili vel Erasistrati æmuli diù tractos non expedierunt. Neque ideò tamen non est temeraria ista medicina; quia plures, si protinùs à principiis excepit, interimit. Sed, quùm eadem omnibus convenire non possint, ferè, quos ratio non restituit, temeritas adjuvat: ideoque ejusmodi medici melius alienos ægros, quam suos nutriunt. Sed est circumspecti quoque hominis et novare interdùm, et augere morbum, et febres accendere; quia curationem ubi id quod est non recipit, potest recipere id quod futurum est.—*Lib.* iii. Cap. ix.

EXAMINATION FOR HONOURS.

MONDAY, November 27.—Afternoon, 3 to 6.

CASE IN SURGERY FOR COMMENTARY.

Examiners, Sir Stephen L. Hammick and Mr. Cæsar Hawkins.

"Mr. T., about 50 years of age, a robust man, rather inclined to corpulence, of very florid complexion, accustomed to good living, and of full habit, was thrown from his horse, and received a slight wound of the scalp, in the very hot weather of 1826. Feeling little inconvenience from the accident after its immediate effects had subsided, he continued his usual mode of living, and went for two or three days from his residence to the City, a distance of four or five miles. Severe inflammation of erysipelatous character came on, commencing at the wound, extending gradually over the scalp and face on the same side, and causing considerable swelling, with closure of the eyelids. In the course of four or five days, he was thrice bled to the amount of twenty ounces on each occasion, and was subjected to the other parts of the antiphlogistic plan. When I saw him at the end of this time, the scalp on the left side of the head was slightly red, and raised into a general elevation, apparently by matter diffused through the cellular texture under the aponeurosis near the wound, and by serous effusion in the circumference. There was a small opening through the inflamed and swollen scalp on the left parietal bone, the original wound; and another, about three inches further back, which had been made to let out matter. Through these a well-formed pus could be slowly squeezed. The face was red, and swollen with erysipelas; the tongue was of a dirty white all over, and rather dry; the pulse full, but not very strong.

"As the openings were manifestly inadequate to the discharge of matter, which could be pressed towards them from a considerable distance, and as the suppuration was extending under the aponeurosis, I laid the two apertures into one, dividing an artery which bled freely. This was allowed to bleed on, as I thought a further loss of blood necessary, although the patient was averse to the measure. The bleeding was continued until faintness came on,

when the artery was tied: the blood, which had been caught in a basin, amounted to more than twenty ounces. (Two grains of calomel with two of James's powder, every six hours; saline medicine with saline aperients: milk diet.)

"Mr. T. slept well, and was much better the next day, the tongue being particularly improved. He continued the medical treatment with slight variations; the inflammation and suppuration of the scalp were arrested, but the erysipelatous redness and swelling passed over to the opposite side of the face. In about a week he began to take the subcarbonate of ammonia, and he recovered quickly and completely."

In commenting on this case, you will describe the varieties of erysipelatous inflammation likely to follow a scalp wound, and you will explain such modifications of the local and general treatment as these varieties require, with your reasons for them; pointing out what circumstances may, in your opinion, indicate a line of treatment similar in kind or in degree to that adopted in the above case.

MONDAY, November 27.—Afternoon, 3 to 6.

CASE IN MIDWIFERY.

Examiner, Dr. Rigby.

Mrs. H., ætat 22, primipara; strong and well made; reckons from May 10.

Feb. 12. Pains came on early this morning. The practitioner made his first examination at twelve, and found the os uteri nearly dilated; at one it was fully dilated, the head presented, and he thought he could distinguish that it was in the third cranial position. The pains became very lingering, a small bladder of Liq. Amnii had gathered at six o'clock, when he ruptured the membranes, and a considerable quantity of water dribbled away. The pains became more severe, but no expulsive efforts were made by the patient; at nine o'clock, as she was becoming exhausted, he applied the short forceps and delivered her of a very fine living male child. The placenta followed easily. Shortly afterwards she had a good deal of pain in her back and loins, owing to the presence of a small but firm clot of blood which external pressure enabled the uterus to expel.

Feb. 13. Quite easy; has passed a good night; the child has taken the breast well.

Feb. 14. Has passed a very restless night; much pain of abdomen, which is very full and distended; pulse 125; the bowels have not been opened since the day before yesterday.

℞ Hydr. chloridi; Extr. Lupuli aa gr. vj. mist. Pil. ij. statim sumendæ. Haust. Sodæ potass. tart. quartis horis.

Feb. 15. Bowels very copiously relieved of much unhealthy matter; pulse 88; feels easy.

Feb. 16. Is doing well.

1. What must have been the position of the fontanelles of the child's head if it had presented as the practitioner supposed?

2. What was the probable cause of the lingering pains?

3. What was the nature of the after attack?

4. What is your opinion of the treatment?

TUESDAY, November 28.—Morning, 10 to 1.

MEDICINE.

Examiners, Dr. Billing and Dr. Tweedie.

1. Sketch the pathology of spontaneous hæmorrhages, including their local and constitutional effects.

2. Describe the forms of acute rheumatism, with the complications that arise in its progress. Give an outline of the treatment.

3. Give the diagnostic characters and treatment of delirium tremens.

4. Describe the anatomical characters, diagnostic symptoms and terminations of inflammation of the cæcum. How should it be treated?

TUESDAY, November 28.—Afternoon, 3 to 6.

MEDICINE.

Examiners, Dr. Billing and Dr. Tweedie.

1. Describe the varieties of periodic fevers, their causes and complications.

2. What are the indications to be kept in view in the treatment of epilepsy, and the best means of fulfilling them?

3. Describe the causes and physical signs of dilated bronchi.

4. Sketch the symptoms of inflammation of the iris. Enumerate its forms, and give an outline of the treatment.

M.D. EXAMINATION.—1848.

FIRST DIVISION.

	Medical Schools.
Barnes, Robert.....	Adjoining St. George's Hosp.
Brinton, William....	King's College.
Browne, Henry.....	King's College.
Parsey, Wm. Henry..	King's College.
Payne, Arthur James	King's College.
Russell, James.....	King's College.
Sibson, Francis	University of Edinburgh.
Smith, Wm. Tyler ..	Bristol Medical School.
Whittle, Ewing	Coll. of Surgeons in Ireland.

SECOND DIVISION.

Pyper, R. Deverell .. Middlesex Hospital.
Randall, John ..... St. Bartholomew's Hospital.

Dr. Sibson was recommended by the Examiners for the gold medal, for his commentary on a case in medicine.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE FELLOWSHIP.

Under this head, we last week stated, that six gentlemen had entered their names for examination for the above honour; out of which number Mr. Owen Richards, of Bala, Merionethshire, was the only successful one.

The following are copies of the questions which each gentleman was expected to answer in writing, and were submitted to the candidates, on the 5th inst., viz.:—

ANATOMY AND PHYSIOLOGY.

No. 1.

1. Describe the structure of the shoulder-joint, with the situation and actions of the several muscles moving it.

2. Describe the course of the brachial artery, with its relations to the adjacent muscles, vessels, and nerves.

3. Describe the course of the aorta in the abdomen, and enumerate its branches in the order of their origin.

4. Describe the mode of formation, course, and termination of the vena cava inferior, and enumerate the branches which it receives.

5. Describe the situation and connexions of the stomach.

6. In what manner are an ordinary inspiration and expiration effected; and in what manner does the air which is expired differ from that which is inspired.

No. 2.

1. Describe the larynx, its cartilages and their connexions with each other, its muscles with their actions, its vessels and nerves.

2. Describe the course, relations, and distribution of the pudic artery in the male, especially its relations to the parts concerned in lithotomy.

3. Describe the distribution of the second and third divisions of the trigeminal nerve.

4. State the present views of the functions of the spinal cord.

5. State the present views of the mode in which digestion of the food in the stomach is effected.

6. What are the functions of the skin?

DECEMBER 7.

SURGERY AND PATHOLOGY.

No. 1.

1. Describe the characters and treatment of aneurism of recent occurrence, from a wound in a large artery.

2. What proceeding is to be adopted in a case of strangulated hernia, in which the intestine is found in a gangrenous state?

3. What consequences ensue from a rupture of the urethra by a fall on the perinæum, and what is the treatment which such a case requires?

4. What is the treatment required in a case of effusion of urine into the perinæum, the consequence of ulceration of the urethra behind a stricture?

5. Describe the characters of the several dislocations which occur to the hip-joint.

6. In a hæmatocele, what is the condition of the testicle and its coverings? What is the treatment suited to this disease?

No. 2.

1. State the various circumstances under which inflammation of veins occurs. Describe its local effects, also the constitutional derangement which usually accompanies it.

2. Describe the effects of inflammation in periosteum, in the compact, and in the cancellous tissue of bone.

3. Give the history of iliac and [of psoas abscess, in respect to its origin and progress; also state the connexion which each has with disease in the spine; also the treatment of each.

4. State the comparative advantages of amputations performed with flaps, and by circular incisions.

5. Under what circumstances may the operation of paracentesis thoracis be required? State the proper mode of performing it in different cases.

6. State the diagnosis of rheumatic from other affections of joints; also the effects of rheumatism on joints, and the treatment of it.

MEDICAL REFORM.

The Quarterly Meeting of the Council of the National Institute of Medicine, Surgery, and Midwifery, was held on Wednesday, the 13th instant, at the Hanover-square Rooms. A much larger number of members than usual attended, particularly provincial members, and letters were received from many of the absent members of Council, expressing great regret at being unable to attend from other engagements. The "Report" issued by the Council at their last meeting, upwards of 2,500 copies of which have been distributed, has elicited the warmest approbation from all branches of the profession, and a confident opinion was expressed, that the measures recommended by the "Conference Committee" will be imbodied in a "Bill," and laid before Parliament at an early period in the ensuing session.

The greatest unanimity prevailed at the meeting, and the Council separated with a full determination to assist, by every means in their power, in bringing the question of medical reform to an early and satisfactory settlement.

GOSSIP OF THE WEEK.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise, on Thursday, 7th December, 1848:—Warren Fincham, Samuel Wallace, Carshalton; Robert Woodman, Weymouth; Walter Robert Crouch, Bruton, Somerset; Matthew Gosling, Liverpool.

WAR-OFFICE, DEC. 8.—72nd Foot: Assistant-Surgeon Anthony Dickson Home, from the 3rd West India Regiment, to be Assistant-Surgeon, vice Irwin, deceased.—3rd West India Regiment: Acting Assistant-Surgeon William Johnstone Fyffe, to be Assistant-Surgeon, vice Home, appointed to the 72nd Foot; Acting Assistant Surgeon George Hyde, to be Assistant-Surgeon, vice Browne, appointed to the Staff. *Hospital Staff.*—Assistant-Surgeon William Browne, from the 3rd West India Regiment, to be Assistant-Surgeon to the Forces, vice English, deceased.

CAMBRIDGE, Dec. 6.—At a congregation held this day the following degrees in medicine were conferred:—Doctor of Medicine, John Abercrombie, Caius College; Bachelor of Medicine, Thomas Denne Hilton, Caius College.

OBITUARY.—On the 26th ult., in his 19th year, Samuel Miller, student in medicine at the Newcastle-on-Tyne Infirmary, and second son of the late Luke Miller, of Little Ilford, Essex.—At

Gateshead, in High-street, on Dec. 5, aged 62, Mr. George Stott, surgeon.—At Bensham, on the 30th ult., aged 42, Mr. Thomas Francis Metcalf, surgeon, late of Norton, near Stockton.

ROYAL GENERAL DISPENSARY.—On Wednesday forenoon a meeting of the Governors of this Institution was held at the Dispensary-house, Aldersgate-street, Mr. W. Atkinson in the chair. The report of the medical officers announced, that not a single serious case of cholera had been brought to the Institution; and also the fact, that no case of cholera had as yet occurred within the City of London itself. Diarrhœa was very prevalent, and, in consequence of the extreme mildness of the season, febrile diseases had greatly increased. The return of patients for the last quarter showed a serious increase over the other quarters of this year, and also over the corresponding quarter of last year. From the 1st of July to the 30th of September, 4,641 patients were treated, and it was expected that the total number of patients for this year would not fall far short of 15,000, whilst a few years since the number seldom exceeded 5,000 or 6,000. The funds of the Institution were, of course, fully drawn upon, and public assistance was solicited. Of the patients treated during the last quarter, 1,869 were cured, 786 were relieved, 37 died, and 1,949 remained under treatment. The powers given to the medical officers in cases of cholera were then continued, as a standing rule of the Institution, viz., that diarrhœa and other premonitory symptoms of cholera should be considered as urgent cases, and relief extended at any hour of the day or night.

THE CHOLERA.—EDINBURGH.—The returns since our last of this disease vary much, but cannot be said to show a decrease either of new cases or of deaths. The number of new cases was on Wednesday, 7; Thursday, 10; Friday, 10; Saturday, 6; Sunday, 4; Monday, 4; Tuesday, 12. The deaths were:—On Wednesday, 3; Thursday, 4; Friday, 6; Saturday, 5; Sunday, 6; Monday, 4; and Tuesday, 5. The number of recoveries seems to be on the increase, there having been 24 reported since our last. No cases have been reported in Leith since last publication. At Loanhead on Tuesday last, there was one new case. In the parish of Duddingstone there was one fatal case on Thursday; and on the same day there was one death at Silver-Knowes, in the parish of Cramond. In Prestonpans there were two fatal cases on Monday.

GLASGOW.—According to the police reports, which are not given as quite authentic, the following is the number of new cases in Glasgow:—Tuesday, 5; Wednesday, 3; Thursday, 5; Friday, 2; Saturday, 2; Sunday, 4; Monday, 2; in all, 23. The deaths during that period have been 10, viz.:—Tuesday, 1; Wednesday, 0; Thursday, 3; Friday, 2; Saturday, 1; Sunday, 2; Monday, 1. In Rothesay there has been 1 fatal case; in Cadder, 1; and 1 also in Falkirk. In Ruthwell there have been 4—2 fatal.

DUMFRIES.—Cholera was very severe in Dumfries during the last week, there having been on Wednesday 23 cases; Thursday, 14; Friday, 26; and Saturday, 9. The deaths were on Friday, 6; and Saturday, 3. In Maxwelltown there were on Friday 3 new cases, and 5 deaths; on Saturday, 12 cases, and 5 deaths. Since the first appearance of the disease, there have been in Dumfries and Maxwelltown up to Thursday, no fewer than 289 cases, and 87 deaths, amounting to about one-half of the cases which have occurred in Edinburgh, though the prevalence of the epidemic here has been spread over a longer period, and among a larger population. Dr. Sutherland, from the Board of Health, in London, has arrived in Dumfries, to render his assistance. Four additional medical men have been engaged in Glasgow, to proceed to Dumfries.

KELSO.—There have been four cases of cholera since Wednesday last, two of which proved fatal, and two remain under treatment.

COLDSTREAM.—There have been eleven fatal cholera cases in that town; and the epidemic has also made its appearance in the village of Carham.

JEDBURGH.—Small-pox is still raging in this place, and with increased virulence and fatal results. It is now nearly a year since it made its appearance amidst the population, and, notwithstanding that lapse of time, is increasing instead of abating, attacking indiscriminately old, young, and middle-aged, vaccinated or unvaccinated.

THERE has been no case of cholera in Berlin since the 21st of November, and on the 28th the last patient was discharged, cured. The city is now, therefore, officially declared free from the disease.

SURGEONS WANTED.—At Grenada much sickness prevails, and the people were greatly distressed from the want of medical aid.

SURGICAL STATISTICS OF THE HOSPITAL OF BARCELONA.—Dr. Mendoza has published surgical statistics of this hospital during the year 1847. From these it appears, that the amputations performed during this period amounted to ten, of which three were of the thigh, four of the leg, two of the arm, and one of the radio-carpal articulation. Out of this number two cases proved fatal (one of the leg and one of the thigh). During this period seven patients were received into the hospital affected with stone in the bladder, of which five were operated on, viz., four adults by the bilateral method; a child, twelve years of age, by the lateral incision; one patient died two months after the operation from acute enteritis. Of three cases of strangulated hernia, one was reduced under the influence of chloroform at the moment when the operation was about to be performed; the other could not be operated on, because the hernia, which presented all the characteristics of congenital entero-epiplocele, was dissociated with the elements of the chord, and the parts were firmly matted together. The third case was that of a female affected with umbilical hernia, which terminated by the formation of two fistulous openings, from which the contents of the intestine escaped, the cure of which was nearly completed, when an attack of indigestion reproduced the original state, and new symptoms of enteritis, which, however, yielded to strict attention to diet, and strong, active injections. M. Mendoza employed in the treatment of fractures the dextrine bandage; and he cites a curious fact of a man, who, having received a gun-shot wound on the head, had a suppurating opening in the parietal region, and in whom the presence of symptoms of cerebral compression seemed to render necessary the application of the trephine. The surgeon found no effusion under the meninges. He plunged his knife into the cerebral substance, and penetrated fortunately into the abscess. The patient, however, eventually died from suppuration in the ventricles of the brain. M. Mendoza reports, in speaking of luxations, a curious fact of a vertical dislocation of the left patella, in which the internal edge of this bone was engaged in the depression between the condyles of the femur, and the external edge had become the interior edge, and the anterior face had become the internal face, whilst the external face had become the posterior face. Great efforts were made to replace the patella in its natural posture, but in vain; and only a slight alteration was produced in the position of the bone. The patient was then placed under the influence of chloroform, and, upon a rapid and forcible flexure of the leg, the patella regained its natural position with an audible noise. The internal condyle of the femur had, in this case, performed the part of Guyat and Wolff's apparatus.

THE UNWHOLESOMENSS OF MERCHANT VESSELS.—In the *London Gazette* of Friday, the 1st inst., there was a notification from the Board of Health to the masters of merchant ships, steamboats, colliers, &c., stating as follows:—"The attention of the General Board of Health having been called to the circumstance, that the first cases of cholera that appeared in Hull and Sunderland occurred on board of merchant vessels in those ports, it appeared to the Board to be very desirable to ascertain the sanitary state of these vessels; and with this view they directed Dr. Sutherland and Mr. Granger to proceed to Hull and make the necessary inquiries. After completing their examination of the commercial shipping at this port, Dr. Sutherland proceeded to Sunderland, and Mr. Grainger to Hamburg. From their statements it appears, that in consequence of the filthy state of the ships, and the inattention to ventilation and to the common precautions for the preservation of the health of the seamen (precautions which, to a considerable extent, are taken in the Royal Navy), there is on board the commercial shipping an excessive amount of sickness and an undue susceptibility to epidemic disease, both amongst the crews and the passengers. From the whole tenor of the information communicated to the Board, it appears that the state of the commercial shipping, at least in the ports examined, has experienced but little improvement since the former appearance of cholera in 1832. * * * From all the information received, it appeared to the General Board of Health that the crews and passengers on board these vessels were in great danger of a sudden outbreak of cholera, under circumstances which far more urgently required assistance than equal populations on shore, who may generally obtain medical aid promptly. After much inquiry, however, the General Board found that the only means in their power of affording the assistance they desired to give to persons on board such vessels, was by circulating information. On consulting with several persons having large interests in this branch of commerce, the Board, with the assistance of Mr. Grainger, prepared a modification of the instructions contained in their first notification." We are glad that the attention of the Board of Health has been called to the condition of our mercantile marine. There is ample room for improvement.

EPIDEMICAL DISEASE AMONGST CATTLE.—Notwithstanding the very serious and fatal disease which has, during the last three years, prevailed among cattle, an epidemic of an entirely different character has lately broken out among horned stock, which prevails at the present time to a serious extent. The first disease, which made such frightful destruction among cows, &c., was exclusively confined to an attack of the lungs, and, despite the efforts of veterinary practitioners, the disease, in the ratio of 95 per cent., proved fatal. The complaint had scarcely diminished in its destructive results before the present epidemic made its appearance in the sheds of the cowkeepers of the metropolis. The disease, although not attended with such fatal results, still, from its singular character and nature, completely baffles the skill of the cow-leech or professional man, and very mature deliberation was required before the proper and necessary mode of treatment was arrived at. The prevailing epidemic consists of a species of ulcers, which form in the mouth and on the tongue of the beast, the feet being similarly affected. The blisters thus formed, the animal is rendered quite unable to take its food, although the appetite and inclination are apparently good; the tongue becomes entirely stripped of the upper surface, the skin peeling off in large flakes; and this progress of the disease continues seven or eight days, and from the tenderness of the tongue and inability of the animal to feed, it becomes greatly reduced in condition, and the produce of milk is comparatively nothing; the feet remain tender, and in many instances the hoof separates from the foot. That the disease is contagious is an indisputable and unquestionable fact. The malady is considered a foreign introduction.—*Sherborne Journal.*

PECULIAR DISTRIBUTION OF THE HUMERAL ARTERY.—M. Struthers has noted a singular distribution of the humeral artery, which, instead of proceeding in the cavity following a line drawn upon the internal face of the bone to the middle part of the bend of the elbow, continued its course towards the internal condyle, and then, proceeding forward, passed under the arch formed by the spleniform process of the humerus, and completed by a peculiar ligament. The median nerve followed the same course as the humeral artery.

SPONTANEOUS PHOSPHORESCENCE OF CERTAIN VEGETABLES.—The phenomena of luminousness in living vegetables have lately been observed in phanerogamous plants, and eight or nine of the cryptogamia. The fungi, and amongst them the rhizomorpha, possess phosphorescent properties.

M. Tulasne constantly observed a luminous appearance upon certain decayed parts of vegetables, upon the moist leaves, and small branches of oak covered with moss in the forest of Sèveres. According to this author, oxygen water and caloric combine to produce phosphorescence, as much in living beings as in those which are deprived of life. The fungi are not only luminous at certain times during their life, but they are also in a state of decomposition, capable of re-producing a phosphorescent appearance, as well as the wood and leaves of trees, the pulp of fruits, and generally substances of organic origin.

Adulteration of Sulphate of Quinine with Sulphate of Lime.—M. Borsarelli, chemist and pharmacien of Turin, has given the following method of detecting an adulteration most frequently practised. Dissolve in a phial, by means of a gentle heat, 2 grammes of sulphate of quinine in from 120 to 150 grammes of alcohol at 40°. If the solution remain clear, it is an indication that the quinine is unadulterated with sulphate of lime. If, on the contrary, the liquid is agitated or become opaque, it eventually deposits a sediment. Decant the alcoholic solution, and add fresh alcohol. The insoluble portion is to be treated with from 100 to 120 grammes of hot water to dissolve the sulphate of lime. The solution is then divided into two parts: in the one chloride of barium must be poured, into the other oxalate of ammonia. Two precipitates are obtained; the one sulphate of baryta; the other oxalate of lime, known by their peculiar characters.

Decomposition of Bread.—The Board of Health of Bordeaux has investigated lately a species of decomposition of bread which had been discovered in various localities in the vicinity of Bordeaux. It has been ascertained, that this deterioration is occasioned simply by a microscopic fungus, —*oidium aurantiacum*,—of which the origin and manner of reproduction are unknown. Numerous facts have proved,—1st. That when this fungus is once implanted in a locality, it may develope itself in bread made of perfectly pure and healthy flour, as well as in any other organic matter placed in the proper conditions of heat and moisture; 2nd. That the *oidium* requires for its production a moist air, and a temperature of 78 deg. Fahr; 3rd. That everything tending to diminish heat and moisture, is fatal to the production and development of this fungus; and 4th, that its development in bread may be altogether prevented by using a smaller quantity of water in making the dough than usual, making the loaves no heavier than 10lbs., subjecting the dough to a gradual and slow baking of somewhat longer duration than usual, and, above all, by avoiding heaping the loaves in large piles, and placing them in moist and hot spots after their removal from the oven.

Cholera.—Mr. Belling, of Lower Edmonton, late Medical Officer of the Bodmin Union, recommends that, on the first appearance of any symptom of the disease, the person should be put into a warm bath and kept about 20 minutes, when he is to be wrapped in a blanket and placed in bed between two other blankets; a tea-spoonful of the flour of mustard, made into a paste with a little water, is then to be given, and instantly washed down with a half-pint of warm water, in which has been previously dissolved two table-spoonsfull of common salt; this quickly acts as an emetic, the spasms subside, the pulse and heat of the skin return, and the patient in a few hours becoming convalescent, is, in the space of a few days, able to resume his labour.

Taking a Dose.—A surgeon in the navy, who was in the habit of prescribing salt-water for the men, fell over-board one day, while angling. The captain, who was at the time on deck, heard the splash, and inquired of a sailor, near him, what it was. "Nothing," replied Jack; "only the surgeon, gone to his medicine chest for a dose, sir."

An Army Surgeon.—Dr. R. Jackson says:—"I have wandered a good deal about the world, and never followed any prescribed rules in anything. My health has been tried in all ways, and, by the aid of temperance and hard work, I have worn out two armies in two wars, and probably could wear out another before my period of old age arrives. I eat no animal food, drink no wine or malt liquors, or spirits of any kind. I wear no flannel, and neither regard wind nor rain, heat nor cold, where duty is in the way."

Humanity of Guardians.—The *Leicester Mercury* states, that a worthy poor-law guardian, opposing sanitary reforms at the Board, gravely made use of the argument, that cleanliness would cut up the trade of the coffin-makers!

A New Chair, adapted to the Practice of Dental Surgery.—We have examined a chair, to be used in the practice of dental surgery, which has been invented by Mr. Gilbert, a surgeon, of Suffolk-place, Pall Mall, and which presents very ingenious and useful peculiarities. Its chief feature is, that it removes the fulcrum required in the extraction of teeth out of the mouth, so that the jaw is not liable to sustain injury. It consists of a padded and easy seat, with arms; a moveable back, which can be readily let down to any inclination, and which (the back) at its summit is semicircular, so as to receive and retain steadily the head of the patient. At the right hand side is let in a strong circular steel bar; on this runs another, at right angles, which can be promptly fixed by a screw at any required height. The cross bar, at its termination, holds a flat piece of metal, which being covered by lint, is brought opposite to, or within, the mouth, and serves as the fulcrum for the forceps used by the operator to rest on. In extracting the teeth of the lower jaw, the forceps is placed superiorly to this fulcrum. In the removal of teeth from the upper alveoli, it is only necessary to let down the back of the chair, when the operator, standing behind the patient, makes the inferior surface of the bar his fulcrum, and proceeds to extraction in exactly the same manner as in the former case. The forceps having grasped the tooth, the operator, with a single movement in one direction, raises the latter out of its socket.

Plantagenet Guard Razor.—One of these instruments has been sent for our inspection. This razor can be used by the operator with perfect security in almost any situation—in bed, on a railway, or even in a carriage on the common roads. This guarded razor is really a useful invention.

MORTALITY TABLE.

For the Week ending Saturday, Dec. 9, 1848.

Causes of Death.	Total.	Average of Five Autumns.
All Causes	1,146	1,154
Specified Causes	1,146	1,149
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	370	270
Sporadic Diseases:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	43	52
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	113	127
Diseases of the Lungs, and of the other Organs of Respiration	188	222
Diseases of the Heart and Blood-vessels	42	38
Diseases of the Stomach, Liver, and other Organs of Digestion	60	67
Diseases of the Kidneys, &c.	13	12
Childbirth, Diseases of the Uterus, &c.	6	14
Rheumatism, Diseases of the Bones, Joints, &c.	6	8
Diseases of the Skin, Cellular Tissue, &c.	..	2
Old Age	43	64
Violence, Privation, Cold, and Intemperance	30	32

London Hospital.—A Quarterly General Court of the Governors of this Institution was held last week in the Board-room of the Hospital, when the following returns were received:—The patients discharged during the last quarter amounted to 1,101 of whom 648 were cured, and 397 relieved; 56 patients died. The patients now in the hospital were 316, and there were 2,549 out-patients on the books. The new buildings are completed, but the Committee requested the assistance of the public to render the funds commensurate with the increased capabilities of the Hospital. In 1846, the expenditure, including repairs, extensions, and improvements, amounted to 16,736*l.* 3s.; and, in 1847, to 15,146*l.* 12s. 10d. The estate and effects of the hospital, at the commencement of the present year, was 190,431*l.* 9s. 5d., whilst the debts due amounted to 2,619*l.* 18s., and this showed an improvement this year in the hospital estate of 2,826*l.* 14s. 9d. Since the last Report, 22,152 patients had been admitted, and the mortality in the hospital had very much decreased during the last few years, and more especially since the completion of the new sewers, and the discontinuance of the use of heated air in the wards. In 1837, the deaths were 14 per cent. on the number of patients. In 1839, when the sewers were completed, the deaths were 9½ per cent. After the opening of the new wing, in 1842, the deaths decreased to 8 per cent., and 7 and 6 per cent. in the two following years; and, in 1847, the deaths were 6¾ per cent. The greatest number of deaths which occurred in one year was in 1835, when 418 patients died, being rather more than 150 above the average.

TO CORRESPONDENTS.

"A Navy Assistant-Surgeon."—We are obliged for the compliment, and we shall not cease to advocate the rights of the much-injured class of medical officers to which our Correspondent belongs. We feel confident that the remonstrances which are constantly made will eventually induce the Admiralty to grant that measure of justice which is due to the Navy Assistants. We agree with our Correspondent, that unless this be speedily done, no talented young men will offer themselves for the service.

"Castigator"'s letter is not suited to our columns.

"Dr. Reader."—The suggestions are good. The promised articles would be acceptable.

"A Regular Reader."—A memorial must be addressed to the Committee through the Chairman; and, in all probability, an early answer will be given.

"Bolus."—The Company will not prosecute.

"Inquirer."—They have been properly held responsible.

"Medicus."—The laceration of the muscles and vessels of the neck may be observed in both instances.

"Beta."—There is always great difficulty of performing the operation after death, as the air passes down the œsophagus.

"Leonard."—We have already received several communications on the subject; the offer is, therefore, declined.

"M.R.C.S."—The Registrar of the University is the proper person to whom the letter should be addressed.

"A Poor-law Surgeon."—The statistics would be useful, as tending to illustrate the injustice of the system.

"Lector."—We cannot agree to the proposition without being put in possession of the name and address of our Correspondent.

"Civitas Lond."—The registration is conducted by the Conservator of the Museum, or by a substitute, for whom he is responsible.

"Studens."—Clinical Medicine and Clinical Surgery must not be attended at the same time.

"B. B."—By the rules of the service, no assistant can be promoted to the rank of Surgeon till he has served three years in his former capacity; one year of which must be in a ship actually employed at sea. Promotion, however, does not always follow after the expiration of the three years.

"An Articled Pupil."—The Hospital contains a hundred beds, and is recognised by the College.

"M. B. Lond."—The examination at Cambridge may take place any time in the fifth year after admission, but not earlier.

"Lieut.-Col. Parr, Foundling Hospital," is thanked for his obliging communication.

"A Constant Reader, Bristol."—In about two months.

"L. A. S." (1)—Certainly not. (2)—Yes: Apply to G. Ross, Esq., Hanover-square Rooms.

"Kaf."—Communication received. We will endeavour to procure the Numbers mentioned.

"Dr. Kidd, Limerick."—A private communication has been sent.

"A Subscriber, Liverpool."—The quack appears incorrigible. His double qualification does not add to his respectability.

"Mr. Snape, Bolton-le-Moors."—The case shall receive an early insertion.

"Clericus Medicus."—(1) Yes; the fees are various. (2) Not without being liable to a prosecution. (3) The charge could not be recovered at law.

ORIGINAL LECTURES.

LECTURES ON THE RACES OF MEN.

By ROBERT KNOX, M.D., F.R.S.E.
Lecturer on Anatomy, and Corresponding Member of the French Academy of Medicine.

(Continued from page 142.)

SARMATIAN RACE.

In the widely extended regions running northward from the Caspian and the Black Seas, towards the shores of the Icy Sea, there has existed from the earliest recorded times a race of men distinct, as I believe them to be, morally and physically, from all other races. To this race, now a great nation, great at least numerically, I have ventured to give the name of Sarmatæ or Sarmatians. The term Muscovite would, perhaps, be preferable; or Russ, which is the name they are best known by in civilised Europe. Their country has always been just where it is now. Towards the decline of the Roman Empire, we find them mingled with the Slavonians and the so-called Goths; again, some centuries later, they made an attempt by sea on Constantinople. From such attempts they have not yet ceased.

For 250 years they were held in abject slavery by the Mongols, a slavery which seems to have left deep traits of character. The late Emperor Alexander had Tartar features. They are quite peculiar and distinct from all other races. Latest, seemingly, in their advent on the great European field, they have grown suddenly, beyond all precedent in history, into a consolidated power of such extent as justly to alarm all nations of civilized and free men. In a word, they constitute, at this moment, the most formidable nation on the earth. They are the dominant race, *par excellence;* they threaten the civilized world. Napoleon, who foresaw all things possible for man to foresee, early discovered the strength and wealth of the Sarmatian race. Unlike our English writers, he never mistook the character of this most formidable power. "In fifty years," he remarked, "Europe will either be cossacque or democrat." Mysterious but prophetic words! He foresaw the approaching struggle.

The Russian empire in Europe, Asia, and America, contains many races of men: of most of these we need take no account here; its population is essentially composed of three great families: 1st. The Muscovite, or Sarmatian; 2nd. The Slavonian; 3rd. Tartar, or Mongolian. Of the second and third of these races I have already treated, and shall in this Lecture direct attention exclusively to the Muscovite or Sarmatian, using those names as synonymous.

It was Dr. Clarke, of Cambridge, who first, I think, revealed to Europe the true character of the Muscovite. Most persons, even those most friendly to him, were strongly of opinion, that he had exaggerated the unfavourable traits in their character, and denied them those good qualities they obviously possess. One thing is certain, that Dr. Clarke himself died of a diseased brain, which may have influenced the character of his writings. But be this as it may, the Muscovite is now much better known to us as an individual, and as a race, than formerly. As a race, he stands between the rest of mankind and civilization. With him, civil and religious liberty are words without any meaning. As the Slavonian, under the assumed name of Goths and Germans, destroyed, and finally took possession of a great part of the Western empire, so it has always been a favourite effort of the Sarmatian to seize on Constantinople, the seat of the Eastern empire. This is the destiny of race; a secret impulse urges them on from Novogorod to the Balkan.

But before we attempt to guess at the future destinies of the race, let us consider first their physical form, moral disposition, their geographical position; their ideas of property, of religion, of arts, literature, and science. For obvious reasons, I shall but touch on these points; Russia is a sealed book—an armed camp. It holds no relations with other nations of a friendly character. It has no colonies. It is one, undivided: the Slavonian and Mongolian portions of its population, Russia holds in the most abject subjection. They are, moreover, profoundly barbarous, and could be at a moment's notice poured into Europe to crush civilization; they require but an Attila. These races are nearly as they were centuries ago. Besides, the Tartar race is on the decline; its day is past.

Of the true Muscovites I have seen but few. Those I have observed were tall, thin, and rather spare in all respects; their colour sallow, and even dark; hair and beard fair or yellow; forehead hard, knotty, and projecting; centre of the face flattened, and as it were hollowed out; forms unpleasing; eyes square and without expression; a fierce look; trunk of one shape and thickness throughout. This is the Sarmatian. His strength is not proportional to his bulk. Obstinate, semi-barbarous, brutal, his character is yet quite distinct from the Celt and Slavonian. Beauty is extremely rare amongst the race; but the condescending manners of the ladies make ample amends for a fleeting quality intensely prized by men, yet often lost as soon as won. Of qualities spoken of by many travellers and others, with whom I have conversed respecting this race, I mean to say but little. They have been described to me as a race without honour and without principle, liars and thieves. Such statements as these, though I have heard them made by most worthy persons, must be by far too sweeping. There are good and bad in all races. That civilization is low; that they are without arts, literature, or science, which can be called their own, may be admitted. That they are barbarous and superstitious, uncleanly in person, swinishly slavish, and without imaginative or inventive powers, may also be true: still there is, I think, a possibility, nay, a probability, that the Russian has been underrated; and this Europe may presently discover. To me it seems evident, first, that the Muscovite race possess the quality of all qualities the most important in mercantile and similar transactions, namely, perseverance. Industry he has, and accumulative desires have not been denied him. His imitations of the doings of other races are admirable; of his ability to apply the inventions of others to practical points I know nothing. He may, or he may not, have applicative genius; of original talent he seems destitute.

I would here mention his linguistic power; that is, his facility in acquiring a great variety of languages. In this I have been assured he excels all other races. To the Empress Catherine we owe the first polyglot vocabulary ever proposed. It was an original idea, and showed what is rare—inventive genius in a woman. She arranged the materials for this polyglot vocabulary with her own hands, and it was afterwards published. A liberal patron of foreign art and scientific men, she did all in her power to civilize her barbarous subjects. Peter the Great, as he is called, was a boor and a savage. He worked in the naval dockyards of Holland, and drank schnapps with her skippers and shipbuilders. For a Russ he was an able man, and suited to govern his race.

As the Muscovite language is peculiar to the race, so is their music, which is beautiful and singular. I think it must have mingled with the Slavonian, or they may have originated in one basis. They have what are called national airs (meaning the songs of the race), which are extremely beautiful, and possess combinations of notes existing in no other music. Every race has its good and bad qualities. The Sarmatians make good soldiers, and at Borodino contested the field with great obstinacy. But they run when their leader quits the field, as they did at Lutzen and Bautzen, before an army of raw conscripts, led by Napoleon. The Emperor Alexander and his staff fled first across the bridge; his army followed in disgraceful pell-mell. A British merchant, who witnessed the scene, was seized and sent to Siberia for a time for having divulged the disgrace. It is their numbers, and the homogeneity of the race, which renders them so formidable. Their geographical position also favours their nationality. Thus strong politically, and by race, they have extended in a few years their vast empire from the Baltic Sea to Behring's Straits.

If I have neglected to describe the Muscovite as the ablest political race in the world, it is because these lectures are not intended to discuss such points. Nevertheless, it is certain, that, being seemingly unscrupulous, they have ever gained their point. My former student and esteemed friend, Mr. P. Lord, was, I believe, the person who detected their intrigues at Caboul and Herat. A railway from Moscow to the Himalaya, would speedily decide the fate of India. Our little band of English adventurers have no true hold of that country. China and Japan are at the mercy of the Muscovite; it is difficult to understand how they have spared them so long. But Turkey and Poland have hitherto been the great aim of this terrible power, and, perhaps, it felt the want of unity of race in the Empire, for the Slavonian portion detests the Sarmatian. This is the difficulty. They also dread a union of the Scandinavian nations with North and Central Germany; a federal and republican Germany, in fact, which in time would drive them beyond the Vistula. But it is mainly France, that is, the warlike Celtic race, they dread; they know their power, their courage, their union. The visit to Moscow, the accidental destruction of Napoleon's army, the burning of their capital, can never be forgotten. It was on this great question that the poet statesman, the astronomical secretary at war of the Gouvernement Provisoire, lost themselves. "March to the Rhine," were the emphatic words of Lafayette in 1833, when Paris was in the hands of a mob; "War you must have; choose for its *locale* the Seine or the Vistula." The nation, probably, sees their error now; nor is it too late to rectify it. To the Sarmatian I neither have, nor can have, any personal dislike; he merely carries out his destinies as a race.

I had almost forgot to say, that the Muscovites belong to the Greek church; in some measure, they represent it. The eastern Pruss is their cousin, and may give the true German, that is the real Saxons, much trouble in their attempts at re-organization. What the Sarmatian would be, civilized and free, it is impossible to say; great qualities might appear which now lie hid, crushed down by a Government unequalled even in Caffraria.

A COURSE OF LECTURES ON PUBLIC HYGIENE.

DELIVERED AT THE FACULTY OF MEDICINE, PARIS.

BY M. HIPPOLYTE ROYER COLLARD.

LECTURE II.

CLASSIFICATIONS AND METHODS OF HYGIENE.

GENTLEMEN,—In my Introductory Lecture, I endeavoured to define the object, design, extent, and limits of Hygiene. I have to proceed now to the consideration of its classifications and methods.

The teaching of a science, no matter which, may be defined as "the systematic exposition of a certain number of general or special facts, similar in their nature, dissimilar in their respective modes of manifestation." For "systematic exposition," we may simply say "*system*," (Σύστημα, from Συνίστημι, *compono*,) which signifies arrangement, disposition, classification. A proper arrangement or classification of the subject matter constitutes, accordingly, one of the most essential conditions of all scientific instruction.

When man has acquired a certain number of notions on any given subject, his mind is naturally led to arrange them in a definite order, that he may master and possess them the more thoroughly, recollect them the more readily, and, eventually impart them with the greater facility to others.

All the phenomena of nature present analogies in some, differences in other, points.

Take any given group of phenomena—whether disclosed by observation, as in the physical sciences; or demonstrated by reason, or perceived by the mind, as in the mathematical or in the philosophical sciences;—if, notwithstanding the differences existing between them, the phenomena forming the group are linked together by some common characteristic mark which pervades the whole of them—either inasmuch as they pertain to objects or ideas of identical nature, or as the objects or ideas to which they relate are regarded in the same point of view—this group of phenomena evidently constitutes a class of facts more or less clearly distinguished and isolated from all others by the human mind; in other words, it constitutes a special science, distinct from all other sciences.

This special science, or, more correctly speaking, the phenomena which constitute it, may be subdivided again into orders, classes, species, varieties, &c., &c.

The subdivision will always prove the more easy, the more simple the nature of the phenomena to be arranged and classified.

Thus, in mineralogy, chemistry, and even in botany, the classification of the bodies belonging respectively to the provinces of one or the other of these sciences, may be considered a comparatively easy task, being based upon the natural affinities and differences of the various bodies. In such cases, the classification may be termed *natural*.

But when we have to deal, not with groups of bodies alone, but with the entangled wheelwork of complex operations and functions, we must rest satisfied with an *artificial* classification, based chiefly upon certain conventional data.

Thus, in the organism, for instance, we have before us a series of complex facts, closely interlinked with each other. Every action that takes place in the organism is connected with some other action,—nay, with a thousand other actions, occurring all simultaneously, comparable to an infinity of small wheels, catching each other, and set in motion by the same motive power. How is it possible to *describe* all these actions *simultaneously?* Whilst you are explaining one of them, you cannot at the same time explain the others, which yet are inseparably connected with it, either as causes or effects. Words necessarily *follow* one another, whereas the facts occur *simultaneously*. Even the readiest methods, the most comprehensive terms, will fail to portray the celerity and, still more, the simultaneousness of the occurrence of the facts.

Accordingly, all our scientific expositions and explanations, relating to the mechanism of life, are necessarily restricted to mere rude and imperfect sketches of the reality which we wish to describe.

Now, hygiene being, properly speaking, simply a certain study of the conditions of human life, and based upon a knowledge of the phenomena presented by the living organism, all hygienic classification must necessarily be artificial.

The term "*artificial classification*" implies, as I have already remarked, that the arrangement of the subject-matter is not—as in chemistry, botany, and mineralogy—based upon the observation of the differential characters that distinguish the various substances from each other, but upon some general notion of the mind,—some leading idea,—erected into a principle, and constituting a doctrine.

Accordingly, if we wish to establish a classification of the subject-matter of hygiene, we must, in the first place, find the leading idea, lay down the principle, and explain the doctrine upon which the classification is to be based. Now, where are you to find this idea, this principle, this doctrine? Evidently, you will have to derive them from the information which you have already acquired in your previous studies of the other branches of the medical science. Let us pass that information in review.

What has natural history taught you? It has taught you that all the beings of nature form a continuous chain, of which man is simply the last link, and that neither of the links of that chain could continue to exist without the aid of the others.

Chemistry and physics have taught you, that all the bodies of nature (animals, plants, minerals) are formed of one and the same universal matter; and that man himself must be regarded simply as a momentaneous fixation of certain elements, taken from this universal matter, and aggregated under a particular form.

Anatomy and physiology have taught you, that all those complex functions of which our organs are the instruments, require, for their performance, the presence and aid of certain principles or matters from without; thus, for instance, without air we cannot breathe; without food, there can be no digestion; light, heat, electricity, &c., are indispensable conditions to the accomplishment of any vital act.

Pathology has taught you, that the morbid changes occurring in the organism are the results of some hurtful influence from without, either mechanical, or chemical, or moral.

Finally, you have already seen, that hygiene is simply an application of the other branches of the medical science, and is consequently governed by the same laws and conditions.

No matter, then, how and from which side you approach and consider the subject, you will invariably arrive at the same inevitable conclusion, that *no organic body can possibly exist a single instant by itself, and independent of the other bodies of nature.*

This is an incontestable truth, not only as regards plants and animals, but also as regards man.

The human body does not bear within itself the principle and condition of independent existence, but requires for its very entrance into life the aid and concurrence of the other beings of nature; with the cessation of that concurrence, the life of the human body also ceases.

Let us glance for a moment at the manner in which the human body starts into life and continues to exist. During the process of primitive formation, the ovum, an integral part of the maternal organism, is fecundated by the external stimulus which suddenly rouses it from its sleep, and imparts to it a distinct existence. Like unto the ripe fruit that falls from the tree, the new being, after a certain time, leaves its parent stem, and commences life on its own account; it has now become an integral part of the universal organism, and, as such, pursues, without intermission, the process of continuous formation (nutrition), in which it is still every instant fecundated and animated by the incessant action of the outer world.

The same idea has been most admirably expressed by Descartes:—"From the fact that I did exist *a moment ago*, it does not follow that I must *now* still continue to exist, unless some cause generates or creates me anew at the present moment; or, in other terms, maintains me in existence. The *continuance of the existence* of a substance requires the same power and the same action that would be necessary to *generate* that substance if it did not yet exist. It is perfectly clear, then, that *creation* and *conservation* are the same in point of fact, and that they differ only in our mode of thinking." (Cousin's edition of Descartes, Vol. I., p. 286.)

Buffon also calls the nutrition and developement of the body a "*continued generation.*"

Now, if this view of Descartes and Buffon is right, (and that it is so, is perfectly incontestable,) it necessarily follows, that the living body has no more the power of self-nutrition and self-developement, than it possessed, at the moment of its birth, the faculty of begetting itself.

There is not an atom, not a molecule in the living body, that is not continually in direct or indirect contact with all that surrounds it. Everything that comes in contact with the body, whether externally or in the innermost depth of its organs, instantly affects and modifies the organism. All these modifying influences are both analogous and antagonistic to the body, and may thus be either serviceable or hurtful to it, according to the manner in which they are received and dealt with by the organism; and it is thus that from these relations between the human organism and the universe, between the subjective and the objective, result both the unity of the laws that govern the world, and the almost infinite diversity of the vital actions.

Well, gentlemen, if it is incontestable that human life, in its functions, is always simply the consequence of the constant and necessary relation between the living body and the beings and objects which surround it—if health is only the most perfect form of life—and if, on the other hand, hygiene is simply intended to preserve and to perfect the well-being of the organism, it must be quite evident to you that the double object of hygiene (the preservation of health and the perfectioning of the organism) can be accomplished only one way, viz., by insuring constantly a proper equilibrium between the human body and the medium in which the latter is placed.

This, gentlemen, is the principle of hygiene, the leading idea, the fundamental doctrine upon which this science rests, and which, in its generality, must sway and pervade every part of it, even to the most trifling details.

Now, how does this doctrine lead us to the method that ought to be pursued in the study of hygiene, and to a proper classification of the subject-matter of that science?

As I said just now, the leading principle of hygiene is to insure a proper equilibrium between the living body and the surrounding objects; in other terms, to determine in what manner the living body ought to use and to deal with these external objects, so that health may be preserved, and the condition of the organism improved and perfectioned. Now, what is the most natural and rational way to arrive at this determination?

Let us suppose you have before you a given article of food. Are you to make use of this article? and, how are you to make use of it? Here you have necessarily two things to consider—yourself, and the article of food. You have, moreover, to establish a relation between that article and yourself. Well, in the first place, you will examine yourself, your appetite, your taste, the state of your health. In the second place, you will examine the article of food, its appearance, form, colour—the resemblance which it may bear to other articles of food. Finally, you will examine, by observation or by experiment, the effects of this article upon animals, upon man in general, upon yourself. The result of this examination will point out to you whether the article in question is good or bad, wholesome or unwholesome. The same examination will be required to ascertain the proper quantity to be taken of the article: it may be quite wholesome when partaken of moderately, whereas excessive indulgence in it may be exceedingly hurtful. Again, you will ascertain, in the same way, whether you ought to partake frequently or rarely of the article; whether you should take it pure, or mixed with other substances. When you have done all this; when you have collected all the necessary information upon this subject, you will have a rule to guide you.

This is the most simple, natural, and universal method to arrive at the desired determination.

Now, suppose that, instead of an article of food, you have before you any other condition capable of modifying your health—some chemical or physical agent, for instance—cold, heat, exercise, mental labour, &c., &c., you will always have to apply the same process—you will invariably have two things to attend to, viz., to study, and to draw conclusions. To study what? Three different points, viz., the individual, the influence, and the relation of the former to the latter, and the effects of this relation.

To draw conclusions, or, in other terms, to establish as deduction from, or corollary of, your studies, the rules and precepts which are to guide your conduct.

Hygiene distinguishes accordingly always in every one of the questions with which it has to deal, four different sides or parts, viz., the subject, the object, the relation of the subject to the object, and the rules and precepts.

The *subject* is man, considered in his individual varieties—age, sex, temperament, &c., &c.; and in his collective varieties—family, house, workshop, town, nation, &c., &c.

The *object or matter of hygiene* are the numberless influences that act upon the organism.

The series of the divers effects which the object

produces upon the health of the subject, according to its nature, its amount, the order to which it may happen to belong, the duration of its influence, &c., &c., constitute what is termed the relation of the subject to the object.

Lastly, the *rules* are general or variable, according to the diversity of the subject, or the mode of using the object.

Every question, then, that may happen to present itself to the hygienist, is to be treated invariably under two different and successive points of view, viz :—

1. The hygionomic.
2. The hygiotechnic.

Under the hygionomic point of view we have to examine invariably the nature of the modifying agent; the manner in which this agent acts upon inorganic bodies, upon plants, upon animals; upon man, both in a physical and moral point of view. We have to examine, moreover, how this action varies with the age, sex, temperament, &c., &c., of the individual under its influence; and how it varies with the manner in which the agent is applied.

Under the hygiotechnic point of view, we have to ascertain how the relation of the subject with the modifying agent ought to be regulated, with regard to the manner in which this agent may happen to be applied, and also with regard to the age, sex, temperament, &c., &c., of the subject.

This achieved, we have still to examine in what point or points the question before us may be made to bear upon public hygiene, or upon social hygiene. The method which I have here endeavoured to describe and expound to you, is most simple and rational, and has been adopted from the time of the earliest hygienists. All hygienists, from Galen to the present age, have divided the study of hygiene into three parts, viz., the subject, the matter, and the rules. I adopt the same division, but I endeavour to render it more precise, and, at the same time, to give it a wider range, and to adapt it to all the considerations of which hygiene is susceptible, in the actual state of our knowledge and o fur wants.

We come now to the classification of hygiene. Various classifications have been proposed or adopted by the different authorities on the subject of hygiene. Some of these classifications continue still in vogue to the present day. In all of them are to be found some important considerations which ought not to be lost sight of. Every different system may, in fact, be regarded as a peculiar manner of viewing the science, and which brings out, with greater force, certain characteristics; so that the divers classifications, to a certain extent, explain and complete each other.

Hippocrates, though unquestionably the greatest hygienist of all ages, never occupied himself with the *science* of hygiene. For him, medicine was simply an art. He observed the facts, and recorded his observations, without ever arranging them systematically.

Galen, in his Treatise on the Eye, expresses himself as follows :—"He who wishes to restore health must study, 1. The seven *natural things*, which are —the elements, the constitution, the humors, the organs, the forces, the senses, the functions. 2. The six *non-natural things*, viz., the air, the various articles of food and of drink, the secretions and excretions, motion and rest, sleep and waking, the affections of the soul or mind (the passions).

This division of Galen's has been much criticised. It has been objected to it more particularly, that the whole thirteen items are equally natural. Yet, after all, it must be admitted, that Galen has simply clothed in different language ideas nearly identical with our own.

His classification, moreover, has served as a basis for all succeeding ones.

Our illustrious master, M. Hallé, has introduced into the study of hygiene a general plan, which has for many years been exclusively followed at this Faculty. Although my own division deviates from this plan, I deem it necessary, notwithstanding, that you should be acquainted with it. I will, therefore, give a brief outline of it.

Hygiene is divided into three parts, viz.—

The Subject,
The Matter,
The Rules.

PART I.—THE SUBJECT OF HYGIENE.

This is sub-divided into two sections, viz.—

1. The study and knowledge of man (in a state of health) considered in society.

2. The study and knowledge of man (in a state of health) considered individually, or in his difference of age, sex, temperament, habits, profession, &c., &c.

PART II.—MATTER OF HYGIENE.

This is sub-divided into six classes, viz.—

1. *Circumfusa*, or surrounding objects.

Of these we distinguish two orders—

a The atmosphere (air, heat, electricity, &c., &c.)

b Earth, water, localities (climate, soil, &c., &c.)

2. *Applicata*, or matters applied to the surface of the body.

Of these we have five orders, viz.—

Clothing,
Cosmetics,
The necessary requisites for personal cleanliness,
Frictions and unctions,
Medicinal applications.

3. *Ingesta*, or matters designed to be introduced into the organism through the alimentary passages.

Of these we distinguish three orders, viz.—

Articles of food,
Articles of drink,
Prophylactic, non-evacuating medicines.

4. *Excreta*, or matters designed to be ejected from the organism.

Of these we have two orders, viz.—

Natural evacuations,
Artificial evacuations.

5. *Gesta*, or functions which are exercised by the voluntary movements of the muscles or organs.

Of these we distinguish four orders, viz.—

Waking,
Sleep,
Motion,
Rest.

6. *Percepta*, or functions and impressions which depend upon the sensibility and upon the organization of the nerves.

These are divided into four orders, viz.—

Sensations,
Functions of the mind,
Functions of the soul,
Weakening or loss of the perceptive faculties.

PART III.—RULES OF HYGIENE.

Here we have two sections, viz.—

1. Public Hygiene,
2. Private Hygiene,

which are both subdivided again into several sections.

The division of the second part into six classes, and the denominations respectively given to these classes, are in a great measure borrowed from Boerhaave, who, in his "Institutions de Médecine," classifies the occasional causes of diseases as follows :—

Circumfusa,
Ingesta,
Excreta,
Gesta.

To these four classes of Boerhaave's, M. Hallé has added two more, viz.—

Applicata,
Percepta.

It is easy to recognise in these six classes the six *non-natural* things of Galen.

M. Frédéric Bérard, Professor of the Faculty of Montpellier, has published his programme of a course of lectures on hygiene. He divides his subjects into three parts, viz.—

PART I.—INTRODUCTION.

PART II.—GENERAL CONSIDERATIONS.

These are classed in four sections, viz.—

Section 1. Life considered in its general and abstract form.

Section 2. The life of man (considered in his individual or collective capacity).—Age, sex, temperament, health, illness, convalescence, national differences, races.

Section 3. The physical and moral agencies that modify the life of man (considered in his individual or collective capacity).—General remarks on the influence of modifying agencies; on the forces of the organism; on the relations existing between hygiene and geography, history, politics, religion, manner and customs, prejudices, political economy.

Section 4. The art of modifying life for the maintenance and improvement of the state of health, whether individual or public.

PART III.—HYGIENE PROPERLY SO CALLED.

This part is divided into three sections, viz.—

1. Actions of external agents upon man (*Circumfusa, ingesta, applicata*).

2. Action of man upon himself, by the exercise of the various functions (*Excreta, percepta, gesta*).

3. Action of one sex upon the other (*Genitalia*).

The classification adopted by M. Londe is of a quite different character from the preceding ones.

This gentleman applies to hygiene the same method and the same plan which Bichat has applied to descriptive anatomy, and which others have applied to pathology, materia medica, and therapeutics, viz., classification, according to the several functions, such as it has been established for the study of physiology. Accordingly, we have, in Londe's system, the hygiene of respiration, of digestion, of absorption, of exhalation, of locomotion, &c., &c.; and, in each of the chapters devoted to the consideration of one or the other of these functions, the author discusses the divers influences which are either habitually or accidentally connected with them.

ORIGINAL CONTRIBUTIONS.

ON COLLODION, OR SOLUTION OF GUN COTTON, AS APPLIED THERAPEUTICALLY, PARTICULARLY IN DISEASES OF THE SKIN; WITH SUGGESTIONS FOR ITS IMPROVEMENT.

By JAMES STARTIN, Surgeon to the London Cutaneous Infirmary.

Having recently read, in the pages of a contemporary journal, a paper professedly treating of this novel and interesting subject, in which conclusions have been arrived at not altogether in unison with my own experience, I am induced to trespass on your valuable pages, to obtain publicity for the following views and observations.

If it be allowed, that the human dermis is an extended secerning surface, and that the pores or ducts of its perspiratory apparatus perforating the cuticle, number many thousands in each square inch; and also that the amount of exhalation through these pores, in insensible perspiration alone, to say nothing of gaseous products, is at the rate of 24 grains per minute, or 3½ lbs. in the 24 hours; then it follows, that you cannot spread an impermeable varnish over these pores which shall exclude the air and include their secretions, without more or less injury to an important function of the economy; this reasoning at once becomes manifest, when pure collodion is varnished over a few square inches of the cutis, a feeling of increased heat, redness, swelling, and irritation being induced, which, it is well known, are the forerunners of inflammation; but as, in the course of a few hours, the varnish is found to divide or crack, some degree of relief is given to the obstructed capillaries, and nature partly accommodates herself to the new arrangement.

A further corroboration of these views may also be found in that class of experiments by French physiologists, wherein the bodies of animals were enveloped in an air-tight coating or varnish, a proceeding invariably followed by intense physical suffering, and death after the lapse of a brief interval, unless the varnish became destroyed. Again, the human cuticle is admitted to be a highly elastic and extensile membrane, properties which are admirably aided and provided for by the numerous

grooves, folds, and duplicatures abounding throughout its surface, but particularly near the centres of motion; it, therefore, can scarcely be advisable to interfere with this natural state of the dermis, by the application of a rigid and contractile covering such as that furnished by collodion; unless, indeed, we desire to produce other specific effects than to protect parts affected with cutaneous inflammation or ulceration, from the action of the air and external influences, and to afford them the gentle support of an elastic bandage.

It may, however, with some reason be argued, in reply to these propositions, that, in such a case as the one before us, the whole cannot, with justice, be considered to furnish data for practice applicable to a part, and, perchance, a very small part of the entire superficies; yet it must be allowed, that, in treating any integral portion of the human skin, a much better chance of success may be expected to attend our efforts, if our remedies are based upon a knowledge of the requirements of the entire cutaneous surface, and thus rendered as nearly as possible imitative of the structure and properties appertaining to its normal condition.

It will be demonstrated, by the subsequent remarks, that collodion, *uncombined*, will not fulfil the indications above alluded to; but I shall endeavour to make it appear, that it may be rendered in every way serviceable for the purposes desired, by admixture with other substances, and by variations in the mode of its application. For the past three years, I have been endeavouring to find a substance of this kind; and before gutta percha, now so common, was known to the public in this country, I obtained from my friend Mr. Delarue, the eminent manufacturer, a solution of this material, which forms, perhaps, *the most perfect prophylactic known*, being limpid and transparent as water, and drying nearly, if not quite, as rapidly as collodion; until the last two or three months I have been constantly using this solution of gutta percha as a cutaneous varnish; the elastic pellicle it forms most exactly resembling the scarf skin. It also follows, with mathematical accuracy, every minute fold and flexuosity of the cuticle, to which it closely adheres, and is not to be removed without washing with ether or naphtha; yet its surface always remains slightly adhesive, so that it becomes soiled after remaining a short time on the epidermis,—and the smell of the solution is less agreeable and more durable than that of the collodion. Hence, about three months ago, I was induced to relinquish it for the latter agent in the treatment of most instances of cutaneous disease.

It would appear, that Mr. Wilson, (the author of the paper in the "Lancet" I have referred to,) and myself, must have commenced researches on collodion about the same period, a fact, as regards my own practice, well known to the pupils attending the Cutaneous Infirmary; but nothing is more common than for two minds, pursuing the same object, to arrive at similar coincidences. To Mr. Wilson, therefore, be the honour of the suggestions he has published; whilst my claims, if any, must rest upon the improvements I may be considered to have made in the solution as applicable to the complaints in which I am more especially interested, and in the method of its application to some forms of disease, seeming to indicate its employment.

It may be well to premise, that collodion, though deriving its name from a supposed resemblance to glue, has yet very slightly adhesive properties; that is to say, it has little cementing power, and will not serve the purposes for which glue or gum are commonly used. Spread upon a plain surface, as a sheet of glass, it forms a transparent, shining membrane, or pellicle of extreme delicacy, which, when the collodion is very pure, is perfectly diaphanous. In a short time, however, it will be found to have separated from the glass in many points, and to have cracked or divided in various directions, from its great contractile powers; these portions of the pellicle may now be readily removed and examined, when its most striking feature is its highly electric condition; not only will the slightest friction make it adhere to the hand, but any light substance,—as pieces of paper, cotton &c., will be drawn towards it. This pellicle is insoluble in water, oils, or alcohol, but is readily re-dissolved in ether; it is explosive, like the cotton from which it has been formed, but cannot be readily inflamed, unless detached from the surface on which it has been spread. When applied to the skin, collodion, maintains identical properties to these now described; it offers to the eye a highly polished surface, save when moisture may have been encountered, when it becomes opaque and white, like the membrane lining an egg-shell. It is so contractile, that when applied to a part that is not stretched to the utmost by muscular action, it very much impedes, or altogether prevents the exercise of this power; and this hindrance continues until the cracking or dividing process commences, of which mention has been made. It is only necessary for an experimenter to paint over the angles of his closed mouth, or the back of his open hand, to become convinced of the extent of this contractile property, and the degree of resistance it is capable of exercising. Such being a brief outline of the properties of collodion, it must be obvious, that, without modification, it is applicable to very few diseases of the skin; yet, the very qualities that unfit it for many of these complaints, render it a most useful agent in the other cases for which it has been for some time used by continental surgeons, viz., in the union of wounds by the first intention; and it would seem particularly applicable in operations about the face, and as the best means of uniting many delicate parts; for instance—the red portion of the lip in the operation for hair-lip, and of the eyelid, after operations for entropium and ptosis.

Pure collodion may also be advantageously employed as a palliative in the latter case, as also in various paralytic affections of the facial muscles, where the antagonist muscle has distorted the features, the parts being adjusted by the finger to their normal position before the collodion is applied, and this position maintained until the solution is perfectly dry. As a bandage, also, to enlarged joints, of the fingers especially, the pure solution will be found useful; and its pellicle would seem to deserve a trial as an artificial tympanum, where such a contrivance may be indicated, the edges of the new membrane being readily attached to the walls of the meatus by a small brush, armed with the solution in its liquid form. Other instances, where the contractile qualities of collodion may prove of advantage, will, doubtless, present themselves to the surgical mind; but it will not be found so applicable to discharging ulcers, as has been stated, (save in the case of chaps and fissures,) unless applied after the following directions:—Dry the ulcer with bibulous paper; wash over its surface with a large soft brush, wetted with ether; dry a second time with the paper; apply by means of the same, or a second brush, the collodion in a circular manner, so as to cover the edges of the ulcer to a greater or less extent, as may be deemed necessary, and varnish over so much of the ulcer itself, as to leave *a small central opening* for the escape of the discharges. In this way, collodion becomes a most important adjuvant in the treatment of cases that are commonly regarded as the *opprobia* of surgery. I allude to chronic ulcers of the legs; for it will be perceived, that this expedient at once reduces a large sore into a small one, and does not prevent any stimulus judged favourable to cicatrization being applied in the dry form, before the varnishing process is commenced.

I have not found the pure collodion of service in any of the more inflammatory maladies of the skin; and though occasionally advantage has been taken of its contractile properties for a single dressing or so, yet too commonly it has been found to create inconvenience and irritation, and thus add to, rather than diminish the patient's sufferings. In intertrigo and eczema it has appeared to me positively prejudicial; besides, when applied to the face or hands, the stiffness and contortions it occasions, its varnished shining appearance, and dividing or cracking properties, proved fertile sources of constant objection and annoyance; I therefore began to make additions of other ingredients to the collodion, with the three following ends in view:—1st. To render the liquid opaque, and of such a tint as not be distinguished from the skin on which it might be applied, whilst it should conceal defects; 2nd. To remove its great contractility, and render it opaque, more elastic, and more closely resembling the solution of gutta percha I have referred to, without including the unfavourable properties of this solution; and 3rdly. To produce a varnish which should be porous, and thus imitate, as nearly as possible, the natural scarf skin, and thus prevent much of the heat and tumefaction which attends the application of an impermeable covering on the skin.

The first of these objects is readily attained by adding an ethereal tincture of turmeric or saffron, and of red Sander's wood, or alkanet-root, so as to produce the required tint. The second, after numerous experiments, is found to be best accomplished by the addition of a drying, or a fat oil, as linseed, cocoa nut, pure cod liver, or lard oil, previously dissolved in ether; the proportion being half a drachm to a drachm of oil, to an ounce of collodion,—the exact quantity being regulated by the greater or less degree of elasticity and opacity required. It is quite remarkable, how completely this simple procedure will accomplish the desired end; for by its means, and the coloured collodion, so exact a representation of the cuticle can be obtained, that the varnish produced, when applied in a thin coat, cannot be distinguished, as differing from the surrounding skin, without close observation and magnifying power. It would also appear to be equally elastic with the cuticle, whilst its contractility is much modified, or entirely lost, according to the proportions of the oil employed: care must, of course, be taken to *use the best materials only*, or the colour will not be permanent, but liable to change to a yellow dirty hue, whilst it will prove an irritant instead of a soothing application. I have much pleasure in recommending, as a most elegant preparation, the combination made by Allen and Co., of Plough Court, Lombard-street, or of Taylor Brothers, of Vere-street, Oxford-street, under the designation of COLLODION TINCTUM PREPARATUM.

The third object I have alluded to, namely, that of rendering the varnish porous, is also to be obtained by the addition of a small quantity of purified, highly concentrated, nearly anhydrous glycerine (the useful therapeutic agent I introduced through the pages of the *Medical Times* three or four years ago, and which I have every reason to believe has verified, in the hands of many, as it has in my own, all that I then said of it). By this substance the collod. tinct. ppt. can be rendered as soft, as a thin layer of ointment, which it resembles in most respects, save that it forms over the part a uniform covering which is coherent, and not liable to be washed away by slight discharges, or external gentle ablutions, whilst it does not require the support of lint or linen.

Having now detailed, at some length, all the necessary modifications of this new addition to the "appliances and means" of modern surgery, it may be expected I may say a few words as to its practical application and utility. A glance almost at the properties it has been described as possessing, will show that it may, under one modification or other, be used where plaster, cerate, or bandage may be required, and where great strength and pressure is not needed; and also that it admits of the use of various other applications, stimulants, caustics, &c., to the parts afflicted, which can be employed before the collodion is applied. As a simple varnish in cases of chaps, chilblains, and other minor affections of the cutis, at this season so prevalent, the collod. ppt. will be found a panacea: but in the bed-ridden, who are not provided with Dr. Arnott's scientific hydrostatic contrivance, it will be found no ordinary boon, as also in cases of incontinence of urine, and excoriations from the pressure of instruments, trusses, &c. As a prophylactic for practitioners in midwifery, in suspected cases, or where the hands are injured by disease or accident, it will be invaluable, as also in the dissecting-room. Many other circumstances, under which its application may appear to promise

an effectual result, will suggest themselves to every practitioner, so that it is needless longer to dwell upon them; I shall, therefore, only add, that it should not be applied in too thick a coat, and that a large soft camel-hair brush must be used, which should afterwards be washed in ether. A bottle of ether, also, might always be conveniently supplied with the collodion, so as to reduce the solution to the required thinness. Where ulceration is present, a portion in the centre of the ulcer should be left uncovered by collodion, in the manner I have already mentioned; and when any part concerned in motion is to be coated, the skin should be put upon the stretch, and marks, &c., should be concealed with a proper pigment, before the collodion is painted over the part.

I shall have pleasure shortly to forward some cases of skin-disease in detail, wherein collodion and its combinations have been beneficially employed, if the Editor of the *Medical Times* shall judge them worthy of his Journal.

3, Saville-row, Burlington-gardens.
Dec. 19, 1848.

ON A SEVERE AND FATAL EPIDEMIC WHICH PREVAILED IN THE TOWN OF PENZANCE AND ITS NEIGHBOURHOOD, FROM THE MIDDLE OF JUNE TO THE EARLY PART OF NOVEMBER, 1848.

By GEORGE BORLASE CHILDS, Esq., Fellow of the Royal College of Surgeons of England.

For much of the information respecting the appearance, symptoms, mode of treatment, &c., &c., of the following epidemic, I am indebted to the Messrs. Moyle, of Penzance, who, from their extensive practice in the town and its neighbourhood, had numerous opportunities of watching its progress. It is, therefore, with extreme pleasure that I take the present opportunity of publicly acknowledging the courtesy and great assistance I have derived from these gentlemen in the construction of the following paper:—

The town of Penzance, long famed for the mildness and salubrity of its climate, is situated in the extreme south-west of Cornwall, on the shores of Mount's Bay. The town is built in the western angle of the bay, and is sheltered from the north and west by tall hills, which form a complete natural protection against the prevalent winds from the Atlantic, as well as from the north. Penzance has for a long period been the resort of invalids suffering from pulmonic affections, and has earned a well-deserved reputation as a harbour of refuge for those so affected. Its extreme mildness during the inclement seasons of the year, and the very moderate and gradual transitions of its temperature have done much to establish the fame it has thus acquired.

The Penzance district for the registration of deaths, includes the town of Penzance, and the three adjoining parishes of Madron, Gulval, and Paul. The total amount of the population, allowing for the increase since the last Census, is about 19,000, viz., Penzance, 9,500, and the three parishes abovenamed, 9,500.

The average number of deaths annually for the last eleven years for the Penzance district, is 377, being from 31 to 32 per month, or 2 per cent.

This return does not afford anything like a fair computation of the average number of deaths amongst the native inhabitants of the town and its neighbourhood, as doubtless many of the deaths recorded occur amongst invalids who resort thither in the hope of being benefitted by the salubrity of the climate, many, whose cases being deemed hopeless by their physicians, are sent there as a last resort.

Up to the period of last June, it was not within the recollection of its oldest inhabitants that any very severe form of epidemic had ever visited the town, nor at any particular period did the average amount of mortality exceed its ordinary limits. In the early part of the present year, influenza existed, but not to any very great extent, and ceased about the middle of February.

On the 8th of June, the brig Sandwich, with fifty-eight emigrants from Cork, bound for Boston, put into the port of Penzance, in consequence of springing a leak. She had been at sea sixteen days, and had encountered contrary winds and hard weather. About a week after her arrival, she was hauled into dock, a damp, close place, the brig itself being badly ventilated. The emigrants were all well before they accompanied the vessel into the dock. The disease first broke out on board this ship on Sunday, the 18th of June. It attacked an emigrant, a young woman, about twenty-four years of age, and she died on the 7th of July, nineteen days after the seizure. The second case was that of a girl, who had been laid up with typhus fever some time previous to her leaving Ireland: she died, also, on the 13th of July. A third case occurred in an elderly woman, aged sixty: she also died after a short illness. Another emigrant, a boy, died, about the same time, of phlegmonous erysipelas. The whole of these poor emigrants were seized within a short period of each other, and were removed from the vessel to a house at a remote part of the town, situated on high ground near the Roman Catholic Chapel, where they died. The remainder of the emigrants were lodged in a very spacious and airy warehouse, and supplied with fresh meat, vegetables, milk, &c., &c., by the inhabitants of the town, and no case of dysentery occurred amongst them whilst there. The bread which had been used was bad, having been a good deal damaged by the salt water, owing to the leaky condition of the ship. Mr. Moyle says, "I have not learned whether dysentery, typhus, or any other disease existed at Cork at the time of the Sandwich sailing from thence, or whether she had made any tropical voyage previously to her being engaged to ship emigrants to Boston."

The emigrants, generally, were of a respectable class of small farmers and their families. They quitted Penzance, in the Sandwich, about the 12th or 13th of July, for their original destination, the inhabitants liberally supplying them with comforts for their outward voyage. Mr. Moyle says, "Since their departure I have learned that two died of dysentery among the emigrants, and two of the crew were attacked with the disease, but both recovered. I am not aware of any particular domestic conditions that favoured the progress of the disease, excepting those of the wants and habits of the poorer classes."

The first case of dysentery which occurred amongst the native inhabitants of the town was on the 16th of July, four days after the brig had left the port. This recovered, but a case occurred on the 22nd which terminated fatally. The disease now began to spread throughout the town. About this period a girl aged six was attacked. By direction of her medical man she was removed without delay to her father's residence, a distance of four miles, in a healthy village containing about six houses. This girl died of the disease in six days. On the day of her death, her brother, an infant in arms, was seized and died in four days. The aunt, who attended the children, also contracted the disease, but recovered. A servant girl resident in the house, was also seized, went home a distance of two miles, and died in five days. Two other persons, residents of the same village, were subsequently attacked, and both died after a short period.

The greatest number of cases occurred amongst the poorer class of labourers and artizans, their wives and children. Many, families of great respectability, were also visited with the disease. One of my little nieces, daughter of a banker of Penzance, aged two years, was seized with the disease and died. My little nephew, aged four, was also attacked, but recovered after a most severe and protracted illness. Children, elderly persons, and those affected with chronic diseases were most obnoxious to its invasion. The disease does not appear to have confined itself to any particular locality, but to have diffused itself pretty generally over the town and its neighbourhood; in the crowded courts and alleys, Mr. Moyle thinks it may have predominated. With the exception of the influenza, before alluded to, it was not preceded by the prevalence of any epidemic sufficiently alarming to excite the attention of the town authorities. A few cases of typhus fever occurred in a locality where typhus is not uncommon, but it did not travel beyond its ordinary limits. In the month of August, as will be seen by the Table of Deaths, a period at which the ravages of the disease were at its maximum, Mr. Moyle states, that many cases of cholera biliosa occurred in his practice, which were very severe in their character, one of which proved fatal. This was the case of Mary Baker, aged 63, the wife of a shipwright. Her husband worked in the docks when the emigrant ship was undergoing repair. She had constant vomiting, rice-water evacuations, cramps, blue extremities, collapse, and suppression of urine. She died on the fourth day.

The average duration of the disease in those who recovered was about 16 days; in those who died, 10 days. Many cases proved fatal in 4 days; others lingered on to a month before death terminated their sufferings.

On again referring to the Table of Deaths, we shall find, that from July to November, a period of 4 months, 105 deaths occurred from dysentery alone, amongst a population of 19,000 souls; and that the deaths, from all causes, are equal to 595 per annum. It is worthy of remark, that, in the parish of Paul, very few cases occurred, and no deaths, although in this parish there are two fishing towns, thickly and densely populated.

In the town of Penzance, 82 died from dysentery, 24 above 5 years of age, and under 60. A great number of the latter had been suffering from chronic diseases, and the remaining 58 were children under 5 years of age. As far as I have been enabled to ascertain, the number of cases which occurred in the town were about 800, nearly 4 per cent. of inhabitants having been attacked with this malady. Occurring as this did in a town celebrated for the salubrity of its climate and the natural facilities afforded for its drainage, cannot but surprise us. The disease was slow and insidious in its character, creeping on surreptitiously through the town and its neighbourhood. It appeared to have been likewise equally tardy in its work of destruction, in some cases lasting a month, and then suddenly snatching its victims from their sufferings.

Through the great kindness of Mr. Moyle, sen., I am enabled to give the following Table of Deaths in the town and parishes for the last five months:—

1848.	Deaths from all causes.	From Dysentery in Penzance District.	In Town of Penzance.	In three adjoining Parishes.
July	31	5	5	0
August	71	38	37	1
September ...	67	38	26	12
October	48	22	13	9
November ...	31	2	1	1
Five Months..	248 = 595 per annum.	105	82	23

It would not be unreasonable to expect, that a disease so violent in its character was either preceded or attended by some unusual changes in the condition of the atmosphere, and Mr. Moyle says, "I perfectly recollect that May was very hot and dry; scarcely any rain fell during this month; the months that followed were wet, there being only two dry days in August; in short, the summer has been a very wet one, and the temperature generally low, very *variable and fluctuating*." Mr. John Moyle says, "there were certainly some peculiar conditions of the atmosphere in our summer and autumn months, as you will see by the maximum and minimum temperature of each month, which I have subjoined. The remarkably hot and dry weather of May, and the cold and wet weather of the subsequent months. The observations are from the Meteorological Journal kept here. The whole of the annual fair amusements in June were quite nullified, and as much as 1 inch of rain fell in 12 hours on the 21st of August. In July we had one fog, and oftentimes misty weather."

THERMOMETER.

	Maximum.	Minimum.	Remarks.
	°	°	
April	60	49	
May	71	55	Rain in May, 0·759.
June	66	53	Rain in June, 3.237.
July	68	57	Rain in July, 3·277 on the 4th, thick fog and mist.
August	66	54	Rain in August, 3·756. 21st of Aug. 1 inch of rain fell in 12 hours.
September...	63	56	Rain Sept., 3 092.
October	62	48	Rain Oct., 4·425.

The temperature given is that of the air in the shade, and at the height of four feet above the ground, and protected from the effects of radiation.

By a reference to the above Table and the Table of Mortality, it will appear, that the temperature during the months in which the disease was at its height, was extremely variable, being much colder and damper than the inhabitants had experienced for many years. In May, the month preceding the outbreak of the disease, it varied from 71° to 88°, making a difference of 16°, whilst in June the variation was 13°, in July 11°, in August 12°, in September the variation was only 7°, and in October it rose again to 14°. The months of August, September, and October were also remarkable for the quantity of rain which fell, amounting to 11·273 in the three months, more than half the average quantity which falls in the metropolis in a year.

The quantity of rain which fell during the whole of the six months, from May to October, was 18.546. Upon these data, I do not conceive it would be erroneous to conclude that the progressive spread of this fatal disease, in a town like Penzance, was mainly influenced by the meteorological conditions of the atmosphere. Like the appearance of cholera in this country, it selected for its outbreak a low-lying, damp, and unwholesome district. The Brig Sandwich was not hauled into dock until a week after her arrival in port, and up to this time all the emigrants enjoyed perfect health and cheerfulness; three days after this, and ten from her arrival, the disease made its appearance; three emigrants were attacked before any steps were taken for the removal of these poor creatures from the vessel, after which no case occurred amongst them. Strictly speaking, I do not conceive the disease to have been generated in dock, but to have been dependent generally upon a variable and damp state of the atmosphere, and that its outbreak here was occasioned by circumstances which tended to depress the vital powers of the emigrants, such as foul air, bad bread, and insufficient nourishment. The natural vigour of their system was consequently reduced to a state highly obnoxious to the influence of atmospheric changes. Its subsequent spread amongst the inhabitants of the town and its neighbourhood, does not, in the slightest degree, militate against the views here entertained. Many of the fatal cases occurred in persons whose vital powers were greatly diminished by the pre-existence of chronic diseases, and whose capability, therefore, of sustaining with impunity such an unusual state of the atmosphere as then prevailed, were much too feeble. The mortality was greatest amongst children under 5 years of age, 58 of whom died in the town; and here, too, I have no doubt, were inquiries to be instituted, it would soon appear that they were either children of delicate frame or were suffering from diseases incidental to childhood; but, even granting this were not the case, such extraordinary changes of the atmosphere, as those recently instanced, had not been known in Penzance for many years. It would be unreasonable, therefore, to expect that children, accustomed to live in a mild and slightly varying atmosphere, could be exposed to vicissitudes like these with impunity. Mr. John Moyle informs me, that on the 4th of October, at 11 a.m., the thermometer stood at 38°; the day was intensely cold, and the average temperature of the air was 41°, being full ten below the same day in the five preceding years.

In the present state of our knowledge respecting the *modus operandi* of atmospheric vicissitudes in the production of disease, I will not attempt to explain how the changes under consideration effected so serious a disturbance of the vital functions. With the above facts placed clearly before us, I think we are bound to regard them in the light of cause and effect. It would be a strange coincidence, indeed, that a disease of so fatal a tendency should manifest itself in a town hitherto famed for the salubrity of its climate, at a period when the atmospheric vicissitudes were greater than had been experienced for many years, and yet claim for itself a separate and independent existence. I will now proceed to lay before the readers of this paper the symptoms of this disease, as noticed by Mr. John Moyle. In many cases, the disease was ushered in with pains in the lower part of the back, tormina, and copious slimy evacuations of a fæcal character,—the dysenteric diarrhœa of authors.

Other cases began with diarrhœa only, unaccompanied by pain; but the greater number were attended with distinct febrile symptoms; the pulse hard and frequent, the skin hot and dry, tongue furred and brown, great thirst, scanty urine, with dysuria; painful tenesmus, with incessant visits to the night-stool; but the voided matters were not fæcal, but consisted of bloody mucus, sometimes shreddy and membranous; greenish, and sometimes blackish in colour, and most horribly offensive. This sanguinolent mucus was accompanied, in the more severe cases, with large quantities of blood, almost pure: frequent vomiting was also a common symptom. In the quickly fatal cases the pulse soon fell, the extremities became cold, the features pinched, the hæmorrhage more frequent and profuse. Rapid exhaustion and death took place, in some cases, as early as four days from the attack.

The treatment adopted, for the slighter cases, was the administration of mild aperients, such as ol. ricini, followed by Dover's Powder at night, with warm farinaceous diet, to promote perspiration, or emollient diluents: these were followed by chalk mixture, with catechu.

In the severer cases, where the inflammatory and febrile symptoms were high, the early exhibition of mercury, guarded with opium and ipecacuanha, given at regular intervals, so as to induce a moderate degree of ptyalism, were the most successful methods of treatment. It was observed, that, as soon as the system was brought under the influence of mercury, there was a remission of the more urgent symptoms, and the case took a favourable turn. Where pain existed in the hypogastrium, leeches, and counter-irritants in the form of mustard poultices, stimulating liniments, and blisters, were applied to this region. To allay the tenesmus, opiate and amylaceous enemata were used with considerable benefit.

In the very severe forms of the disease, no plan of treatment could arrest its fatal progress. Styptics of the most active nature were resorted to in vain. Sulphate of copper, diacetate of lead, and injections of sulphate of zinc, were quite abortive: the powers of art were baffled by the excessive discharges of blood, and death gained the ascendancy. Where the hæmorrhage was apparently passive, an excellent effect was derived from the internal administration of the oil of turpentine. Bleeding was but seldom resorted to, owing to the asthenic character of the epidemic.

TWO CASES OF UTERINE TUMORS SIMULATING PREGNANCY.

By WILLIAM THOMPSON KAY, Esq., &c. &c.

I. Emma P——, aged 42, the mother of three children, of a sallow complexion, emaciated appearance, and irritable constitution, applied to me to attend her about the latter end of September in her confinement. She said that there was "something wrong with her," as in her other pregnancies she never suffered as at the present time.

Had generally enjoyed good health, menstruated regularly, and had quick labours, with a good "getting up." She now complained of œdema of the lower extremities, pain of a dull character in the region of the uterus, increased on pressure, restless and unquiet nights, with profuse sweats, nausea and obstinate constipation of the bowels; and occasionally there was a "dragging kind of sensation" on the left side.

By the aid of castor oil and pil. rhei. co., the bowels became more regular, but the œdema continued; and as she seemed rather to object to palliative measures, all medicines were discontinued, with the exception of aperients.

On the 27th September, about five in the evening, a messenger summoned me to her residence, and on my arrival I found it was to show me a tumor that she had been delivered of, a short time before, by a midwife, employed with the idea of saving money.

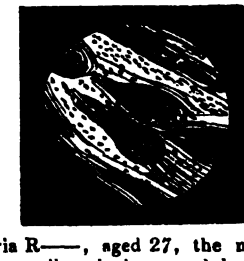
She was much exhausted and restless. On inquiry, she said that "labour pains came on as usual, increasing in frequency; the waters broke, and in a short time the tumor came away." I applied a binder, gave her an opiate, as she was suffering much from after pains, and left her, taking the tumor with me.

The following day the bowels acted without medicines; lochia moderate, with fever on the third day, terminating by a crisis of sweating; rose on the fifth, and recovered on the eleventh day.

The tumor was of an oval shape, lobulated, and resembling somewhat a large pancreas at first sight, without any attachments, as if adhesion had existed, but covered with a membrane resembling, in structure and appearance, the piu mater of the spinal cord, where it becomes changed in its character. This membrane was firmly adherent to the mass of the tumor, investing its lobes, and dipping down into the fissures. The substance of the tumor in one part resembled the spongy structure of the placenta; in another it was compact, with fibrous bands stretching across, and here and there vesicles like hydatids imbedded in it, the whole mass being of the colour of a healthy brain, with rather less vascularity. It weighed two pounds eight ounces, and measured fourteen inches in length, six in breadth, and twenty-one in circumference, and under the microscope it presented the following appearance:—

Profile of Tumor.

Section of the Mole. Magnified.



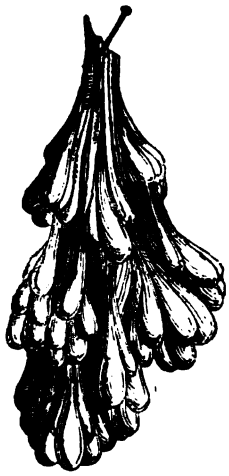
II. Maria R——, aged 27, the mother of five children, generally enjoying good health, sent for me on the 13th Nov., as "she had symptoms of impending abortion, induced from having lifted a washing-tray."

On my arrival I found her in great pain, tossing about in the bed, &c. The pain recurring regularly every ten minutes; and, as she said that she was "about three months gone," I considered it necessary to make a vaginal examination.

Finding the os uteri firm, and only of the size of a shirt-button, I gave a full dose of *liq. opii. sedu-*

tivus, and left her, promising to call again in an hour. Before the time had elapsed, a messenger summoned me again, and now the pains recurred every two or three minutes. On examining the patient now, the os uteri was found to be dilated to the size of a shilling during the absence of a pain, and increasing during a pain to about that of a half-penny, or even larger, the membranes protruding, &c. Considering it necessary, I ruptured the membranes; the liquor amnii came away in a gush, and with it, what appeared to me, a coagulum. The pains ceased, the uterus contracted, and the woman was instantly relieved. The supposed coagulum was now examined, and found to be a mass of hydatids that had been attached by a pedicle to the uterus, weighing fourteen ounces, and presenting the following appearance when suspended by a pin:—

Hydatids.



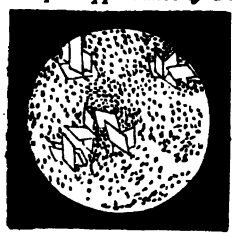
A binder was applied, an anodyne given, and orders to watch her and maintain quietness. No hæmorrhage followed, and she recovered without a bad symptom in ten days.

The hydatids were enveloped by a fine, firm membrane, separable into two laminæ by immersion for a long time in water, of an equal thickness throughout, and of a pale yellow colour.

The fluid was of a pale yellow colour, with flocculi of albumen. When boiled, coagulated and turned rather brown, gave a slight alkaline re-action, and was of the specific gravity 1008·6. It contained in 1000 parts 132·38 of solid constituents, chiefly albumen, phosphate of lime, cholesterine, inorganic salts, and fat, and 867·62 of water, gave off an unpleasant odour during evaporation, and left a brown, thick, elastic residue upon the glass.

Under the microscope, it presented the following appearance:—

Microscopic Appearance of Fluid.



Phosphate of lime and cholesterine being the principal crystal observed, which fully bore out the analysis.

FRACTURE OF THE SCULL;—ABSCESS OF THE BRAIN—DEATH.

By R. F. SNAPE, Esq., M.R.C.S. England, L.A.C. London, Honorary Surgeon to the Bolton Infirmary, &c.

Michael Byrns, aged 28, navigator, a strong, athletic Irishman, of sanguine temperament, received a blow from a spade on the left side of the head, in a quarrel with a fellow-labourer; paralysis of the right side immediately came on; he was taken home, and attended by a surgeon in the neighbourhood for a month, during which time he was better and worse, sometimes able to walk about and use his arm, at others the paralysis was complete. He was removed to the hospital of the Bolton Workhouse, on November 24, 1848, when he came under my care. At that time there was total loss of motion in the entire right side of the body, but sensation was perfect; there was a small and apparently simple wound upon the left side of the head nearly healed, except at one portion, from which issued a little sanious discharge. I could not, upon the most careful examination, detect any evidence of fracture: there was no pain in the head; the pulse 80, and slightly laboured; the tongue clean; the bowels rather costive. Under the influence of purging, counter-irritation, and mild doses of mercury, he rapidly improved, gaining almost perfect control over the arm, leg, and muscles of the face: this state of things continued till Friday, December 8th, when I found him quite insensible, and he died the same evening.

SECTIO CADAVERIS, SIXTEEN HOURS AFTER DEATH.

Upon removing the scalp, I discovered a semi-circular fracture of an inch in extent, perfectly clean cut, as if a *narrow* sharp instrument had passed through the tab. dura; there was *no* depression of the surrounding bone at all, which was quite sound. Upon taking off the calvaria, I found the tab. vitrea shattered and depressed for a circular inch; spiculæ of bone had penetrated the dura mater, and were sticking into the brain. On puncturing the brain immediately under the seat of injury there issued an ounce and a half of pus; the abscess had *not* penetrated into the lateral ventricle.

Would the symptoms in this case have justified me in trephining?

If I had done so at the time I first saw him, (a month after the receipt of the injury,) would there have been a reasonable chance of saving the man's life?

PROGRESS OF MEDICAL SCIENCE.

IRELAND.

[From our Dublin Correspondent.]

EDINBURGH ANÆSTHETICS *v.* DUBLIN MIDWIFERY.

Your readers are probably aware, that a controversy has been carried on, for some time past, between Professor Simpson, of Edinburgh, and Dr. Collins, the President of the Dublin College of Physicians, with respect to the propriety of early interference in cases of protracted labour. This contest, like most disputes of the kind, has not been marked by any extraordinary examples of courtesy or urbanity; and as your readers are, probably, for the most part, tolerably competent judges of the merits of the question at issue, I should not have alluded to it, if it had not been for some remarkable revelations of the modern method of seeking for scientific celebrity which it has disclosed. Dr. Collins says, in his last pamphlet, published on the 15th instant, "Dr. Simpson states, in conclusion, that this discussion was entirely commenced by me, not by him. Those who have read the medical journals, however, for several years past, and the popular essays on chloroform, with which the domestic circle has been so wantonly shocked with the 'sufferings' of women in protracted labour, and the number that 'perished' well know the fallacy of this assertion. From the Palace of Royalty in England, to the Viceroy in Ireland, and to the Fellows of Trinity College, Dublin, and sundry other learned individuals, these singularly censurable pamphlets have been supplied, plausibly founded upon the authority of Dr. Collins, when the 'sufferings' of the patients, under Professor Simpson, from protracted labour, which were proportionally TEN TIMES more numerous, and SIX TIMES more fatal, have been scrupulously concealed. These misdeeds, after a lengthened period of forbearance upon my part, were followed by an essay 'On Turning, as an alternative for Craniotomy and the long Forceps,' *so fraught with danger*, that I felt it my duty to call the serious attention of the profession to the entire of these *innovations*, and I believe the exposure is likely to be followed by good results."

I have quoted the foregoing extract, because it contains charges which really require explanation. What! can it be possible, that the professor of an ancient and respectable university, can have been in the habit of distributing pamphlets among the exalted in rank, but unlearned in medicine, on a subject with which the strongest prejudices and feelings are connected, reflecting on the practice of an older and far more experienced brother, and all for the purpose of puffing off a novel and improved speculation? If these accusations be admitted and defended, then welcome the reign of red republicanism in medicine; your Morrisons and Hollowayes are the only legitimate physicians.

DUBLIN PATHOLOGICAL SOCIETY.

The second meeting for the season of this Society was held in the Anatomical Theatre of Trinity College, on Saturday, the 16th instant. R. ADAMS, Esq., V.P., in the chair.

THIRD STAGE OF PNEUMONIA.

Professor Law exhibited a lung, part of which was in the condition described by Laennec as the third stage of pneumonia. There was nothing very remarkable in the case, but the Professor of the Institutes of Medicine developed some new views with respect to the nature of the disease. The patient, a waterman, aged 40, had, according to his own account, an attack on the chest nine years ago, for which he was cupped on the right side; since that time up to a few days before his admission into hospital he was in perfect health. In the beginning of November he was seized with rigors, pain in his back and left side, and inability to draw a deep inspiration. On the 11th, the day of his admission, he complained of dyspnœa, anorexia, and thirst, to relieve which he would take nothing but water, which he immediately rejected. Pulse, 108 compressible; respirations, 52; expression, anxious; lips, livid. The physical signs were dulness on percussion, muco-crepitating râle, bronchial respiration, and bronchophony on the left side down to a little below the nipple, and posterior to it; moist and dry bronchial râles all over the right side. The diagnosis was easy; general bronchitis, with pneumonia in the upper part of left lung. From the first, the prognosis was most unfavourable; and, although he appeared at first to improve a little under the influence of mercury and opium, he ultimately sunk in a couple of days. The appearances after death confirmed the diagnosis; the bronchial membrane was highly congested, and the tubes filled with frothy mucus; there were some recent adhesions of the pleura; and the upper lobe of left lung was solidified, and presented, on a section being made, a greyish marbled appearance, broke down easily under pressure, and exuded pus. The reason why Dr. Law brought the case before the attention of the Society, was because he thought that Laennec has led pathologists astray, by regarding this disease as a stage of pneumonia, as the natural transition from red hepatization. He (Dr. Law) was induced to regard this disease, not as a more advanced stage of ordinary pneumonia, but as a distinct disease, depending on an unhealthy form of inflammation. In fact, he considered grey hepatization, as it is called, as a diffuse inflammation of the lung. The pus is not, as Laennec supposed, infiltrated through the parenchyma, but is deposited in the recently effused lymph. Examples of similar deposits are frequently found in other situations; masses of fibrin, containing pus in their interior, are found in the heart; also in the veins, in cases of phlebitis; pus is found infiltrated in the effused lymph in the neck in cases of diffuse inflammation. The coincidence of the form of pneumonia under consideration, and diffuse inflammation in the neck, has often been observed. Again, it is notorious, that re-hepatization most frequently takes in the lower lobes. According to Dr. Law's experience, gre-

hepatization most usually occurs in the upper lobes; a strong argument against considering it as a merely advanced stage of the former. The pleuro-pneumonia (distemper) of cattle, which has been more or less epidemic for some years, is a disease of the same nature; and in those cases it was most likely that the pus and lymph are poured out nearly at the same time. Assuming, then, that grey hepatization was the result of an unhealthy form of inflammation, Dr. Law thinks that it may throw some light on the pathology of phthisis pulmonalis. He is convinced, that tubercle is the result of an unhealthy form of inflammation. He exhibited a clot of blood remarkably cupped and buffed, drawn from the arm of a person labouring under incipient tuberculization; and if it be admitted that tubercles be the result of unhealthy inflammation in other parts, as in tubercular peritonitis, he did not see how it could be denied, that the same cause produces them in the lung. Now, it was remarkable, that tubercles and grey hepatization both select the same locality in the lungs, namely the apex, and the presumption of their alliance was thus strengthened.

PARTIAL DISLOCATION OF THE HEAD OF THE HUMERUS.

In the year 1836, at the September meeting of the British Association, held at Bristol, Mr. Adams made a communication upon the disease he denominated chronic rheumatic arthritis. When speaking of the disease as it affected the shoulder, he said, the profession, he believed, were by no means familiar with the ordinary and formal characters of the affection as it presented itself on dissection; and hence many mistakes, he believed, had occurred. Surgeons have long been in the habit of speaking of *partial luxations* of the shoulder-joint; but at the time Mr. A. made his communication to the British Association, the profession was familiar with only one recorded case of a dissection of a partial luxation from accident, or, rather, a partial luxation supposed to have been the result of accident. It is true, Sir Astley Cooper had described the accident he called partial luxation of the humerus inwards; and had given, as an illustration of the anatomical characters of it, the dissection of a case forwarded to him by a Surgeon Patey. However, the nature of the case may well be questioned, as the previous history of it was altogether unknown. At all events, Mr. Adams has met with numerous specimens of chronic rheumatic arthritis of the shoulder, the history of the cases having been known, and these specimens critically resembled the case produced by Sir Astley Cooper. An abstract of this communication, made to the British Association, is contained in the *Athenæum*, reported at the time the oral communication and demonstration were made. Some eminent surgeons of this city, Mr. Carmichael, the Professor of the University, Dr. Macartney, and Mr. Smith, were present, as well as those resident in Bristol, and the celebrated surgeon, Mr. Hodgson, of Birmingham; and these seemed to concur with Mr. Adams in the idea, that if there be such a thing as a partial luxation of the humerus from accident, that the case was never up to that time proved by dissection. Professor Hargrave of this city, in 1837, published a case in the *Edinburgh Journal* of a dissection of a case of partial luxation from accident, but the history of the case was also unknown; if this were otherwise, we might hesitate to call in question the authority of Sir A. Cooper, or that of our Professor of Surgery in the Irish College of Surgeons; but as the history of the cases is unknown, the profession is at liberty to come to its own conclusion by the inspection of the specimens which have been preserved, and, besides, delineated. So much as to partial dislocations *inwards*. Partial dislocation of the head of the humerus upwards has been also much spoken of, and Mr. Adams does not doubt, that not less than 16 such cases may be collected; but as far as he knows, the previous history of none of these cases or specimens, rather, was known. He had made up his mind that all these specimens were examples of the effects of chronic rheumatic athritis, when, in 1841, Mr. Soden, Jun., of Bath, published a case in the *Medico-Chirurgical Transactions* of partial displacement of the head of the humerus upwards, the result of accident. In this case the history was known, but for many reasons Mr. Adams still had doubts that accident was the sole cause of the appearances found on the dissection in this case. The fall the man received might, he considered, have been the cause of a disease which produced the effects found on dissection, but that the appearances could not be attributed to the simple and direct effect of accident. His reasons for thinking so were many; among the rest, Mr. Soden's own observation, "the patient being of a rheumatic habit, inflammatory action of that character was established in the joint." The case which Mr. Adams, on the present occasion, laid before the Pathological Society, closely resembled that of Mr. Soden, as to the anatomical appearances; but in the present case the disease was not confined to one joint in the body, but affected many; and that which places the matter beyond all doubt, that the partial dislocation of the head of the humerus in the present case was the result, not of accident, but disease, was, that in this case both shoulder joints were similarly affected, or, or, to use language somewhat paradoxical, the deformity was symmetrical. Thirdly, partial dislocation downwards has been known to be the result of this chronic rheumatic arthritis of the shoulder, as a preparation presented by Mr. Kirby to the College of Surgeons here, proves; and upon looking over the preparations in the museum of Bartholomew's Hospital, Mr. Adams observed a specimen of complete dislocation of the head of the humerus backwards, which was the result of chronic rheumatic arthritis. Mr. Adams said, he would not enter at that time into further details, which would be indeed unnecessary, as the whole subject will, he hopes, be shortly published in Dr. Todd's Cyclopædia. The editor has had in his possession for some time an article on the abnormal anatomy of the shoulder joint, written by Mr. Adams, in which the subject of partial luxation of the head of the humerus has been discussed in connexion with that of chronic rheumatic arthritis of this articulation.

SCOTLAND.

EDINBURGH.

MEDICO-CHIRURGICAL SOCIETY.

The second meeting of the session of the Edinburgh Medico-Chirurgical Society took place in their new Rooms, 65, George-street, on Wednesday, the 13th inst., when a considerable number of the members was present.

POSITION OF THE FŒTUS IN UTERO.

Dr. J. Y. Simpson made a communication on the attitudes, natural and preternatural, of the fœtus in utero, and showed them to be acts of the reflex or excito-motory system of nerves. After pointing out various differences in the mechanism of the same functions, as nutrition and respiration, &c., in the fœtus and adult, he went on to show the different doctrines that had been formed, in order to explain why the fœtus, in the latter months of utero-gestation, stands upon its head, or, in other words, why the head is so commonly the presenting part. A variety of reasons were adduced to show, that this circumstance, at any rate, could not be ascribed to gravitation of the infant's head. For the child is not suspended by the cord, as the gravitation-theory presupposes. For instance, when the cord is round the child's neck, as so often occurs, that does not alter the presentation; and in cases of hydrocephalus, in which preternatural presentations are exceedingly common, the head, from its weight, were this theory correct, ought to have the contrary influence, if it had it in any case at all. Also, in the cases of dead children, where the presentation was frequently preternatural, the child was submitted to all the physical laws of gravitation, and still the head did not present.

Dr. Simpson then described the theory of Professor Dubois, of Paris, who conceives, that the position of the child's head at the os uteri is owing to instinctive and voluntary action on the part of the infant. But Dr. Simpson argued, that the motions of the fœtus in utero were not voluntary, or connected in any degree with the brain or mind, as they took place in anencephalous fœtuses, where the brain, and, consequently, the mind, was entirely awanting. He adduced other reasons to show that these, the motions of the fœtus in utero, were entirely of an excito-motory character, and were the causes of the positions which it assumed.

At the full time, the pregnant uterus is of an ovoid form, like an egg; and the fœtus within it is laid up in an ovoid form;—further, the broad or pelvic end of the ovoid of the fœtus corresponds to the broad or upper end of the ovoid of the uterus; and the narrow or cephalic end of the ovoid of the fœtus corresponds to the lower or narrow end of the ovoid of the uterus. Thus, when the child is made to move, by the mother altering *her* position, or other such causes, it immediately moves so as to swim back into the position in which it may be again most free from external impressions, viz., that with its head at the narrow end of the uterine ovoid and its pelvis at the broad.

The immediate cause of its motion, in these and other circumstances, according to Dr. Simpson's view, is the pressure upon projecting parts of the fœtus from the walls of the uterus; and perhaps the parts pressed upon, which most easily excite the motions, are the soles of the feet, the knees, and sides, parts that remain even super-sensitive in the adult. If any projecting part of a child, such as the knee or hand, be touched through the uterine walls, it immediately moves away from the contact, as an adult does in sleep.

Dr. Simpson went on to show, that the preternatural positions of the fœtus were owing to causes altering the relative forms to each other, of the uterine cavity, or of the fœtus contained in it, and hence necessitating the fœtus to place itself in abnormal positions, so that it might be as free as possible from external impressions acting upon its excitor nerves.

A number of Tables were exhibited, for the purpose of showing the great proportion of preternatural presentations, in cases where the figure of the lower end of the uterus was altered, by the implantation of the placenta there, (placenta prævia;) by the deformity of the brim of the pelvis, in cases of Cæsarean section; by the presence of twins, each of which had a cavity for itself, differing from the ovoid cavity of the uterus. On the other hand, where the form of the fœtus is altered by a monstrosity, as hydrocephalus, &c., malposition was shown to be common, because the fœtus requires to adopt some peculiarity of posture, different from natural, in order to hold itself removed, as much as possible, from the external impressions around it.

The recurrence of preternatural presentations in the same mother, Dr. Simpson, in the same way, traced to peculiarities in the forms of the uteri in these mothers. He brought forward statistical evidence to show, that the position of the child with its head lowest, only begins to be assumed about the seventh month, and becomes more and more steadily assumed up to the full time. If the child dies in utero during the three latter months, the position is lost. Statistical Tables were shown to prove this. Lastly, the circumstance of the position only beginning to be assumed about the seventh month, was shown to be the reason why children born under the induction of premature labour often presented preternaturally.

DISSECTION OF A PREGNANT WOMAN, WHO DIED FROM CHOLERA.

Dr. Simpson also exhibited a beautiful preparation from the Anatomical Rooms of Professor Goodsir. It was the dissection of a woman who had died from cholera in the ninth month of pregnancy. The whole of the uterine sinuses, and other maternal vessels, were injected with differently coloured kinds of wax, and the cavity of the uterus itself was laid open, by the removal of a large flap of its anterior wall. The fœtus, unmoved, was lying in its most common position, with its feet and hands directed to the placental mass. The occiput was plunged deep in the pelvis, and directed towards the left foramen ovale. The preparation was greatly

admired, partly in consequence of its striking similarity to the plates in William Hunter's "Gravid Uterus."

After a few remarks from different members, thanks were tendered from the Chair to Dr. Simpson for his interesting communication.

CHOLERA—IS IT CONTAGIOUS?

A conversation afterwards took place regarding the present state of cholera, in which Drs. Maclagan, Patterson, Simpson, Chas. Bell, Cockburn, and others joined; and some remarkable facts were brought forward, tending to favour the idea of its being, at least under certain circumstances, contagious. Dr. Simpson, calling attention to the singularity, that cholera had reached Edinburgh from the Continental coasts, passing the numerous and crowded villages on the shores of the Firth of Forth, made the following remarkable statement, the result of inquiries made by himself:—That the first cases which occurred in this neighbourhood, took place at the fishing village of Newhaven, two miles from Edinburgh. On the Saturday previous to Wednesday, the 4th of October, on which day it first appeared in Edinburgh, three pilots went down to the Isle of May, in the mouth of the Firth of Forth, on the look-out for vessels. They spoke a ship from Cronstadt, bound to Leith. One of them was taken on board, while the other two remained in their boat on the lee side of the vessel, and were towed to Leith, a distance of four or five and twenty miles, exposed to the exhalations from the ship. Both were seized with diarrhœa on their passage. They were not on board the ship until they arrived at Leith, when they went on board to obtain refreshment. Both were seriously ill afterwards, and one died on the Sunday. Dr. Simpson's coachman, who accompanied him when he was making these inquiries in Newhaven, was shortly afterwards attacked with cholera, and had a narrow escape with his life. Before any inquiries had been made about the vessel, it had left Leith; but Dr. Simpson still hopes to be able to ascertain whether cholera had occurred on board during the voyage. Some other instances were mentioned by Dr. Cockburn and other members, bearing on the same conclusion.

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THE MEDICAL TIMES.

SATURDAY, DECEMBER 23, 1848.

THE PROGRESS OF MEDICAL REFORM.

A notice of the Quarterly Meeting of the Council of the National Institute, that appeared in our last week's Number, reminds us that another session of Parliament is drawing near, and that renewed efforts will then be made to bring to some definite settlement the irritating differences of opinion and policy that have so long kept asunder the various classes of the profession. For some time past we have refrained from adverting, with frequency, to this subject, because we felt, that, whilst the National Institute, as representing the general practitioners, was consulting with the established Colleges for the purpose of arranging the points in dispute, it would be impolitic in us, by agitating the public mind, to embarrass their labours. The result of that Conference was, a document embracing the outlines of a Bill, which has been submitted to the Special Committee of the House of Commons, and will, probably, form the groundwork of a general measure of legislation. We have already given full publicity to the scheme propounded by the Conference; and, as we have not observed much opposition directed against it, we presume that the profession acquiesce in its general principles. There are, doubtless, some matters of detail that will require revision; but the profession will know better how to deal with these, when a Bill shall be actually presented to Parliament.

The cardinal point in the proposed scheme is, of course, the establishment of a new College for the general practitioners,—a measure that has received the vigorous and untiring advocacy of this Journal, believing, as we do, that the principles upon which such a united College is sought, are not less just, than the requirements of the age make its establishment imperative. We are convinced that our opinion is now embraced by nine-tenths of the general practitioners; and, if we feel gratification at any portion of our labours, it is in that of being instrumental towards the achievement of so great a boon for our professional brethren. We have not sought impracticabilities; we have not followed the meteor lights of passion or of prejudice, instead of fixed principles, nor trimmed our sails to catch each shifting gust of professional caprice. We have remained faithful to the cause to which, in the first instance, we gave our influence; and, whilst we hold the resolution to devote ourselves to its triumph, we trust that no imprudence or false policy will ever constrain us to withhold our confidence from those men who have hitherto deserved our support. If errors occur, we must be just, and point them out; we shall counsel as a friend, rather than reproach as an enemy: in short, we will do all things—consistent with an unswerving zeal for the true interests of the general practitioners.

Opposition, however, has succumbed, prejudices have vanished, common sense has prevailed. The unanswerable arguments that have been, from time to time, put forth, have no doubt had their influence on professional opinion; the very iterations of the opponents of the proposed New College, by becoming querulous, have served to weaken the cause they were intended to support; and if we might form a judgment from the general silence on the terms of the proposed arrangement, we should conclude that the profession regarded them with a well-satisfied concurrence. Having nothing to defend, and feeling an inward assurance of an ultimate triumph of our opinions, we are in no humour to complain of the want of zeal or want of interest displayed by our professional brethren; for we would much rather that they were calmly engaged in cultivating the regions of science, and in searching out new blessings wherewith to ease the lot of suffering humanity, than in stirring up the waters of strife and bitterness.

The only mode by which we can gain that social respectability which each in his various way professes a desire to attain, is by every man setting an example of it in his own person, and by discouraging every license of speech and indecorum of conduct that may reflect discredit upon the general body. We hope, that any future contest—if it should be again the fate of the profession to be so intensely agitated by conflicting opinions as it has recently been—will be conducted in this spirit, and that whilst we are vindicating our collegiate rights, we forget not the dignity of a learned profession.

There are, among the general practitioners, great undeveloped powers, which we have exerted ourselves to evoke and foster. When we undertook this mission we were aware of its responsibilities,—we have endeavoured to meet them, and we are glad that the profession have acknowledged our humble services with such general and unstinted commendation. We have scattered seed abroad that has germinated in the professional mind, and taken firm root; the young tree is springing up and growing stouter and taller day by day, and we hope that ere long it will spread its branches abroad and blossom over our heads.

What is it but for this that we have advocated the institution of an independent college for you,—the general practitioners? Have we not seen, that you have now no hope of distinguishing yourselves before the public, except in the case of a few exceptional and massive intellects that break down by their own weight all the barriers which a monopolising exclusiveness has set up? Are you not humbled and overshadowed by the prurient development of a vicious system, which too often accords distinction to mediocrity, and robs genius of its reward? We have endeavoured to antagonize a bad system, by giving opportunities in our pages for the development of individual intellect; and we believe that we have introduced several aspirants to a brilliant and meritorious career. If other proof were wanting, our pages would afford evidence in justification of the claims of the general practitioners to corporate rights and collegiate honours. These they *must* have; and if the profession will only be true to themselves, they will emancipate themselves much sooner than they expect, and cease to be the Pariahs of an unjust code, and of a mediæval usurpation and ban. We have said, that we will not stir you up to action, because we believe that agitation would be a calamity; but we are earnest, sincere, and resolved, and whilst we are determined to assist you in securing your independence and corporate rights, we trust that no further efforts will be necessary than those which a calm and sober judgment would approve. If you be united among yourselves, no opposition can defeat you,—our aim shall be to promote and insure that union. Your wants, your instincts, your sympathies

are our own;—your cause is our strength, your triumph our success. We have felt the bond of sympathy growing stronger with each week's experience; it shall not be our fault if it be ever broken.

We have thought it necessary, on this renewal of the discussion on medico-political subjects, to revive to a certain extent those friendly assurances which have generally characterised our polemics, and which have been reciprocated with the same generous sentiment by our readers. If truth and justice will not permit us to avoid political discussion, they also exact from us a deference to the opinions of others, and a courteous demeanour to all. The asperities of debate are thus smoothed down, party passions assuaged, and conviction more easily secured for the side of common sense and for the general good.

Let none, however, imagine, that because we inculcate mildness, we are yielding to timidity; this would be a sad mistake for any doughty champion of error to commit; we retain the power of arm and skill at fence, that have availed us in many a stouter contest than we may ever have to fight again; but we heartily rejoice that, according to the present aspect of affairs, we shall not be called upon to defend the right with that uncompromising rigour which was once both a duty and a merit.

The next session of Parliament will, no doubt, dawn upon a new scheme for the reconstruction of the profession, when it will be every man's duty to facilitate the passing of the measure—should it prove to be one of justice and equity—by all the means at his command. We shall be ready to advise, urge, and organize, when the proper period shall come. Meanwhile, we recommend all classes to be calm and watchful. Superfluous activity shows a want of judgment, of knowledge, and of self-command; it creates difficulties and embarrassments, and only makes work that must be afterwards undone. There are certain principles, now well understood and acknowledged, without embracing which no Bill can ever give general satisfaction, or could be otherwise than prejudicial to the true interests of the profession. These principles are,—Equality of Qualification for Equality of Privilege,—Collegiate Honours open to all,—Representative Government,—Protection from Illegal Practice,—which last is, perhaps, the most difficult, but, without doubt, the most necessary, of all the objects to be accomplished. Any measure that comprises these leading principles will receive our favourable consideration; and, should it contain other points manifestly oppressive or injurious in their tendency, we shall not fail to point them out, and seek their removal or amendment.

IMPORTANT INFORMATION FOR MEDICAL REFORMERS — ESTABLISHMENT OF A NEW FACULTY OF MEDICINE IN IRELAND, WITH THE POWER OF GRANTING DEGREES.

The number of bodies entitled to grant diplomas to practise medicine and surgery in Great Britain has hitherto been a subject of complaint amongst medical reformers. We believe, that there are at present eighteen licensing corporations in the United Kingdom; and it has been said, whether truly or falsely, that the effect of so great a number being thus instituted has been, to give rise to a dishonourable competition, ruinous to the profession, and injurious to medical science. Whether this be true or not, it is well that the medical profession should know that there is about to be established a new Faculty of Medicine in Ireland, *the nineteenth* in the British Islands; equally independent of the others already existing, equally uncontrolled by any central authority, equally in a condition to despise the interests or wishes of the profession. We were wrong in saying, that this new Faculty is "about to be established." It is already founded; it has at this moment the full aid and influence of the Government in its support; it has, within the week, published the regulations by which it is in future to be guided. If the medical reformers of England think this step to be one calculated to prejudice the cause they have at heart, it is time for them to rouse from their slumbers.

We publish this day, for the benefit of our readers, the Prospectus issued by the Presidents and Vice-Presidents of the Queen's University in Ireland, with respect to the education requisite for obtaining degrees. It will be seen, that the number of courses of lectures required for a medical degree are fewer than are insisted upon by any other licensing body; and that two years' general hospital, or one year and half hospital, and six months' dispensary practice, are all that are demanded. Secondly, it will be seen that the fees for lectures are much lower than any elsewhere in Great Britain, and that the fee for license is to be 5*l*. Lastly, that one-fourth, at least, of the classes must be taken out in some one of the Queen's Colleges in Ireland. These are all matters for the serious deliberation of the members of the profession.

It is not our object now to make any lengthened comment upon these proceedings. It may be, that the founding of a new and *nineteenth* faculty of medicine—superior to any of those previously existing in its arrangements, easier in its examinations, and throwing less expense upon the undergraduate—is the simplest and wisest remedy for existing evils! The scheme which *is apparently, may not be really, paradoxical;* and it *may* prove, that, affording increased facilities for entering the profession, *may* have the effect of diminishing its numbers, and increasing its wealth and respectability. It may also be premature to discuss the subject, until the names of the Professors of the various Colleges are before the public. If a constellation of great names be presented,—of men who have fairly won esteem and reputation,—who have spent years in labouring to better the condition of their fellow-men,—who have acquired popularity as teachers,—and who have toiled, through good report and evil report, with trifling means, and amidst the greatest obstacles, to extend the domain of science, and utilize its dogmas,—if such men as these are found to be the Professors appointed to these new Colleges, it will afford an earnest that the promoters of the scheme have honest intentions and enlightened principles of action. We shall not, for the present, contemplate the possibility of the reverse.

It must not be thought, however, that the promoters of this scheme are not thoroughly in earnest. A moment's reflection will show that they are so. If the Queen's Colleges be not forced to succeed, there is an end of the Queen's government in Ireland. The Catholic hierarchy have denounced them as godless Colleges; the Pope has issued a Rescript against them. If the Pope and the Catholic hierarchy succeed in preventing students attending them, they will stand as persisting monuments of the impotence of British dominion in the land. No; every British Ministry will feel it incumbent upon them to secure the success of these Colleges by all the means at the disposal of the Executive. True, the underselling of certificates and degrees, and the superior advantages proffered in the shape of scholarships, and, perhaps, situations in the army and navy, or other things in the gift of Government, may have the effect of ruining old establishments in Ireland,—may even draw numbers of students from England and Scotland to these schools; but these are consequences which no Ministry can be expected to be particularly anxious to avoid. Indeed, it is questionable whether the British Government would not be the better pleased at the destruction of the old Institutions. The Medical School of Dublin has, certainly, been the only bright spot in the history of our country during the last fifty years. The Royal Irish Academy has fostered a love of Irish history and antiquities; the Royal Dublin Society has striven to advance the interests of agriculture and the arts; Trinity College has produced its Hamiltons, MacCulloughs, and Lloyds, men who can vie with the *savans* of any other land in their discoveries of abstract truths. But these circumstances, perhaps, have made the several bodies alluded to less subservient, and less easily governed. The members of the medical profession have had the courage to remonstrate, calmly and reasonably, at being offered a journeyman tradesman's wages for the dangerous task of attending temporary fever hospitals; but they were refused a remuneration proportioned to the labours required of them, and to the perils to which they were exposed. The Royal Irish Academy, with its Essay on Round Towers, and its archæological researches, has been rather independent. The Royal Dublin Society, although it does receive a petty grant from Parliament, appoints its own officers, and is occasionally somewhat refractory. And, lastly, the Catholics do not admire Trinity College, which is the principal *nidus* of Irish Protestantism. It is, however, for the medical profession in England as well as in Ireland to consider, what will be the effect of this Nineteenth Medical Faculty upon their interests.

MR. MACILWAIN'S LECTURES ON FEVER.

Our Number of January 4, 1849, will contain the first of the Lectures on this subject. The Author's object is to develope the nature, and define the principles of treatment, both general and special, of that multiform process of the animal economy, comprehended in the term "fever."

The Lectures will be inserted, as nearly as possible, in consecutive Numbers of this Journal, and will consist of about eight discourses.

It must be confessed, that nothing can be much less satisfactory than the present state of the science as regards the nature of fever. One set of writers insist on fever being a general disease; another, that it is a disease of a single organ; whilst plain, practical men seem to think the thing to be done is to minister to symptoms, and that very little is known of the matter. There can be no doubt that a good practical analysis, which should establish, on logical grounds, some definite generalization, which should express, in a clear and positive form, what is at present known, and thereby establish a point as a sure foothold for further progress, is one of the greatest desiderata in either medicine or surgery. Without pledging ourselves on the subject, thus much we may say, that we believe the object of the Author is the accomplishment of that which we have above stated; and the anxiety which he has so long shown to enforce greater strictness in medical reasoning, as the thing essential to the progress of science, renders us sanguine in our expectation, that he will not be found to have laboured in vain.

PENCILLINGS OF EMINENT MEDICAL MEN.

SAMUEL COOPER, Esq., F.R.S.

At the request of numerous valued correspondents, anxious to peruse a more particular account of this distinguished surgeon than has hitherto appeared, we are induced to re-commence our "pencillings" of those illustrious members of the profession who have contributed so largely to the advancement of medical and chirurgical knowledge, and thereby done good service to the public.

"Professor Samuel Cooper, well known all over the world for the variety and extent of his surgical information, as exemplified in his First Lines, and in that almost unequalled production, the 'Dictionary of Surgery,'" (a) was at the time of his decease in the 68th year of his age. Mr. Cooper was apprenticed to Mr. Thomas Ramsden, one of the surgeons of St. Bartholomew's Hospital, in which institution he received his professional education, studying under some of the first teachers of the day; and, early in life, he was noticed for his assiduous attention to his studies. The deceased having undergone the necessary examinations for the diploma, was admitted a member of the Royal College of Surgeons, so long ago as October 7th, 1803. In 1807 he obtained the Jacksonian Prize for an elaborate treatise on the '*Diseases of the Joints*,' being the sixth member of the College who had obtained the honour. (b) After occupying himself a short time in practice, with no very great success, he was induced to enter the medical department of the army, in which, from his superior professional attainments, he very soon rose to the rank of Staff-surgeon, and in this capacity served in Holland; and at the memorable and unfortunate expedition to Walcheren, in the Mediterranean, and at the battle of Quatre Bras, he was also present. At the proclamation of peace he settled down into practice.

On the 26th of May, 1827, he was elected a Member of the Council of the Royal College of Surgeons, in the vacancy occasioned by the resignation of Mr. Francis Knight. On the 14th of February, 1832, (the anniversary of the birth of the immortal Hunter,) he delivered the annual oration in memory of the illustrious founder of the Hunterian Museum. On the 8th of October, 1835, he was appointed a Member of the Court of Examiners, in the vacancy occasioned by the decease of Sir William Blizard, at which Board he was greatly esteemed for the considerate and courteous manner in which he performed an often irksome duty. On the 10th of July, 1845, he was elected to the highest professional honour he could obtain, viz., President of the Royal College of Surgeons, of which Institution he was a great admirer, and, at the same time, a "constant advocate for those modifications in its internal economy and external relations by which its usefulness and its interests might be advanced." Mr. Cooper was, for many years, surgeon to the Fleet and Queen's Bench Prisons; but it is from his long connexion with the University College and Hospital, that the deceased was so deservedly well known as a most popular teacher; as a proof of which it may be mentioned, that his first class consisted of 100 students, which number gradually increased to upwards of 300. To make this sketch more complete, we are obliged to transcribe the following from page 152 of the *Medical Times*, which brings us to a very painful episode in the life of the deceased. When the late Mr. Liston's health began to suffer, in the autumn of last year, he apprised Mr. Cooper of his inability to continue the usual assistance in the surgical lectures; the deceased, therefore, made application to the Senate for the necessary assistance, and, it is stated, requested that Mr. Morton might be appointed his assistant. As this gentleman was educated in the University, held an appointment in it, had occasionally acted as surgeon, and, moreover, had delivered lectures for both Messrs. Liston and Cooper, and was, withal, a very popular teacher with the students, who were desirous of continuing with this gentleman in preference to any other, there could be no objection to the appointment. But this suggestion of Mr. Cooper's gave great offence to two of his colleagues, and not being adopted by the Council, Mr. Cooper felt compelled to resign. Accordingly, on the 28th of April last, he addressed the President and Council, directing their attention to the treatment he had received, and finally tendering his resignation as Professor of Surgery in University College, and of Consulting-Surgeon to the Hospital, appointments he had held with credit to himself and honour to the College for *seventeen years*. This resignation is the more to be regretted, as, from a statement forwarded to us from high authority, it appears that the lamented deceased was labouring under some mistaken impression, respecting the conduct of the professors alluded to, as appears from the following resolution of the Council:—"Resolved unanimously, that Mr. Cooper has been strangely imposed upon, if he has been informed that any member or members of the Council have been influenced, directly or indirectly, by any of the professors, or by any other parties, in the course pursued. On the contrary, no communication whatever was held with any one out of the Council." A very general impression, however, exists, that the irritation and annoyance to which the sensitive and honourable feelings of the lamented deceased were subjected, were not without their effect in tending to shorten the days of this truly great and good man, who expired, after a short illness, at his country seat, Shepperton, Middlesex, in the 68th year of his age, and was buried at Kensal-green Cemetery, on Saturday, December 9. Mr. Cooper left an only child, married to Mr. Thomas Morton, the Assistant-surgeon of University College Hospital, who resided with the deceased, and is well known as the author of some excellent works on practical surgery.

The following are the works which have conferred on Mr. Cooper an European reputation, and have made him a universal teacher of the present race of practitioners:—

1805. Critical Reflections on some important Practical Points relative to Cataract. 8vo.
1807. On the Diseases of the Joints. (Jacksonian Prize Essay). 8vo.
1832. The Hunterian Oration, delivered in the Theatre of the Royal College of Surgeons, February 14, 1832. 8vo.
1838. A Dictionary of Practical Surgery. A monument of industry and accurate research, which is alone sufficient to confer upon the author a lasting reputation in medical literature. It has reached a seventh edition, has been translated into several languages, and is diffused through all countries as a standard work on Surgery. 8vo.
1840. The First Lines of the Practice of Surgery. 8vo. This work has also reached a seventh edition.
1844. Introductory Address to the Students of University College. 8vo. There is an excellent likeness of Mr. Cooper, by Morton, engraved by Cousins.

(a) Such is the language of one well able to form an opinion, viz., Dr. William Gibson, Professor of Surgery in the University of Pennsylvania, as expressed in his Sketches of Eminent British Surgeons.

(b) This prize was founded by the late Samuel Jackson, Esq., a Member of the College, and was of the value of *Ten Guineas*, since increased by the munificence of the College to *Twenty Guineas*. The following gentlemen were the successful competitors, previous to Mr. Cooper obtaining it, viz., Messrs. T. N. Elwyn, *Diseases of the Urethra*, and T. Chevalier, *On Gun-shot Wounds*, 1803; Wm. Chandler, *On Aneurism*, and John Hyslop, *On Injuries of the Head*, 1805; and Wm. Lawrence, *On Hernia*, 1807.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—Dec. 12, 1848.

J. M. ARNOTT, Esq., F.R.S., PRESIDENT.

The library this evening was more than usually full. The first paper read was

Observations on Creeping Bubo, illustrated with 16 Drawings and Cases. By SAMUEL SOLLY, F.R.S., Senior Assistant-Surgeon to St. Thomas's Hospital, &c.

The object of this paper is to distinguish a form of bubonic ulceration, which requires mercury for its cure. The author begins by reprobating the practice of treating syphilis without mercury, and attributes the numerous cases of secondary syphilis which are met with in the present day to that practice. He points out the characteristic appearances of acute, chronic, sloughing, and phagedenic bubo, to distinguish them from creeping bubo. He describes this bubonic ulceration as presenting a yellowish colour, with inverted, overlapping, hard, corrugated, whitish edges. As a general rule, he says it does not occur if the primary symptoms are judiciously treated with mercury. That it occurs in some cases after the original chancre has healed,—that it is in such cases that a correct diagnosis is most important,—that it is comparatively easily arrested, if it is combatted with mercury in the onset, but excessively obstinate if it attains any size,—that mercury should be administered by injection, unadulterated with stimulants and tonics,—that the cases which are not benefited by mercury are the exception to the rule, and are very few in number,—and, that mercury is the most powerful instrument we possess to arrest the disease. He related and produced drawings of nine cases, five to illustrate the extreme obstinacy of the disease, and four to show the curative power of mercury, administered decidedly in its early stage.

Mr. ACTON begged leave to ask, whether it was Mr. Solly's opinion that mercury would invariably effect a cure in the cases mentioned? To him the cases adduced appeared only to prove, what, in the experience of every gentleman present had been abundantly verified—that the treatment of all such cases was exceedingly difficult. It consisted with his experience that, in the Hospitals some would come in for a short time and be treated without much success, and then go out and recover; in other cases they came in and got well immediately. He wished to ask Mr. Solly what was the proportion of the cases cured by mercury; seeing that while it had succeeded in some cases it had failed in others?

Mr. SOLLY, in answer to the question proposed, begged to say, that when mercury was used—without the interference of stimulants—he believed it invariably succeeded. In the earlier part of his

practice, when he considered in some cases that it was necessary, on account of the peculiar nature or condition of the sore, he had been induced to give porter, gin, and other stimulants, sometimes sarsaparilla, and iodide of potassium, with mercury, either rubbed in, or by the mouth, and succeeded.

Mr. Cooper said, it seemed he (Mr. Solly) considered these sores of a purely syphilitic character; while, on the contrary, experience and the drawings proved that the peculiar character of the disease often arose from constitutional causes. But Mr. Solly contended that mercury, and mercury alone —which was a specific remedy for syphilis—was successful. If so, and it had nothing to do with the constitution,—which seemed to be established by Mr. Solly,—he felt he was called upon to ask some further explanation.

Mr. Solly wished it to be distinctly understood, that he had endeavoured to point out, in the commencement of the paper, that none could judge of the syphilitic character of the sore from the sore itself. Patients came to them with a sore in the groin, and could not tell a word about the original one. In these cases, they could neither see the primary sore, nor obtain its history from the patient. He believed them to be purely syphilitic.

Mr. B. Cooper said, that he had seen many such sores; and, were such cases to come into Guy's Hospital, he should put a splint on the patient, so as to keep the part in a proper state of rest; and he thought two-thirds would get well without mercury. He should say, from the general appearance of the sores, that their cure did not indicate the success of mercury, but an improvement in the constitution. The condition of aggravated sores depended a great deal upon the place being kept in a state of rest with the splint, &c.

Mr. Acton said, he considered it very important that medical men should be made acquainted with the proper treatment of this disease; for his own part he took particular interest in it. He had known several cases of inoculation from these particular sores. He wished to ask Mr. Solly how many of these cases had been treated with mercury? How many had been cured? Had there been fifty, forty, or ten? It was difficult to over-estimate the value of accurate statistics on this point.

Mr. Solly could not either say "how many had been treated with mercury," or "how many had been cured"—he had not kept notes of all the cases; however, at that moment, he could remember eight or nine which had been cured. Some, indeed, had left the hospital without getting well; but this, he was firmly convinced, arose from interference with the proper function of mercury.

Mr. Lloyd concurred very largely in the views which had been set forth by Mr. Cooper. As far as he had seen, these cases arose from primary sores, and it could not be seen, from these ulcers, what sore preceded it; they could not, therefore, say that such and such was the primary sore, and, accordingly, such and such a course of treatment should be pursued. Surgeons, of course, were guided by the appearance of the sore. There were cases in which he would decidedly say at once, mercury is the remedy, and will certainly cure. Where this was not the case, it was the exception, and not the rule. He thought there would be no difficulty, with proper treatment, in preventing secondary symptoms. Mr. Solly distinctly states, that in one case there was a primary sore, which got well when mercury was used. He appealed to Mr. Solly as to the accuracy of this. He thought that a true syphilitic sore would not get well without mercury; had they, therefore, any right to infer that a secondary sore would get well with it? He had several times seen sores of this kind in the husband and wife, in which the disease of the one was the consequence of its existence in the other. He had seen bubo in the one get well, while the other continued through a lengthened period. In one case, mercury had been tried by him to the full extent, till the patient's constitution was completely worn out; sarsaparilla was also given. At length he sent the patient into the country, where he got completely well; previously the disease had spread all the time. He instanced also a case which occurred in Bartholomew's Hospital. Local and general means had been tried; but the disease continued to spread, and the patient to suffer. On one occasion, when going to the Hospital with a gentleman, formerly a fellow-student, he asked him what he thought would cure the disease. He acknowledged the difficulty which sometimes occurred. He said, he had given extract of conium, 120 grains a-day, and the patient got well. He (Mr. Lloyd) then gave his patient 5 grains three times a-day, and gradually went on till he arrived at the 120, without making any difference; but directly he arrived there a marked improvement was visible. For a little all was stationary. He then increased the dose and the disease diminished, and he stopped at last at 7 drachms a-day. He went on till the patient had taken 56 ounces. He got perfectly well. He had seen frequent cases of recovery with other remedies, and no deaths; with mercury he had seen many sink, and several die.

Mr. Macilwain said he could not forbear offering one or two observations. He was in possession of many facts bearing on the subject of the paper which had been read. He thought the author's object seemed to be to prove that there was a sore —not the creeping bubo—that was certainly to be cured by mercury, provided the legitimate functions of that mercury were not interfered with by stimulants? His experience agreed with that of Messrs. Lloyd and Cooper. He had seen many of these cases in his time, both connected with the primary and other sores. After much experience and study he had come to this conclusion:—There was a class of cases in which it (mercury) was exceedingly valuable in its operation upon different organs—it was not so in others. It was his decided opinion that there was no treatment suited to every case. Much depended upon the peculiar state of the health—differing much in different individuals, and which, in the various cases, required not only different treatment, but treatments as different as the varieties of the disorders of the body. Sometimes mercury did good, and at other times bark, mineral acids, and everything tending to improve the general health, might advantageously be used. With one opinion which had been advanced that evening—the necessity for keeping the parts quiet—he most cordially agreed. He had himself frequently seen the great benefits derived from this judicious regulation. When he looked back on some of his earlier cases, he could see that some of them would have got well more rapidly had he charged the patients to keep quiet. He now ordered their exercise to be confined to the carriage or gentle walking.

Mr. Coulson said, it was clear that that form of the disease commenced in the cellular tissue, and not in the glands. The action was, therefore, confined to the cellular tissue, and not to the gland. It had been suggested that potassa fusa, by destroying the cellular tissue, would, in all probability, arrest the progress of the disease. He thought, upon the whole, this local application was the best, and would scarcely ever fail. But, with respect to constitutional treatment they would all be at issue. There were cases in which mercury was indispensable; and there were cases in which mercury would not do much, on account of constitutional peculiarities. Provided there was not peculiar delicacy of constitution, he should be disposed, as a general rule, to give small doses of mercury; but, on the other hand, in opposite cases, he was of opinion it could not safely be done.

Mr. Oliver Chalk said, Mr. Lloyd and Mr. Coulson talked of "small doses"; Mr. Solly did not preclude large doses. In 1838 a case came under his own observation. The patient had undergone mercurial treatment for some time. The sores occupied both the groins and the arms. He tried various local applications—hydriodate of mercury, and bandaging. Found, by removing the bandages, the day after, that appearances were highly favourable to the use of iodide of mercury; 5 grains to the ounce; he confined the edge of the wound by strapping, and in five weeks the man got well.

Mr. B. Cooper said, he agreed with much of what Mr. Coulson had said with regard to the cellular membrane and its sore. He agreed also with the remarks of the last gentleman with regard to strapping, from a proper use of which much good, he believed, was to be derived. He had tried potassa fusa and concentrated nitric acid. He did not believe those cases brought forward by Mr. Solly were of a specific character, but dependent upon constitutional or local peculiarities. There were many instances in which the case was improved by the use of mercury. He was quite satisfied that it had been made out by those who had spoken of the various remedies; that some succeeded, others failed. He should much like an accurate statistical account. He believed the remedy employed must be regulated according to constitutional and local circumstances.

Mr. Lloyd said, he had known nitric acid tried and failed.

Mr. Cooper: Potassa fusa yet remained; but he had tried nitric acid, and it had operated successfully.

The following paper was then read:—

An Extraordinary Case of Injury within the Uterus, with partial Reparation before Birth. By John Dalston Jones, M.R.C.S.E. (Communicated by Dr. Pereira.)

Mrs. B., of Dalston, was attended by the author, in April last, in her first confinement; she had a quick labour, and bore an average-sized male child. A few minutes after the birth, his attention was directed to the following appearance by the nurse. An open wound extended, from the third dorsal vertebra, across the scapula, along the back part of the humerus, to within an inch of the elbow. The existing condition of the wound, at the time of birth, was illustrated by a drawing, which showed that a considerable portion of the wound was already healed, a part of the cicatrix seeming to indicate that there had been ulceration of the edges of the wound prior to the healing by granulation. The edges of the wound were jagged, and, at the spinal termination, appeared bifurcated.

In speculating upon the probable causes of this singular injury, the author classes his queries under four heads: viz., Would a blow produce it? Was it the funis? Was it by a sudden and violent contraction of the uterus? or, lastly, may it not be ascribed to an accident which the mother had about six weeks before delivery? The author considers, that he is justified in concluding that the last-mentioned was the efficient cause. The nature of the accident was this:—The patient was running down stairs in a hurry, when she trod upon a cat; and, to save herself, made a spring of five or six steps at once, alighting on her feet. This was succeeded by faintness at the time, and a sanguineous discharge from the vagina on the following day, which, however, soon disappeared.

The author states, that this large wound was quite healed at the expiration of five weeks; and concludes his paper by directing attention to the importance of the case in a medico-legal point of view.

The President announced that the time for closing the evening's proceedings had arrived, and that they would meet again, Jan. 9, 1849.

REVIEWS.

Observations on Hospital Gangrene. By John Bogie, M.D., Surgeon to Her Majesty's Forces. Edinburgh: Sutherland and Knox; London: Samuel Highley. 1848.

The Civil or Sedentary Surgeon, if we may so call the surgeon who practises in peaceful times and in quiet places, can scarcely form an idea of the appearance which the wards of a military hospital present, after a general action. After shot and shell have done their best or worst to shatter and destroy, then comes the surgeon to save life, if possible. Limbs are not thought of when life is at stake. But here another and a terrible evil steps in: the Hospital wards become unhealthy; the gangrene called "Hospital" appears, sweeping off the unhappy soldiers by hundreds, as the case may be. All efforts to save him prove at times unavailing, and the surgeon, with pain and great mental distress, stands by in mute astonishment at the appearance and the progress of a disease which he does not rightly understand, which he cannot cure, which he cannot prevent.

Hospital gangrene seldom appears in civil hospitals; nevertheless, at particular times and seasons, the wounded, whether by accident or the surgeon, have been known to die in great numbers, even in the best regulated hospitals. To us, this seems to have happened chiefly during the summer and autumn months. Repeatedly have we known all the operated-on die in an hospital, where nothing could be blamed but atmospheric influence. The wounds made by the surgeon's knife, or otherwise, put on an unhealthy look; no treatment was of any avail; no one ventured to call it hospital gangrene, though strongly affiliated to that terrible disease in characters and fatality. The civil surgeon, then, in general has, fortunately, but a limited experience as regards this description of gangrene. It is to the military surgeon we look for information and for rules of practice, if there be any. The author of the little treatise, whose title we have just given, Dr. Boggie, has, we think, judiciously selected the present time, for the re-editing a memoir he read about twenty-two years ago to the Medico-Chirurgical Society, and which was published in their transactions. But the volume containing his memoir on hospital gangrene is no longer on sale; and this circumstance, combined with domestic and other wars now or lately raging in Continental Europe, has led the author to hope that a second edition may prove acceptable to the medical profession.

It was during the Peninsular war that the circumstance occurred which led Dr. Boggie to give to the subject of hospital gangrene his deepest attention. Returning from England, where he had been for a short time on sick-leave, Dr. Boggie landed at Bilboa in 1812, the principal hospital-station at that time of the grand army. To the hospitals of that city the wounded were removed after the battle of Vittoria; and the hospital called Cordileria was the theatre of Dr. Boggie's efforts. He had for a colleague the late Dr. John Hennen, an excellent surgeon, and a man of great ability as a military surgeon.

When the gangrene appeared, the stimulating plan of treatment was, or had been, universally adopted. A free and indiscriminate use of tonic and stimulating remedies, such as bark, opium, wine, spirits, &c., was resorted to; yet the disease made rapid progress, until the hospital was overrun by it. Amputation was had recourse to where available; and Dr. Boggie states, that great reliance was apparently placed on that; but, unfortunately, it was of little avail, for in most cases the disease attacked the stumps, so that the operation had to be repeated. In one month, in the Cordileria, 150 men had each a limb amputated.

It was during this disastrous moment that Dr. Hennen received an order to proceed to Vittoria on a particular duty, which detained him there two months. The charge of the hospital devolved then on Dr. Boggie. There were still 800 wounded in the hospital; and from the 31st July to the 20th October, "before the progress of the gangrene was checked," 250 deaths had occurred in that hospital, and 150 amputations had been performed.

At this period Dr. Boggie altered the treatment of the wounded. For the stimulating plan he substituted the antiphlogistic, and seemingly with great success. The progress of the gangrene was speedily arrested, nor did it again appear in the Cordileria.

In discussing this important subject with surgeons who were at Bilboa during the period alluded to, and frequently with Mr. Hennen himself, we found that many, whilst allowing to Dr. Boggie the very great merit of boldly opposing a treatment which had, to say the least, proved unavailing, were yet disposed to ascribe the cessation of the hospital gangrene to a change in the season of the year; the autumnal and summer months had ceased, and with them that unhealthy state of the air which caused every wound, large or small, to put on an unhealthy look. Still great credit is due to Dr. Boggie for the talent he evinced in restoring confidence to the medical staff, and to the army generally.

It was at Bilboa, and at the very period we speak of, and originating in these very circumstances, that the practice of cutting off both ends of the ligature with which arteries are secured in amputations was introduced into English practice by Mr. Hennen. The method was not of his invention—it was French; but he was the first English surgeon who practised it.

During the great continental wars of the past and present century, gun-shot and other wounds were chiefly limited to the military, including, under this head, the naval service. But on the continent, at least, civilians have shown, on many late occasions, an aptitude at acquiring the art of war, which promises, we fear, some future serious conflicts. One result already of this new mode of warfare has been, to place the civil surgeon, as nearly as may be, on a footing with the military surgeon, thus suddenly calling on him for a promptness to decide and act, a quality essential to the military man, be he medical or not. Secondly, it has raised up again all, or nearly all, the great questions which had exercised the pens of the most illustrious surgeons of the past era: of Hunter and Bell, Percy and Larrey, Lisfranc and Dupuytren. Once more, discussions have arisen in that illustrious Academy (Academie Nationale de Médicine) as to the superiority of primary to secondary amputation; whether balls may, or may not, be left for any length of time in wounds; what should be the proper dressing of a gun-shot wound; what its first treatment; must the surgeon lay open (*debride*) such wounds under all circumstances, or ought he to wait until some circumstance arise, calling for or necessitating such *debridement*; these and other similar questions, not omitting the diet of the wounded, have once more been subject to the critique of the medical world. Benefit must, we think, accrue to mankind from such discussions; and we mean, therefore, to say nothing unfavourable or to the prejudice of the present surgeons of France.

The work of Dr. Boggie will prove valuable to surgeons. It is a monograph merely, that is true; and medical men generally, we think, do not read monographs. The one we have just examined will well repay a careful perusal.

The Code of Safety; or Causes, Effects, and Aids, Preventive and Curative, as well of other Epidemics, as also of Cholera. By G. F. Collier, M.D., &c. London: Longman and Co; and Simpkin and Co. 1849. Pp. 96.

The work before us is divided into four parts; the first, Treating of Causes and Effects; the second, of the Means of Preventing Disease; the third, of Aids; and the fourth is more especially devoted to the consideration of Asiatic Cholera.

The first division, in which Causes and Effects are discussed, consists of 125 paragraphs, or rather aphorisms, each of which contains truths sententiously but clearly stated, and which, while they convey distinct ideas to the mind, are closely connected with each other. In this division we have stated the influence of the atmosphere in producing disease, and those causes which render individuals susceptible of attacks from epidemics. In speaking of "Prevention" of disease, the author advocates attention to cleanliness, free access of light and air to dwellings, refreshing exercise, and suitable diet for individuals. In the part which treats of Aids, Dr. Collier remarks, in paragraph twelve, that, "to relieve the stagnant circulation, to determine the fluids to the surface of the body, to allay the commotions of the intestines, to comfort the whole system, and afterwards to elicit healthy secretions, are the rational indications, as well in a dysentery as in Asiatic cholera. And they equally apply to nearly all suddenly destructive epidemics, for not one of which has any panacea ever been discovered, or, it may be safely prophesied, ever will be; since, when a poison is introduced into the blood, recovery will chiefly depend upon the dose, the force, and the resisting powers of each individual." The fourth part treats especially of the symptoms, prognosis, and diagnosis of Asiatic cholera, with the *post-mortem* appearances.

The work of Dr. Collier exhibits much thought, and is worthy of an attentive perusal.

Insanity tested by Science, and Shown to be a Disease Rarely Connected with Permanent Organic Lesion of the Brain, and on that Account More Susceptible of Cure than has hitherto been Supposed. By C. M. Burnett, M.D. London: S. Highley. 1848. Pp. 107.

The object of the Author in this treatise is, to show that insanity is not, in the first instance, a disease of the brain, but one connected with the blood, having no fixed or local character, but producing the morbid phenomena comprehended under the title of insanity. It arises from derangement or mal-assimilation of those particular materials of the blood—carbon and phosphorus—which constitute the bulk of the elementary tissue of the brain and nervous system generally. The author is strengthened in this view from the fact, that in the few morbid appearances of the brain which are found to accompany insanity, nine out of ten are to be referred to the venous system in that organ. In most cases, insanity is caused by the deterioration of the *fatty matter* of the blood, by which the carbon and the phosphorus are unable to combine in healthy proportions, which substances, in a normal state, it is known form the elementary tissue of the brain and nerves, and which chief constituents fail to make that part of the organism of the body amenable to the operation of the vital and mental principles conveyed in the blood. Dr. Burnett thus viewing the disease, in four cases out of five, as only functional, he considers that it is more a curable one than has been generally admitted—the fault principally being the mode of treatment adopted. This has been hitherto antiphlogistic, and on this account has extensively failed. Dr. Burnett ranges his mode of treatment under four divisions—the hygienic, the therapeutic, the moral, and the physical. He condemns the indiscriminate use of alcohol, speaks highly of pure air and water, and urges strongly the necessity of attending closely to the quantity and quality of the food taken by the insane. Bleeding from the arm is, in most cases, considered injurious, while local bleeding as near as possible to the longitudinal or lateral sinus is recommended. Purgatives are principally useful for young persons of sanguineous temperaments; in multitudes of other cases they are injurious. Sedatives, tartar emetic, prussic acid, metallic tonics, and diuretics, have been found occasionally useful. The moral treatment of the insane, Dr. Burnett considers most important. The more these principles are carried out, the less cause will there be to resort to the physical treatment. One of the most valuable agents in the treatment of insanity is restraint; by this is meant, not the binding of the limbs, but the right extension of liberty to the insane.

The Medical Practitioner's Visiting List, and Register of Engagements, for 1849. London: John Smith.

Underwood's Medical Appointment Book, Diary, and Almanack, for 1849, *for the especial use of Physicians, Surgeons, General Practitioners, Dentists, &c.*

These two books will be found exceedingly useful to the members of the profession. Each is furnished with an almanack, a list of literary and scientific societies, their days and hours of meeting, with other information, of use to those who are engaged in the active duties of the profession. There are also ruled pages for the insertion of memoranda. We would advise every member of the profession to furnish himself with one of these books.

DR. ROUTH ON THE PUERPERAL FEVER OF VIENNA.

[To the Editor of the Medical Times.]

Sir,—My attention has been drawn to the leading article in the last number of the *Medical Times*, Dec. 16, 1848, in which allusion is made to Dr. Routh's paper on endemic puerperal fever.

You refer to an abstract, given some months back, of Dr. Lemelweiss's researches, which formed a portion of one of Dr. Bushnan's sketches of the progress of German Medical Science, as an evidence that the

substance of Dr. Routh's paper has already been made known to the profession through the columns of your Journal. I find, in the Number for March 4, 1848, a very brief notice of the important fact, that Dr. Lemelweiss had ascertained, in reference to the manner of propagating the disease, but which certainly did not embrace "the substance of Dr. Routh's paper."

In justice to Dr. Routh, (who is at present unfortunately absent from London,) you will permit me to state, that he had been, in the year 1847, an assiduous pupil of the Vienna Lying-in Hospital, where he closely observed the progress of puerperal fever, and assisted Dr. Lemelweiss in his inquiries respecting it. In the month of October of that year, Dr. Routh read an essay in Vienna on the subject, and again, in February, 1848, brought the question under the notice of the Academy of Medicine in Paris. On his arrival in London last March, he permitted me to peruse his paper, and its importance led me to request his permission to bring the subject before the Medical and Chirurgical Society. Dr. Routh acceded to my request, and drew up the paper that was read there. The paper was given to the Society in the last session, but the accumulation of previous papers prevented it being read until this session. From this statement, you will perceive that Dr. Routh had brought this important question before the profession both in Vienna and Paris, previously to Dr. Bushnan's notice of it in your Journal, and that the late period in which it was brought before the Medical and Chirurgical Society arose from a merely accidental cause.

I feel it my duty to state these facts, without in the least wishing to depreciate the value of Dr. Bushnan's interesting communications, still less to deprive your Journal of its just merit in giving a very prompt and clear abstract of foreign intelligence.

I have the honour, to be, your very obedient servant,

EDWARD V. MURPHY.

12, Henrietta-street, Cavendish-square,
December 19, 1848.

ON COLLODION AND ASBESTOS FOR TOOTH-ACHE.

[To the Editor of the Medical Times.]

SIR,—I request the favour of the insertion in your valuable Journal of the following, which may be interesting to many of your readers.

I have frequently applied collodion in severe cases of tooth-ache, arising from exposure of the nerve, with perfect success, when no persuasion could induce the patient to submit to extraction, either with or without the use of chloroform or ether.

The method I adopt is to let the patient first wash the mouth with warm water, in which a few grains of bicarbonate of soda has been dissolved. I then remove from the cavity any foreign substance likely to cause irritation. After drying the cavity, I drop, from a point, the collodion, to which has been added a few grains of morphia; after which, I fill the cavity with asbestos, and saturate with collodion. Lastly, over this I place a pledget of bibulous paper. In a few seconds the whole becomes solidified, and forms an excellent non-conductor of heat and cold to the exposed nerve. By occasionally renewing this, I have been enabled to effect a more durable stopping than with gold.

I remain, Sir, your obedient Servant,

J. ROBINSON.

Gower-street, Bedford-square.

MR. ROSS'S TABLES OF TREATMENT OF ASIATIC CHOLERA.

[To the Editor of the Medical Times.]

SIR,—I request the favour of your publishing the inclosed Correspondence, which I have selected for the purpose of clearing up an obscure point in my Tables of Treatment of Asiatic Cholera. As many other gentlemen may entertain similar impressions to those contained in the letters of my esteemed correspondents, in reference to the treatment, by salines, in Coldbath-fields Prison, it is desirable that I should be more explicit upon the subject, so that no point in my Tables may be left open to dispute. I have no wish to disparage the saline system of treatment; on the contrary, I believe it to be the best yet tried, and would recommend it as such; at the same time, it is my duty to state facts faithfully, regardless of any apparent contrariety that may appear in the evidence. Although Dr. Stevens' cases may not be depended on, and his system may prove injurious, yet it does not follow that other saline plans should be equally pernicious. Saline aperients may be improper, when simple neutral salts may do good. Again, there is evidence to show, that, when saline remedies are administered in a large quantity of water, the intestinal hæmorrhage, which salines are apt to occasion, is avoided; the salts are absorbed, and supply the absent constituents to the blood. Liebig explained the action of aperient salts by the theory, that, when the vehicle contained in solution a larger proportion of salts than existed normally in the blood, the excess passed off by the bowels,—a mode of explanation that applies to the other secretions. The successful administration of salines may, therefore, wholly depend upon the amount of fluid in which the salts are dissolved; and in all the cases that I have found reported, where decided success attended this mode of treatment, considerable quantities of water were drank by the patients. I would recommend, that the saline solution should not be much denser than the serum of the blood. The absorbents would be more likely to take up such a solution, than one of a higher specific gravity. It is upon such points as these that successful practice frequently depends.

I remain, Sir, your most obedient servant,

GEORGE ROSS.

24, Farringdon-street, City, Dec. 18, 1848.

Mr. Southee's letter deserves peculiar attention, as that gentleman held a high surgical appointment in the Russian army during the campaign in Poland in the years 1831-2, and was also at Cronstadt, when the cholera raged so severely there about the same period. His letter is a transcript of one published by him in the *Cambridge Independent Press*.

G. R.

"TO GEORGE ROSS, ESQ., SURGEON TO THE WESTERN CITY DISPENSARY.

"Dear Sir,—I have taken very great interest in your extensive researches on the Asiatic cholera, published in the *Medical Times*, and, therefore, widely disseminated.

"I am sure that the profession generally must feel itself under deep obligations to you for the labour you have devoted to this all-important subject.

"In your fifth lecture, which appeared in the above Journal, Nov. 25, 1848, you have given three statistical Tables, which will doubtless be recorded in various works, on the effects on the mortality in cholera, under different methods of treatment.

"I well remember the 'saline treatment' being first introduced into the Coldbath-fields Prison, and also into some other similar establishments, by Dr. Stevens, and the great renown this gentleman acquired, and the distinguished manner in which his services were rewarded, for his having so materially reduced the usual mortality in cholera by his novel saline treatment; and I have ever since had the greatest confidence in his method of treating cholera. But, supposing this city should be now visited by this awful scourge, my confidence is destroyed in a plan which I considered my 'sheet-anchor,' by your third Table, referred to above. It stands thus, as regards the treatment of Dr. Stevens:—

"'Salines.—Dr. Stevens' combination of salts—88 cases, 67 deaths; 76·3 rate per cent.'

"I am, therefore, desirous to know, and I am sure you will kindly oblige me by a reply, as one of the Committee of our City 'Board of Health,' from what documents you constructed this Table? For it follows, if this Table can be relied on, that Dr. Stevens, on public grounds, should disclaim what is considered a great merit due to him for the superiority of his favourite 'saline treatment,' inasmuch as this appears to be the treatment least worthy of professional confidence.

"Your answer, at your earliest convenience, will make me still more, dear Sir,

"Your obliged Servant,

"EDWARD ASTBURY TURLEY,
M.D. (Coll. Lond.)

"Ivy House, Worcester, 11th Dec., 1848."

"24, Farringdon-street, City, 13th Dec., 1848.

"DEAR SIR,—I am much obliged to you for your polite letter, received this morning, in reference to my Lectures on Cholera. You make inquiries respecting my authorities for the eighty-eight cases of cholera treated on Dr. Stevens' plan, contained in my Tables. I beg to reply, that twenty-five of these cases were treated in the city of London, under the jurisdiction of the Local Board, and were reported to the Central Board by Mr. F. De Graves; the remaining sixty-three cases were treated in the Hospital of Dr. Egeberg, at Christiana, in Norway, and first appeared in the *Eye*, a medical periodical in Christiana, in an able series of communications from Dr. Vetter. A review appears in the *Lancet* for 1834—5, p. 323.

"You may ask why I go so far for cases? Simply because I could get no series of cases to be depended on nearer home, and facts must be received, whether occurring in Norway or in England. I do not think that there is any series of cases containing at the same time the whole number of attacks and mortality published in England that is authoritative, except those published in my Tables. Opinions and summaries of experience, both in favour of and in objection to the practice abound; but, strange to say, there are no carefully recorded Tables of Cases. A statement of cures is of no value unless a statement of cases accompany it.

"I have refrained from referring to Dr. Stevens' cases in Coldbath-fields Prison, simply because it is obvious, that the grossest exaggerations, unintentional, perhaps, were published in respect to those cases. The visiting magistrates stated, on the authority of the surgeon, that upwards of seventy cases had occurred there within a specified period; but the Commission, of which Sir David Barry was the head, appointed by the Government to investigate the facts, could not discover more than two, or, at the utmost, three marked cases. Dr. Stevens admitted to Sir D. Barry that the majority had only premonitory symptoms, which are very deceptive.

"Under these circumstances, I do not think that any writer would be justified in citing the cases that occurred at that prison as genuine cases of cholera. I shall be happy to hear from you again, if you have anything to communicate that will tend to elucidate this question. Have you any sets of cases? If you have, will you oblige me by letting me have them.

"Believe me, dear Sir, yours most truly.

"GEORGE ROSS.

"Dr. Turley, Worcester."

ON THE PREMATURE ESCAPE OF THE LIQUOR AMNII.

[To the Editor of the Medical Times.]

SIR,—In looking over the article on the operation of turning, in Dr. Ramsbotham's valuable work on "Obstetric Medicine and Surgery," it struck me, that the premature escape of the liquor amnii might be remedied in a manner at once simple in its principle and easy of performance. The instrument I here propose to the consideration of more experienced accouchers than myself, is merely a gum-elastic bottle, with a long, narrow, valvular canula. The left hand having been introduced within the os uteri, the canula is to be slid gently along its inner surface and insinuated into the uterus, where, having discharged its contents, it is to be as gently withdrawn; while the hand or arm of the operator would act as a plug, the descending valve, in the neck of the instrument, would effectually prevent any escape of the fluid through its tube. I have not as yet given this simple contrivance a fair trial; but, should it answer my expectations, it will indeed be a boon to the lying-in woman who may be unfortunate enough (from a transverse or other presentation) to require the operation of turning after the rupture of the membranes.

I have the honour to remain, your obedient servant,

C. E. FITZGERALD.

Nottingham, Dec. 19, 1848.

NEW UNIVERSITY.

QUEEN'S COLLEGES, IRELAND.

FACULTY OF MEDICINE.

Candidates for the degree of M.D., in the Queen's University in Ireland, will be required to pass the matriculation examination prescribed to Students in Arts, and to pursue the following course of study:—

First Year ...	The Greek and Latin Languages	One Session.
	The French Language	One Session.
	Chemistry	One Session.
	Physics	Four Months.
Second Year...	Descriptive Anatomy	Six Months.
	Practical Anatomy	Six Months.
	Practical Chemistry	Three Months.
	Botany	Three Months.
Third Year ...	Physiology	Six Months.
	Materia Medica	Six Months.
	Practice of Surgery	Six Months.
Fourth Year...	Practice of Medicine	Six Months.
	Midwifery	Six Months.
	Medical Jurisprudence	Six Months.

In addition to the foregoing classes, candidates for the degree of M.D. will be required to attend a general hospital during twenty-four months, or a general hospital during eighteen months and a dis-

pensary six months, and also a course of practical pharmacy for three months.

Candidates will be required to attend one-fourth, at the least, of the above classes in some of the Queen's Colleges in Ireland, and for the remainder, authenticated certificates will be received from other Colleges or Medical Schools, recognised by the Senate of the Queen's University.

Students in Arts will be admitted to examination for the degree of M.D., two years after having obtained the degree of A.B., provided they shall have completed the curriculum prescribed for the second, third, and fourth medical years.

Every candidate, before being admitted to the degree of M.D., will be required to undergo an examination in all the subjects comprehended in the above course of education, and to make a declaration that he is 21 years of age.

The fees payable by matriculated Students in Medicine to the bursar, on behalf of the College, will be—

First year (including the Matriculation Fee)	£3	0	0
Second year	2	0	0
Third year	2	0	0
Fourth year	2	0	0
Degree of M.D., exclusive of Stamp-duty	5	0	0

The fees payable by matriculated Students in Medicine to the several professors, for each course of lectures prescribed for the degree of M.D., will be—

The Greek Language	£2	0	0
The Latin Language	2	0	0
The French Language	2	0	0
Physics	1	10	0
Descriptive Anatomy	2	0	0
Physiology	1	0	0
Chemistry	2	0	0
Botany	2	0	0
Materia Medica	2	0	0
Practice of Medicine	2	0	0
Practice of Surgery	2	0	0
Midwifery	2	0	0
Medical Jurisprudence	2	0	0
Practical Anatomy	3	0	0
Practical Chemistry	3	0	0

Non-matriculated Students will be permitted to attend any separate course or courses of lectures delivered by the medical professors, on payment of 5s. each Session to the bursar, on behalf of the College, and of the regulated class-fees to the professors, viz. :—

	One Course.			Perpetual.		
Anatomy and Physiology	£3	0	0	£5	0	0
Practice of Medicine	2	0	0	3	0	0
Practice of Surgery	2	0	0	3	0	0
Chemistry	2	0	0	3	0	0
Botany	2	0	0	3	0	0
Materia Medica	2	0	0	3	0	0
Medical Jurisprudence	2	0	0	3	0	0
Practical Anatomy	3	0	0			
Practical Chemistry	3	0	0			

EDWARD BERWICK, Secretary.

Board of Queen's Colleges, Dublin,
December 4, 1848.

GOSSIP OF THE WEEK.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received certificates to Practise, on Thursday, 14th December, 1848 :—Joseph Stewart Burton, Frederick Dicker Fletcher, Canterbury; Thomas Ward Boswood, Joseph Harvey, Milford, Derbyshire; Henry Sanders Grant, Northampton.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 15th inst. :—Messrs. Charles Pryce, Brighton; Charles Drage, Ipswich; Bindon John Burton, Dublin; Thomas Ferguson, Belfast; Samuel Nathaniel Squire, Pakefield, Suffolk; Henry Rogers, Regent-street; Decimus Nelson Frampton, Eaton-square; William O'Keefe, Cork; Simon Bowen, Haverfordwest; and James Kingdon Take, Week, St. Mary, Cornwall.

THE FELLOWSHIP.—Mr. Owen Richards, of Bala, Merionethshire, who, we stated last week, was the newly-elected Fellow of the Royal College of Surgeons, was also a member, his diploma bearing date March 20, 1835.

APPOINTMENTS.—Dr. Toogood Downing, of Harley-street, has just been appointed one of the physicians to the Blenheim-street Infirmary and Free Dispensary.

NAVAL APPOINTMENT.—Assistant-Surgeon G. E. Freeman, to the Penguin.

NAVAL SURGEON.—At the meeting of the Court of Examiners of the Royal College of Surgeons, on the 15th inst., Mr. Allan Brown passed his examination for naval surgeon. This gentleman had previously been admitted a member of the College, his diploma bearing date June 27th, 1842.

OBITUARY.—Dec. 5, at Cork, aged 29, Peter Thomas Gunning, Esq., assistant-surgeon 12th Lancers.—At Dumfries, on the 10th instant, James M'Lauchlan, Esq., surgeon.—December 10, at the Barracks, Enniskillen, of fever, Johnston Thompson Richardson, M.D., surgeon of the 57th Regiment.—On the 15th inst., at his residence, 28, Albemarle-street, from a sudden and fatal attack of apoplexy on the previous day, John Harris, Esq., M.D. (Cantab), and Fellow of the Royal College of Physicians.

THE BOARD OF HEALTH.—Mr. Smith, of Deanston, the celebrated agricultural improver, is, we believe, to be appointed one of the superintendent inspectors under the General Board of Health.

THE POOR-LAW BOARD.—We hear that Mr. Baines, Q.C., will succeed the late lamented Charles Buller, at the head of the Poor-law Board.

MARLBOROUGH COLLEGE, WILTS.—The office of Resident Medical Officer to this College was on Wednesday, the 13th instant, filled up by the election of Dr. Fergus, of the Staffordshire General Infirmary. A vacancy is thus created in the house-surgeonship of the Infirmary at Stafford.

LIVERPOOL LYING-IN HOSPITAL.—The seventh annual meeting of the subscribers and friends to this valuable Institution was held on Thursday, at the Institution-house, Pembroke-place. The Report showed, that during the past year the number of patients admitted into the hospital had been 155; attended at home, 10: total, 165. Labours, 164. Surgical cases, 1; mothers recovered, 162; died of Irish fever, 2: total, 165. Children did well (two cases of twins), 152; died, 1; still-born 11. The Report also showed that the position of the hospital was never so unfavourable as at the present moment, as the amount of subscriptions was only barely sufficient to meet the current expenses. There had not been any addition to the hospital wardrobe. The receipts were 280*l.*, expenditure 320*l.*, and amount due to the treasurer and outstanding accounts 270*l.*

MEDICAL REFORM ON THE CONTINENT.—In the sitting of December 5th, the Chamber of Representatives received a Petition from MM. Wasseize, Putseys, and other Members of the Society of Medicine of Liege, demanding a revision of the laws which regulate the exercise of the Healing Act. Ninety-six doctors of medicine, surgeons, veterinary surgeons, and pharmaciens, have declared their adherence to this demand.

THE UNION MEDICAL OFFICERS OF THE CITY OF LONDON AND THE COMMISSIONERS OF SEWERS.—Mr. Simon, the officer of health, stated, that though the city was still free from cholera, the disorder was spreading towards it. He also stated that he had received a communication from the various medical officers of the unions, stating that they would furnish the reports required by him if they were recognized as district sanitary officers by the Court, and allowed a salary of £50 each. The communication of the medical officers was referred to the Select Committee.

THE CHOLERA IN BELFAST.—The cholera, in its most aggravated form, has appeared here. Eight fatal cases occurred among the children in the nursery ward on Saturday and Sunday last.

CHOLERA IN DUMFRIES.—The number of cases reported up to Sunday morning last, since Monday, the 4th inst., was 97, and 19 deaths; so that there have been reported in all since the commencement of the disease, now nearly one month ago, 277 cases, and 84 deaths. There has been a considerable diminution in the number of cases and deaths last week compared to the preceding one; but there can be no doubt that the disease has been much more severe than the reports show. Owing to a change of arrangements, the medical staff have taken the charge of the reports, and meet for the purpose of making up the list in the Council Chamber, at 5 p.m. each day. They have had two meetings, one on Sunday, and one yesterday afternoon. At the first 37 cases were reported, and 9 deaths; at the second, 38 cases, 6 deaths, and 5 recoveries. Arrangements have been made for distinguishing cases of cholera from the premonitory symptoms in future.

CHOLERA IN RUTHWELL.—Four cases of cholera have occurred in this parish, all of which have proved fatal.

DEATH OF A MEDICAL OFFICER FROM CHOLERA.—Dr. Smith, of Ruthwell, was seized with all the symptoms of cholera about an hour after attending a patient affected with this disease. His death took place eight hours after the first attack. He was a man in the prime of life, but in his time had seen a good deal of service; was much and deservedly respected by a wide circle of friends and relatives. His practice was extensive, not only in Ruthwell, but in the adjoining parishes.

INTRAMURAL INTERMENTS.—The Commissioners appointed under the City Sewers Act, which comes into operation on the 1st of January next, caused notices to be served on the incumbents and churchwardens of parishes within the city precincts, warning them, under a penalty of 20*l.*, not to permit any interment within their jurisdiction, wherein the space from the top of the coffin to the surface of the grave is less than five feet; nor to allow any corpse to be placed in their church vaults or catacombs, unless enclosed in a leaden coffin, or a double wooden one, having pitch, half an inch in thickness between the outer and inner case. Undertakers aiding interments contrary to the above, are liable to the same penalty.

FILTH AND FEVER.—STATE OF THE SKIBBEREEN POOR-HOUSE.—There are permanently lodged in the Union Poor-house about 2,780. It was intended when first built to accommodate 800. Since then, three additional timber houses have been built on the premises, one of which is inhabited by invalids, and into these three and the main house there are now crammed by day 3,280, and by night 2,780. The air in the apartments in which these are kept is intolerable. Disease has already begun to increase in the house; and in the infirmary the number in each bed varies from two to six.

A MOVE IN THE RIGHT DIRECTION.—The Municipal Council of Paris has resolved, upon the proposition of M. Segalas, to raise the salaries of the surgeons of the central bureau from 400 to 600 francs per annum. The Parisian medical journals speak highly of other changes of importance to the profession, which have taken place since the introduction of M. Segalas into the Municipal Council.

HYGIENE OF ARMIES.—In an interesting memoir upon the comparative hygiene and the medical statistics of armies, M. Boudin has given the following conclusions :—1st. There is an intimate relation between the hygienic institutions of an army, and the losses it sustains by diseases, evacuations, and deaths; 2nd. The losses of all the armies in a time of peace exceed those of the civil population of the same age; 3rd. In Europe, and in North America, that is on this side of the iso-thermal line of 59 degrees, phthisis and typhoid fever constitute the principal causes of death; whilst beyond the line, and upon the sea-coast, the greatest mortality of Europeans is due to diseases produced by an air impregnated with exhalations from fens, such as dysentery and diseases of the liver. If the constitutions of the men be hygienically good, the mortality is not only reduced to ten in a thousand, (the mortality of the civil population in England of persons from twenty to thirty years of age,) but even to six in a thousand (the mortality of the military population in Prussia).

MORTALITY IN THE ARMIES OF EUROPE AND THE UNITED STATES.—In a force of 105,000 men, the Prussian army has lost, from 1821 to 1830, annually, 11·7 in a thousand. This is the lowest rate of mortality in the armies of Europe. This army, however, is composed of young men, who are

only engaged three years in active service, and they suffer little by being removed from place to place. The mortality of the civil population of Berlin, from 20 to 25 years of age, is 10 in 1,000. The British army counts 15 deaths in 1,000 men in the United Kingdom; 57 in the troops which serve abroad, making an average of 37 in 1,000 of all the forces. In the French army, numbering 387,687 men, the mortality is 34.2 per 1,000; and, if the officers are deducted, 46·5. The greatest number of deaths has taken place in Algeria. The Russian forces lose 50 men in 1,000; and, if we are to believe M. Dennis, the mortality rises to 160 and 180 in the army of the Caucasus. It is not only in European armies that the mortality is so great; in the United States of North America, in a force of 5,515 men, it has been computed that, from 1829 to 1838, there were 44 deaths in 1,000. It is necessary, however, to remark, that the mortality has not been more than 18 per 1,000 in the Northern States, while, in the Southern, it has reached 49. It has been observed, that the rate of deaths has not been the same in different kinds of troops. Thus, in Prussia, the infantry reckons 12·9; the cavalry, 9; the artillery, 10, per 1,000. In the British army, from 1830 to 1836, the dragoons lost annually 14; the infantry, 26·6, per 1,000. The total loss for seven years was 41·6 for the dragoons, 31·5 for the horse-guards, 58 for the foot-guards. Marozzo reports, that from 1775 to 1792, the Piedmontese forces experienced a mortality of 18 in 1,000 of cavalry, and 34 per 1,000 of infantry.

DR. SUTHERLAND ON THE TREATMENT OF CHOLERA.—Persian naphtha had been used with some effect in checking vomiting, but this medicine was so rare, that he could hardly recommend it. Chloroform had been used in the state of collapse without effect; but previous to this stage, it had been found useful in reducing cramps and spasms, and certainly relieved the sufferings of the patients. It was simply applied by being dropped on a piece of flannel, which was held to the mouth of the patient. Bleeding seemed the most effectual treatment at present. In this there was, however, a curious anomaly. At Edinburgh, in 1832, a patient was bled, and recovered, but in the next thirty-nine cases, in which bleeding was used, the patients all died. It had been tried extensively lately. Out of twelve selected cases at the Edinburgh Hospital, eleven recovered who were bled; and in one gentleman's private practice, four out of five patients recovered. This was at present a promising practice, and the results were such as to encourage its trial. But cholera was certainly an extraordinary disease; treatment which was curative one week might prove useless on the next. Large doses of opium had been administered with good effect in some cases; but, if used too late, there was the danger of a want of re-action and the patient sinking under the effects of the remedy. The transfusion of artificial serum into the blood had not been beneficial. In the management of patients in the hospital, much depended upon their distribution. There was no evidence that the disease was contagious. In one or two instances this had been asserted; but an examination had shown it to be unfounded. It was, however, certain that cholera had a tendency to spread. In a room where there was a single patient, persons might come into contact with him in any way without danger; but if a number of patients were in one room, and persons remained there for some time, they would be liable to be attacked. This, however, was not contagion. In the Edinburgh Cholera Hospital the patients were at first widely distributed, and there was no spread of the disease. Many more patients having been received, however, the beds were crowded together; and he (Dr. S.), on entering the wards, observed a peculiar odour, and warned the attendants of their danger. More patients, were, however, received, and within 24 hours four of the nurses were attacked, three of whom died. Since that time fewer patients had been received; and, though it was some weeks since the occurrence, none of the attendants had been attacked. This showed the importance of room and good ventilation in the wards. There was often a difficulty in obtaining external heat in the dwellings of the poor, to apply to patients. This could be done by hot bricks, water, sand, or salt. In some cases the cold water cure had been used with advantage, particularly for children,—wrapping them in a sheet dipped in cold water, and then covering them with warm clothing so as to produce perspiration; but he approved more of a plan of Professor Christison's, which was to dip a blanket into water as hot as it could be handled and wrap it round the patient. This soothed them very much, and had been attended with good results. The great thing, however, was unremitting attention on the part of the medical men. This was particularly necessary for the poor, who, unless well looked after, were apt to neglect the prescriptions given.

SUICIDES IN MECKLENBURG-SCHWERIN.—From the researches of Dr. Spengler, it appears that the number of suicides among the inhabitants, was 69, or 1 in 7,478; in 1846, 82 cases, or 1 in 6,367; in 1847, 71 cases, or 1 in 7,353. These statistical documents are very curious.

SUICIDES IN DENMARK.—From 1835 to 1844 there were 2,809 cases of suicide, of which 45·3 were in 100,000 inhabitants of Copenhagen, and the remaining 19·3 in the provinces. The cases of suicide amongst the men were three times more than the females. There are comparatively three times as many suicides in Denmark as in France; also, among the deaths of individuals above ten years of age, there was one suicide in 60, and 1 in 27 of the male sex. Two-thirds of these hung themselves, a fourth were drowned, and the remaining tenth chose other kinds of deaths. There were more females who drowned themselves than men.

MANSLAUGHTER BY A QUACK DOCTOR.—At the last York Assizes, on Monday, T. Whitehead (whose practice we noticed a few weeks ago) was convicted of the manslaughter of George Taylor, and sentenced to twelve months' imprisonment and hard labour.

MORTALITY TABLE.

For the Week ending Saturday, Dec. 16, 1848.

CAUSES OF DEATH.	Total.	Average of Five Autumns.
ALL CAUSES	1,130	1,154
SPECIFIED CAUSES	1,128	1,149
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	360	270
SPORADIC DISEASES:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	55	52
Tubercular Diseases	138	184
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	102	127
Diseases of the Heart and Blood-vessels	41	38
Diseases of the Lungs, and of the other Organs of Respiration	185	222
Diseases of the Stomach, Liver, and other Organs of Digestion	62	67
Diseases of the Kidneys, &c.	12	12
Childbirth, Diseases of the Uterus, &c.	12	14
Rheumatism, Diseases of the Bones, Joints, &c.	7	8
Diseases of the Skin, Cellular Tissue, &c.	2	2
Malformations	6	3
Premature Birth.....	26	23
Atrophy	25	19
Age.....	37	64
Sudden	23	12
Violence, Privation, Cold, and Intemperance	35	32
Causes not Specified	2	5

ARTESIAN WELLS IN ALGERIA.—The practice of digging artesian wells, known in ancient Egypt and in China, is customary amongst the natives of Algeria. Also in the Desert of Sahara, and especially in the Valley of Ouad Ria. In the basin of the Omegla, where the depth is sometimes 300 metres or more, for want of metallic tubes, they make use of trunks of palm trees, which conduct to the surface the water from the reservoirs beneath, which the Arabs call "underground seas."

TO CORRESPONDENTS.

"Mr. Sanderson."—We are not aware of having received such a communication.

"Dr. Wilson."—The cause is evident; the remedy doubtful.

"Medicus."—The diploma would confer no legal right to practise in this country.

"T. C. D."—The "Strictures" are under consideration.

"Beta."—It is impossible to decide.

"An Old Correspondent."—The Report shall be published as soon as received.

"A Birmingham Subscriber."—We know of no work which treats especially of the disease. Cooper's Surgical Dictionary contains some good remarks upon it.

"M."—The three Hospital Reports cannot be published unless authenticated.

"A Surgeon."—The diploma cannot be obtained without examination.

"Rus."—The Court of Examiners should be memorialised, who will take the matter into consideration, and will probably, with the testimonials mentioned, admit our Correspondent to examination.

"A Bachelor of Medicine, Lond."—Yes.

"An Old Reformer."—The subject will, in all probability, be brought forward early next Session.

"An Assistant-Surgeon, R.N."—Yes, in confidence.

"Omega."—No fees are demanded.

"Dubitans."—(1) Quickening has been known to occur as early as the third and as late as between the sixth and seventh months. (2) The Stethoscope.

"Filius Scientiæ."—A person in a state of intoxication may be destroyed by exposure to cold not sufficient to produce fatal consequences in a temperate individual.

"Jacobus."—It is prepared by digesting the sawings of any kind of wood successively in alcohol, water, and dilute muriatic acid, until all the substances soluble in the menstrua are removed.

"Anglican."—(1) The Kilogramme is nearly 2 lb. 3 oz, 4 drams avoirdupois. (2) The "Clypeola metallica pro digitis" is generally the same as a tea-spoonful.

"Adolescens."—The school is an efficient one.

"A Subscriber and M.D."—Communication received.

"M.D., Iron Works."—Yes: and the expenses would probably be from £10 to £20.

"Dr. Kebbell, Brighton."—Communication received; we hope shortly to be able to give an abstract.

"E. H."—We cannot give all the information sought by our Correspondent,—the Secretary of the Asylum (Dr. Conolly) will do so, on application by letter.

"Mr. J. D. Macdonald, Newman-street."—We will endeavour to find the communication.

"Mr. W. C. Dalby, Syston."—Yes.

"A Correspondent, Shepton Mallet," informs us that his neighbourhood is much infested with herb doctors, worm doctors, and water doctors. He sends us a specimen of the means adopted to catch flats, and we are really surprised that the public should be so easily duped. We give a specimen of the talents of a gentleman who "wants an apprentice to the profession,"—lets blood, draws teeth, and expels worms:—

"Bad news for the worms, new K— is in town,
They cannot withstand his Hearts of renown;
He expells them with ease from old and from young,
And some you may see one hundred yards long.
What a foe to mankind these vermin must be,
What a blessing if from them we may be set free;
We don't wish to lose either a child or a wife,
And surely we wish to preserve our own life.
Then let us consult this excellent plan,
If troubled with worms, K— is the man!
As he is now to be seen every day.
With pleasure he'll hear all you wish for to say."

"Tooth."—Mr. Tomes, in his Lectures on Dental Surgery, gives the following process:—Bees-wax previously softened by immersion in hot water, and well kneaded, and then placed in a horse-shoe shaped tray, of suitable size, is introduced into the mouth, and carefully pressed against the gums until they are perfectly embedded. The tray is then withdrawn, and will present a counter-cast of the gums. Into this wax impression plaster of Paris is poured, and allowed to set, after which it is removed from the wax by softening the latter.

"Dr. W. P. Brookes, Cheltenham."—Communication shall appear next week.

"Dr. W. G. Maxwell, Hydrabad, E.I."—Communication received.

"Dr. T. Thomson, Stratford-on-Avon."—On lead-poisonings shall appear next week. The request shall be attended to.

"G. Stephenson, Esq., 3rd Dragoon Guards, Nottingham," is thanked for his communication.

"Mr. W. T. Morris (post-mark Limerick)."—We cannot engage to insert attacks on individuals, especially when we have not sent us the names and *addresses* of our correspondents. Will our Correspondent favour us with a London reference?

The Letter from "The Author of the Fallacies of the Faculty" will appear next week.

"Mr. Crummey's" communication is in type.

ORIGINAL LECTURES.

LECTURES ON THE RACES OF MEN.

By ROBERT KNOX, M.D., F.R.S.E.
Lecturer on Anatomy, and Corresponding Member of the French Academy of Medicine.

(Continued from page 175.)

POLITICAL UNITY OF THE SLAVONIAN RACE.

The circumstances, chiefly accidental, which raised to high political importance the imbecile house of Hapsburgh, with its long train of courtiers, form a portion, and a large one, too, of the political history of Europe. In the elevation of the family, it was hoped to continue a central power in Europe, which, under the name of the empire, should retain as much as it well could do of the ancient Roman domination. Thus, directly or indirectly, the stolid descendants of Rodolph the Goth, came to claim dominion in Italy over the Italian races; in Spain, over the mingled jumble of six or seven races, which now infest, rather than inhabit, the Celt Iberian Peninsula—over Spain, in fact, as a province of the Roman empire; over the Slavonian races, as forming, indeed, the real strength, and assuming the mock name of Germans, calling themselves Germans, and endeavouring, by various political tricks, to identify themselves with the true German race of central Europe; the Saxon race, whose strength lay in Scandinavia, and on the southern shores of the Baltic, in Jutland and Wirtemberg, Saxony and Holland.

Carrying out this game of political fraud, hoping that the misnomers and contradictions would not be noticed, the pretended German (Slavonians in fact) pushed Croats and savage Huns—the Zedeschi—into Italy; and occupied Austrian Flanders, thus following the original track of the Hun, or Gothic race, which seems to have been diagonally across Europe, from the shores of the Danube to Finland and the German Ocean.

As if in mockery of an empire founded on treaties and protocols, Berlin and Vienna came at one and the same time into the hands of a mob. A cry was raised in both for national unity of the German race as distinct from all others; not as to the Pruss or the Hanoverian, or the Austrian or the men of Hesse Cassel, but as Germans—that is Saxons. This demand was met by the Slavonian race, who also demanded a Slavonian unity: between these two the house of Hapsburgh, which rightly belongs to neither, must fall. Its only chance would be to dismiss the German *employées*, and declare for Slavonia and a Slavonian empire.

For these great events the English public were not in the least prepared: with the exception of Thierry, no historian, in so far as I know, had treated of the History of Race; well educated persons even yet often ask me if the French are Celts! and if the Scotch are Celts! They are so unlike the Irish, the only Celts they have heard of; for the tendency of the English press generally for the last twelve months, must lead those who have not inquired into the history of races into the belief, that the only Celts in the world are the Irish, &c. These ludicrous errors may be traced directly to the miserable historical compilations, as they are called, put into our hands at school, pressed into our memories there, and never abandoned. And although, at various times, as I have endeavoured to prove, in the history of Europe, the feelings of race showed themselves distinctly in Europe, in despite of all the attempts to conceal the absolute weakness of the "old-fashioned ancient monarchies," with "their sham constitutions and legal fictions," the real question of race was never fairly brought out, until the cry raised a few months ago by the German and Slavonian races.

The unity of France as a nation and a race is the circumstance which charms them most: nationality, recollections of surpassing grandeur, added to the deep feeling of race, pure and undivided; while they are quite sensible, that were the inhabitants of Great Britain and Ireland composed of *one race*, the kingdoms would not be *three*, but *one*; that they would form the antagonism of Celtic union in Europe, forming an empire so strong, *being united* and *one*, that she might safely say to Europe, arrange your difficulties as you please; we neither fear nor despise; we are perfectly indifferent to your vapourings and fluster. But then comes the Celtic question.

Saxon England, about	. .	13 millions
Saxon Scotland, about	. .	1½ ,,
Saxon Ireland	. . .	1 ,,
		14½
Celtic England, Wales	. .	½ million
Celtic Scotland	. . .	½ ,,
Celtic Ireland	. . .	4½ ,,
		5½

In Central Europe we have two races very properly and justly demanding a distinct national unity; the German or Saxon, and the Slavonian.

The numbers of the Continental Germans at present demanding national unity and political independence, are said to be about forty millions; this is exclusive of the very best of their race; the purest of all the Saxon blood, namely, the Danes, Norwegians, Swedes, Dutch,—these nations are composed of the purest of all the Saxon race; the insular Saxon or German is the Englishman, the lowland Scot, and the eastern Irishman. The Slavonians are said to muster about seventy millions, divided between the Austrian, Russian, and, I presume, Turkish empires. To emancipate this race from their present governments, which they abhor, there is required but *one* mind—one truly great man; let us attend for an instant to the nibbling of a strong modern pen in the consideration of this great question.

"The recent exertions of several of the most important countries of central and southern Europe to reform their institutions and reconstitute their Government, have ostensibly and incontestibly been animated by a passionate desire for what is termed nationality, by which is in reality meant a somewhat exclusive manifestation and imperious assertion of the right of language and race."

The writer, misunderstanding the meaning of the terms, nation and race, next goes on to say, that, "to speak more correctly, the term nationality denotes a tie of higher import, and more universal obligation, than those of a common tongue or cognate origin."

How any human contrivance,—which all Governments are,—should be declared a tie superior and more universal than that eternal tie of nature, which links us to those of cognate origin—that is, to those of the *same race*, is to me altogether incomprehensible. That I, born accidentally, we shall say, in Britain, may be called by Act of Parliament an Englishman, is all well enough, so long as it runs not counter to any great law of my nature. But let us reverse the case; let another race of men, say Hungarians, Croats, Mongolians, or Russ, or Normans, overrun England, occupy it with millions, call themselves, after the lapse of time, *Englishmen*; create a thing called nationality; expect that this wholly artificial and ideal tie, called national, is to bind me or any Saxon to the accidental land of our birth, when occupied by a race not of cognate origin, (to use the term of the expert Journalist), is to imagine what never did happen, and never will happen, to any pure race of men. The flag of England would rise coldly then before us; no soul-stirring effects would or could follow, for us—and I know I speak the real sentiments of all Saxons—it might be struck to the earth without one hand being stretched out to save it. The Saxon flag must be waved by Saxon hands, and the war-cry of "England for ever," must be raised by Saxon men, before our sympathies would be raised.

It is a remark of the same Journalist, that "no state can subsist on the mere basis of language and race. That even France, the most *homogeneous of existing nations* (mark the expressive phrase) would suffer some diminution on her eastern frontier." Now this alludes, of course, to Alsace; but if France lost there, could she not, on the principle of *race*, claim most of Sardinia and northern Italy? Ireland, too—their twin brothers of the Celtic race occupy nearly all Ireland, a part of England, and at least a third of Scotland, lower Canada, and a large extent of Belgium.

"The Prussian empire," continues the Journalist, "would be shattered into a hundred barbarous tribes and incoherent fragments." Now, nothing more opposed to the actual truth was ever said; the Russians, forming the real strength of the empire, are essentially and absolutely Sarmatian or Muscovite. The only difficulty the Sarmatian has, is the Slavonian question; the other races on her soil have been wholly trodden under foot, and are becoming extinct; the Tartar or Mongolian requires no especial notice.

This Journalist thinks and affirms that nationality, which, according to him, is the only real tie, must consist in some positive political connexion, such as a common reverence for the authority of the throne, or in a common adherence to the rights of a constitution, or in the general adoption of the same traditions of law and government, or even in common subjection to military might!

The states of Italy and Germany, it is said, "aim at a unity through language and race, but the essential element is still wanting, the element of government." No doubt it is; but what they seek is a government in unison with the *feelings of the race*, and this mankind will ultimately insist on. If the Norman government of England had been in unison with the minds of the *Saxon race*, the United States of America would never have appeared: there is no flinching from this simple fact. To hold the twenty-seven states together requires not a soldier; to hold England and Ireland together requires a well appointed army of

	50,000	men;
A police-force of	20,000	,,
Government agents, &c...	10,000	,,
	80,000	

There is, then, no unity of race; that is the whole question.

The whole Slavonian race is said to amount to 78,000,000; with a portion of these, Zedeschi, the house of Hapsburgh ground Italy into the most abject slavery; with another part was crushed German independence; and with German troops were butchered, in cold blood, the Slavonian race in Bohemia. This was the policy; and it is still followed out. The English Press contends for the old story of the balance of power in Europe; as it was an artificial system it must perish like all that is artificial. It ought, in fact, to perish. The balance of power must, henceforward, be based on the antagonism of race.

MUSICAL TALENT OF THE RACES OF MEN.

As all the great races of men have their own distinctive characters, physically and morally; their own literature, science, and art; so each race has a musical ear peculiar to itself, expressed in its aboriginal songs, or native wild notes; its more elaborate forms, when subjected to the processes of civilization and imitation; its character, as expressed by the human voice—the original instrument of nature—and as imitated and expressed by the various human contrivances of brass and catgut, parchment and reed. Let us consider this wonderful art—the art of music; this mysterious, and seemingly superadded, faculty, the musical ear, not necessary, nor required for human happiness; not to be acquired when absent; not to be improved when present; unalterable, fixed, determined, and eternal in every race, according to its nature.

Music is usually called one of the fine arts, and music and painting have been called sister arts. (a) They have been defined as arts of which the one is supplied from inward sentiment, the other from outward observation; but it is evidently not so. Music stands apart; it is not one of the fine arts; it has no relation to them. Were it universal, we

(a) Quarterly Review, September, 1848.

should say it was mysterious, and had a reference to a something hereafter; but it is not so. Musical ear is not universal; on the contrary, the most numerous races of men have no musical ear, and even amongst the most highly organized do we find one race, at least, to whom it will be found difficult to assign a musical ear in the strict sense of the term, the Saxon,—so rare amongst that race is the deep, intense, and indescribable feeling with which musical tones reach the souls of those on whom nature has lavished a gift, seemingly supererogatory, barren, and profitless for human good or human ill. Critics (a) write of the art which consists of giving to music a form, and to painting a soul; such expressions convey no meaning, to my mind at least. Music has no form; painting no soul; the deep recesses of our inward feelings, those mysterious nervous cords which link us with the invisible, the eternal, the unknown, are quickest and easiest reached by music; but all the fine arts proceed in the same direction; their object is to touch those inward feelings on which are based ideality, the pure, the spotless, the everlasting, the world which has always been and is ever to be, contrasted with the little petty shop-keeping world we live and toil in. In this respect, then, these arts do not differ, but music differs from them. It is a dream of the soul which admits not of analysis. But this world is not made of dreams, although abounding in persons who fancy themselves dreamers, and would fain make others believe so. There are no dreamers amongst a spatular-fingered race, nor much music either; if it exist at all, it will assume a brass-band character; brass and noise, drums and post-horns,—the National Anthem performed by five brass bands! The "Jolly Waterman" comes next, and "Tom Tug"; the "Cherub Aloft" is the mock sentimental of music, and its own musical taste and ear,—not to all the individuals of any race, but to some. Thus, it was easy to see that the Welsh Celt, and the Irish Celt, and Scottish Celt had their own music, and that of a high order. The native music of the Slavonian is beautiful; so is the Samartian: the Italian, alone, is perfect. The Scandinavian or Saxon races love simple melody; and the airs of the race preserve this character. Our so-called national airs are mostly Norwegian or Scandinavian; very pure Saxon races are without any ear for music. Hence, the difficulty of maintaining public taste in England; it ever tends downwards to the sailors' catches and glees, the drinking song, the mock-sentimental. In my younger days, sailors used to join in the chorus of "Rule Britannia" on the stage. They did so lately at Portsmouth, as I foretold they would. I shall reserve what I have to say on the character of race, as represented in their so-called national dramas, until I speak of the Saxon race. In the meantime, the less that is said about native talent and national music, the better. The nationality, however, which is based and supported by some strong quality in the race, is often of great importance, a fact which the following brief anecdote will sufficiently explain:—

I had proceeded to Folkstone, on my way to France; the packet-boat, Undine, I think, did not sail until next morning. The evening was come, and soft for the season of January; the full moon was on the waters of *the Channel*,—that all-important ocean stream, which preserved from the hands of Napoleon the Crown of England.

As I listlessly wandered along the shores of the sea, meditating on past and coming events, I found myself close under the windows of an ancient part of Folkstone towards the east. From an alehouse there proceeded the usual hoarse, discordant noise, which the lower orders in England take as music; a party of boatmen, and, probably, tradesmen, were carousing in a room above, and one had volunteered what he called a song. My "lungs began to crow like Chanticleer," as I listened to him; he sang the ditty of "Rule, Britannia;" the notes need not be spoken of. But as I heard him roar out, the others joining, that "Pritons," for so he pronounced the word "Britons," "would never be slaves," on that very beach, where William the Norman landed, my mind gave way to deep reflection, and I bethought me that nationality, and a war cry, and a thorough dislike and contempt for all other nations and nationalities, are good things after all,—let philanthropists and philosophers say what they will.

(a) Quarterly—*loc. cit.*

SOME REMARKS ON THE PRIMITIVE AND OUTCAST RACES OF MANKIND.

It is a favourite theory with some, that the primitive races of men differed considerably from those now inhabiting the earth. That they were of a lower type—degraded in form and intellect; inferior men in fact—uncultivated, uncivilized. That by degrees they improved—education, civilization, knowledge, altered their forms—or that the brutal portion of mankind gradually became extinct, leaving the earth in the hands of the more intellectual; or finally, that in the nature of things, by a great law of organic life, the human form becomes deparated, passing through, in successive ages,—centuries,—certain lower forms of organization, towards a superior form and a superior character; beings of a more elevated character appear essentially springing from the past, yet differing much in their special nature; the law of progress, in fact, which everything obeys—man and animals—the earth and all that is therein.

These theories,—for they are merely theories,—and some of them devoid of all basis in truth, I propose inquiring into in my two concluding Lectures. In the meantime, it may be permitted me to remark, that in so far as *historical* evidence goes, whether written or monumental, the theory of low primitive races of men, appearing *first* in history, is refuted by history itself: anatomy, as yet, gives no countenance to such ideas. Beyond the era of the monumental records of Greece, and Egypt, and India, all is profound mystery. But the time may come, when a deeper dissection of the globe of the earth may reveal all this, and much more. The cautious Newton—the man of the Mint, of figures and calculations—has very beautifully and touchingly said, somewhere, that, of the true philosophy of nature, organic and inorganic, he knew no more than a child, wandering by the sea-shore, collecting shells; gazing at the ever restless ocean; hugging his little treasures,—his discoveries,—the variegated shells he had just picked up; retiring, before the tide, to that little spot called his home, to seek, in beings like himself, those responsive sympathies which human nature seeks and finds in human nature alone of all the Creator's works.

Of the other fashionable theory, respecting the progress of race, namely, that by the union of all, or, at least, of several races, a mixed population results, superior to any pure race,—of such a theory I need only say, that it is at once refuted by the history of man and animals. For the former, look at the past and present condition of Italy and Spain, of Mexico and Peru. It is against certain great, and seemingly unalterable, physiological laws, and against historic evidence. The oft-repeated nonsense, that nationality is a stronger tie than race, is refuted by the history of the Saxon in every part of the world.

Did there exist, in Central Europe,—on the banks of the Rhine and Danube,—in the Black Forest and in Central France,—on the shores of the Baltic, and perhaps, also, in Spain, other races of men, which are now becoming extinct—races remarkable for their stolidity, their incapacity, their heavy brutality, their extreme ugliness? I think it probable that such races did exist, but this is offered as a mere conjecture. When Teniers, Ostade, and his brother artists, drew the correct portraiture of the Flemish and low Dutch boor, with his enormous uncouth nose, inexpressive features, gigantic hands and feet terminating his misshapen limbs, they were thought to have drawn caricatures of the peasantry of their countries. Now, this is not the case. People like these, so drawn, are still to be found in the Low Countries, and, no doubt, in Holland, and on the Rhine, and in Germany. I was informed, by a most intelligent person, that, whilst travelling through Germany, and in the district of the remains of the Black Forest, he passed through a district where the people were generally deformed, without shape, with a frightful physiognomy, and enormous hands and feet. Some of these people appear to have found their way into Scotland and its Highlands, following or accompanying other races.

In the South of France there are persons pointed out as belonging to the *outcast* (*mandit*) *races*. They are not gypsies, nor Jews, who are outcasts in their way; nor would it be easy to say to what race they belong. M. Michel has written a learned work respecting these outcast people, or race, as they are called. This work I have not seen. The particulars of the following brief sketch I have gleaned from a memoir published in the *Union Medicale*, of 10th February, 1848.

In travelling along the chain of the French Pyrennean Mountains, the traveller hears, almost at every step, of the persons called *Cagots;* springs or fountains are shown you, called by the people *Fontaines des Cagots*. Frequently, in churches, they show you a narrow and low entrance by which alone the Cagots were permitted to enter the House of God. Finally, in several villages, groups of houses are still shown you, isolated from the rest, retaining traditionally the name of Quartier des Cagots.

These form some of the proofs, that there once lived in France, so late as the full establishment of Christianity, a race of men esteemed by the general population of France as pariahs or outcasts—detested, abhorred, despised. But where are these men now? The writer of the article I now quote, was shown one at Landes for the first time; the person shown him as a Cagot, was a tall and handsome young woman, perfectly well made, with fair hair and blue eyes, oval face, and regular features—in plain language, a Saxon woman, living amongst a dark, stunted, dwarfish population of Gascons and Bas Bretons, squalid and filthy, with disheveled black hair, small eyes, and an insurmountable hatred to progressists and progression. By some singular and mysterious event, the handsome race was the pariah; the dwarfish, vulgar, and common, was the dominant and favoured race.

The recollections of the vulgar are most obstinate. To this day I have heard, in the remote and sequestered dales and glens of my native country, Scotland, the stories and theories of Herodotus and Hippocrates nearly unaltered. Although in the South of France all are citizens—all enter the church by the same door—all have equal rights—the people still point out individuals as the descendants of the Cagots—the pariahs of France, the accursed, outcast race. It is said to be different in Spain—nothing more likely. From that happy land common sense has long taken flight. Without knowing why, the agodos or outcasts are still persecuted cruelly in the valley of Bustan.

Cagotism in France, then, may be said to exist only in history; but still its history is worth investigating; and the following questions, put by the author of the memoir we quote, merit great attention:—

What is the origin of the Cagots, or pariahs, of France? Whence do they come? At what epoch did they settle in the Pyrennean regions? When commenced the barbarous legislation which oppressed them until the period of the French Revolution? And did this cruel legislation and prejudice originate in some physical or moral defect of the Cagot? Was he a Cretin, or a leprous person? Was he a heretic? Was he merely a man of another race, overcome and subdued as a nation? Or was he the original, indigenous native of these mountains when the mingled hordes of Celt Iberians, Gascons, and Basques took possession of them?—the vestiges of a race more ancient than any existing.

Is not this the fate of certain races? Already the Hottentot, the Bosjesman, have become Cagots in the land of their birth, in the land which originally belonged to them. Death was the fate of any Bosjesman discovered in the African desert by the exotic Dutchman, calling himself an Africaner. The Caffre—noble, chivalrous Caffre—will soon be a Cagot, a race] accursed in his beauteous wild; the romantic slopes and wooded valleys of the Amitola mountains. Hunted like a panther, the hyæna, the wild dog, the hippopotamus, he must

share their fate, giving way before the man dressed as civilized should be, all like each other, in model regimentals; his mind trimmed, formed, and fashioned to the current opinions of the day.

The vestiges of the race seem to me too few, the physical data too conflicting, to decide this question. The first person pointed out to the French author as a Cagot, was a handsome woman of Saxon origin, a perfect contrast, I have no doubt, to the wild bewildered looking Gascon and Basque population amongst whom she dwelt. But, how came she there? Basques do not produce Saxon children any more than negresses favour their black husbands with Mongol children.! Pursuing his inquiries, the French author found that the sons of nine or ten Cagots whom he met with had fair hair and blue eyes. Three were remarkably fair. The researches of Michel, Coarraze, Nay, Abadié had the same results. *The lobe of the ear was natural*, and they had found no Cretins. Palasson, at the end of the last age, describes the Cagots of his day much as Procopius described the Goths, tall persons with fair skins. If these facts may be depended on, the Cagots of ancient times were of Scandinavian origin; they were confounded by Ambrose Pare and others with the leprous.

But there are conflicting statements to be encountered. Buale, an apothecary of Argeles, affirms, that the Cagots of his neighbourhood are very subject to *goitre*; have a dark skin, blue eyes, and the ears without lobes; whilst in the department of the Landes, and around Bayonne, a different description is given of the Cagots found there. Hence arises a question superseding all others; are the Cagots of different races?

The more commonly received opinion throughout the country is, that the Cagots are the descendants of the Visigoths, a race of Scandinavian origin, or at least partially so, who held the South of France until the reign of Clovis, and who, being Arians, cruelly persecuted the Catholics. Hence the mutual hatred! This, under Clovis, gave rise to a war of race; it was the same ever as it is now,—the Celt and Celt Iberian against the Scandinavian—the dark-haired races against the fair—the Catholic against the Protestant. Cans Goths—these Gothic dogs—was a favourite expression in the South of France. All Scandinavians they called Goths. By the trickery or mystification of historic events, the Goths of the Danube, who subdued the Western Empire and Italy, endeavoured to persuade Europe that they were Germans, and of Scandinavian origin. They established themselves at last in Vienna, where they still are. Claiming to be Germans, which they were not, they attempted to crush the liberties of the Saxon race in Central and Northern Germany, by employing the real Gothic force—that is, the Slavonian, against the Slavonian; when requisite, they employed their German troops. With the Slavonian Gothic race they opposed Luther and Gustavus Adolphus; with the South Germans, they crushed the liberties of, and endeavoured to exterminate, the Slavonian people of Bohemia. It was the same in the time of Clovis—a war of race, ending in the destruction of the heterogeneous mass of people called Goths, Visigoths, and Vandals, who had seized on Southern France. Has France gained by exterminating the Scandinavian Cagots?

ORIGINAL CONTRIBUTIONS.

CASE OF PLACENTA PRŒVIA.

By CHARLES WALLER, M.D., Obstetric Physician to St. Thomas's Hospital.

Although the case of Placenta Prœvia, about to be narrated, presents nothing of an extraordinary character, being a simple case treated in the usual manner, yet I send it for insertion in your Journal, that the record of my experience in these fearful complications of labour, may be complete. The presentation of the placenta being partial only, no opportunity was afforded of still further testing the safety of Professor Simpson's suggestion, as the manipulation required for the perfect detachment of the placenta would have been more difficult than that which was necessary for the removal of the child; it affords, however, another example (to be added to the many already existing), showing the propriety of prompt interference in these formidable cases. On referring to former numbers of your Journal, it will be seen that thirty-four cases have been recorded as occurring in my own practice of placenta prœvia; the present, therefore, increases the number to

Case 35. Mrs. S———, a lady of peculiarly delicate habit, was married at a very early age; she gave birth to her first child at the age of nineteen, and although she is at the present time only thirty-four, has been delivered seven times at the full period, and has had four miscarriages; the latter generally attended with profuse discharges of blood. She has only once previously been under my own care, when the fœtus passed at the fifth month, and in this case, contrary to her usual custom, the loss was exceedingly trifling, and her return to her general state of health more than ordinarily rapid. She has always suffered greatly during the period of utero-gestation, but at this time her pains were most agonizing, and seemed to partake of a neuralgic character of intermittent or rather remittent kind; for although at times a certain amount of relief was experienced, yet for several months she knew not what it was to be free from uneasiness. There was scarcely a part of her body in which pain was not complained of, although her head, stomach, and genital organs were chiefly affected. The pains in the head were not always general, one side being occasionally more severely attacked than the other. In addition to the gastric pain, there was almost universally nausea, not unfrequently attended with distressing vomiting, so that for many days scarcely any nourishment could be taken without being immediately rejected, or, if by chance it was retained, was productive of such intense suffering, that for days afterwards the patient could not be persuaded to renew the attempt. This was also unfortunately the case with respect to medicine; nothing afforded more than transient relief, and often, indeed, the pain seemed to be aggravated rather than diminished. The pain in the genitals was of an extended character, the uterus itself being extremely irritable, the pains being often of an urging and forcing kind, attended with a hot, full, and bursting sensation along the vaginal canal, the patient feeling as if there was a large substance about to be expelled. There was also great irritation about the neck of the bladder, producing very frequent micturition. Examination per vaginam discovered nothing abnormal, the passage was free from swelling, and the uterus in its natural position. From the inconvenience complained of, I expected to have found prolapsus of the uterus, with inflammation of the vaginal membrane. Such, however, was not the case.

For some months gestation proceeded with but little variation in the symptoms, during which time, as before noticed, no effectual alleviation of the symptoms could be obtained. On the 28th of Sept. the patient was alarmed by a very large effusion of blood, unattended with any decided uterine action. This soon subsided; indeed it had ceased before my arrival at her house. On making an examination, the uterus was found very slightly dilated, only sufficient to allow the introduction of one finger. A considerable space intervened between the os uteri and the ovum, the latter could only be reached with difficulty, when a portion of the placenta could be distinctly felt. The hæmorrhage had produced great prostration in an already enfeebled constitution, and it was not without apprehension I looked forward to its renewal, when labour should eventually come on. Perfect quietude was enjoined and anodynes administered with the view of tranquillizing the excited condition of the circulatory and nervous systems. Slight pains occurred at irregular intervals, but nothing material happened until the 4th of October, when a most alarming hæmorrhage again took place. I was immediately sent for, and found my patient in a state of great agitation, a very large quantity of blood having suddenly escaped from the uterus; the flow had then entirely ceased. Fearing another gush of the like nature would probably at once extinguish the feeble powers of the system, I determined upon instant delivery, if practicable. The os uteri was very partially open, but being dilatable, I succeeded in passing my hand into the uterus, and turning the child without any great difficulty; the fœtus appeared to have arrived at the seventh month, or rather more, and was born alive. One fearful gush succeeded the removal of the placenta, after which the bleeding ceased. In her former labour, the uneasiness soon ceased after the birth of the child, so that suitable nourishment could be given, and the patient had what is usually termed a tolerably "good getting up." Not so, however, in the present instance, for the pains continued with (if possible) increased violence; this was especially the case as regards the gastric symptoms; the agony was intense, if the smallest particle of a solid nature were taken, and the exhaustion, of course, became most formidable. The power of voiding urine was lost for several days. On trying the effect of opium, sometimes in large, and, at others, in smaller quantities, I was gratified in finding that it was retained on the stomach, and produced a most beneficial effect, in greatly relieving the pain. For many days this remedy was administered every few hours, and, indeed, constituted the only efficient treatment. After a somewhat protracted period, I had the satisfaction of seeing my patient able to walk down stairs, although she still remains in a very debilitated condition, and is scarcely ever free from pain.

OBSERVATIONS ON POISONING BY WATER PASSED THROUGH LEADEN TUBES, AND RETAINED IN LEADEN CISTERNS.

By THOMAS THOMSON, M.D., Stratford-upon-Avon.

Whilst so much is being said and done in the cause of sanitary improvement, may I beg to draw attention to a source of morbid action which I have lately been led to suspect occurs more frequently than is generally imagined. I refer to the presence of salts of lead in water used for domestic purposes, from its action on the lead of the cisterns, and the pipes which contain it, and through which it passes.

My attention was aroused to the importance of this inquiry, and to the investigation of so insidious a cause of disease and suffering, by a severe case of lead poisoning which lately presented itself to my notice, and which, with several others, occurring in the same family—one of which terminated fatally before the detection of the poison,—was, upon investigation, and subsequent analysis of the suspected water, unequivocally traced to that source.

Having the permission of my patient, I feel that it will add to the interest of this communication if I here introduce, in his own words, the following interesting and touching narrative, which he was so obliging as to draw up at my request, of the history and progress of these cases up to the time when he came under my care:—

"I resided," he writes, "at Firfield House, Addlestone, near to Chertsey, for four years, during which time the well and pump belonging to the house were used exclusively until about four months before the expiration of that period. After being there four months, I was laid up with severe pain and swelling in the foot, which appeared to be of a gouty nature, and these kind of attacks troubled me for two or three months, accompanied with general symptoms of indigestion, nettle-rash, sickness, and great depression of spirits, with a particularly dark and unhealthy hue of countenance, loss of flesh, and continued constipation. To this succeeded so violent an attack of spasmodic obstruction of the bowels, that for some time I was considered in imminent danger. From this attack I recovered, but I had a relapse in two or three weeks; and, until the paralysation of the extensors, three years subsequently, I continued out of health, with the symptoms before mentioned, of indigestion, &c., with pain in the head and limbs, during which period several medical men were consulted, and change of air, medicine, and outward applications to the limbs were used with little or no

relief. A man-servant left, in about two years, in ill-health, suffering very much from colic, and occasionally from sickness. Mrs. Stokes, also, had had several times uneasiness in the stomach and bowels, and pains in the feet and knees, with depression of spirits. In October, 1847, Mrs. Stokes, the nurse, and myself, were all seized with colic, sickness, and constipation, and were attended by a medical man of the neighbourhood; but not getting better in three weeks, we went to Ryde, where we continued very unwell, and returned home the third week in November. In a week or two we all became much worse, and I went to London for advice, where I was obliged to remain, being siezed with a spasmodic obstruction of the bowels, as at a former period. This being overcome, *violent pain* in the hands and arms, succeeded with enormous swellings, for which leeches were applied. I remained in town three weeks, being unable to move from excessive debility and pain, and suffering, at the same time, from depression of spirits, and constant uneasiness in the stomach and bowels. During this period Mrs. Stokes continued ill, and also the nurse, and were attended by the same medical man as before, who recommended the latter returning to her home in Worcestershire, as he considered her in great danger, but could not account for her illness. She had wasted in flesh for some time, and had slight nettle-rash. To this succeeded pain in the chest and violent vomiting, during which she frequently, in the course of the night or day, threw up a quart of green liquid, quite *dark* and lumpy. She was also very much constipated, had great pain in the stomach and bowels, head-ache, flushing of the face, pains in all her joints and limbs,—particularly the wrists,—and depression of spirits. She left a week before Christmas, and died on 7th Jan., 1848. During her illness she suffered much from thirst; and, as she was not allowed beer or tea, frequently drank water fresh from the pump. Mrs. Stokes left for Worcestershire, a day or two after the nurse, very ill, with constant pain in the stomach and bowels, nausea, pain in the wrists and ankles, with very slight paralyzation of the extensors. Two children at this period became ill, a charwoman, a little girl in the capacity of nurse, the other female servant, and the man-servant. My medical adviser from town was sent for, who still imagined me to be suffering from rheumatic gout (I then being so completely paralyzed as to be dressed, fed, and attended upon as a child), and he recommended my going to Bath. I accordingly went there; but the baths did not at all diminish the excessive pain in the limbs, nor did the medicine prescribed allay the pain in the stomach and bowels, head-ache, and sickness. A relative, having joined me at Bath, first mentioned the probability of my being affected by the poison of lead, from the similarity of my symptoms to those of painters and plumbers. I then went to Cheltenham, and consulted a physician there. From thence I proceeded into the neighbourhood of Evesham, where the relative already referred to in the course of a casual conversation was informed by you, that a characteristic sign of the poison of lead was a dark tinge, similar to an ink stain round the edge of the gums, which on examination was found to be the case—my gums being deeply coloured, the maid servants in a lesser degree, and Mrs. Stokes more slightly still. I then put myself under your care, and have been improving ever since; the only remnant now being, the affection of the hands, which are so far recovered, that I am able to hold my reins in riding or driving. The others, from taking the same medicines, soon recovered also. The evacuations from all who were affected were very *dark*, with *large quantities* of the mucous of the bowels; *and most painful sensations* of *delirium* and fidgets were experienced by Mrs. Stokes, myself, and the nurse. It should also be mentioned, that a young friend, staying about ten days with Mrs. Stokes, immediately on her return home, was seriously ill for several weeks, with what was supposed to be inflammation of the bowels. It has since appeared, that several families previously residing at the same house had suffered in a similiar manner, but had, after a time, fetched their water for drinking from another source, and quitted as soon as they could. The last occupiers were the landlord and his wife. The latter was exceedingly ill with rheumatism and paralysed extensors, and they also had other water on these symptoms appearing. Being a stranger in the neighbourhood, I had heard nothing of these particulars; and understanding from the landlord that the water was good, I did not think my illness attributable to, or in any way connected with it, although the water was frequently white, as if mixed with milk, and the spout of the pump quite white, which would rub off, and mix with the water. The well is about eight feet deep; there are two pipes, one connected with a forcing pump, and the other with the common pump, being together about sixteen feet in length. There was always a good supply of water; but Mrs. Stokes observed, that in rainy weather the symptoms of indisposition were always more severe. Two men in the village have paralysed extensors and rheumatic pains. A family who have resided in the place five years, have, whilst there, all suffered from head-aches; and it has been remarked, that persons become sallow, and dark in the skin. The situation of the village is on a flat, formerly a common. The ditches are wide, but there is not sufficient fall to carry off the water, which, when it stands at all, becomes covered with a brown, unpleasant looking scum, not unlike an addled egg."

In a subsequent communication, dated 30th August, Mr. Stokes again writes to me.

"The following facts were stated to me by a gentleman, who particularly requested that his name should not be brought before the public in print, viz.—That he had resided for eight years at Weybridge (which is within about four miles of Chertsey) in the same house; was not much affected in health till three and a half years ago, and then with a slight palsy of the hands which increased until they became universally powerless; a general prostration of all energies followed, with great debility, and his heart was much affected, (June, 1847.) It was thought by his medical adviser that his liver was enlarged; to remove which, mercury was given, and administered in large quantities for ten or twelve weeks, without much beneficial result. Another medical man was then induced to have the water analysed, when it was found to contain lead, in about the same proportions as the water at Addlestone. The well is some distance from his house, and the pipe to convey the water is, altogether, about *sixty feet* in length. After the mercury, tonics succeeded, and about six drops of sulphuric acid. At this time I met with him, and recommended your prescription, increasing the quantities as in my own case, which treatment of himself he still continues, taking all the water from a well where there is *no pump*; and he is now enjoying much better health, with the use of his arms and hands, much to his own astonishment. His maid-servant, who had been complaining for two years, had just left from ill-health; her strength quite prostrate; much affected with loss of appetite, *spasms, and colic*, and her gums *quite blue*. When Mr. Stokes, the writer of the foregoing statement, first called upon me, I found him reduced to a most pitiable state. The extensor muscles of both arms and hands were so far paralysed, that he was unable to feed or dress himself, and it was with much difficulty that he could walk a few yards. His countenance was dark and sallow, and his eyes sunken, his mind weakened and depressed, and his whole system emaciated. His tongue was flabby,—indented at the edges, and of a whitish livid colour, and there was a dark blue line along the transparent edges of the gums on both sides. The treatment consisted of mild aperients and dilute sulphuric acid, gradually increased from ten drops, twice a day, to thirty, to which were added, in the course of a few weeks, small doses of the di-sulphate of quinine, and sulphate of magnesia. His arms and hands were placed on splints, and supported on slings, and after a time cold water poured upon them every morning. Under this treatment he improved rapidly, and in about a month he was able to return home to Addlestone. Ever since, he has been gradually gaining strength, and for some time past has been able to write, to hold his reins in riding and driving, and to pursue his usual avocations. Before he left this neighbourhood, the blue mark on the gums had perceptibly diminished, and, I understand, that, with the improvement in his health, it continued to decrease, until now there is hardly a trace of it remaining. On submitting some of the water taken from the pump at Addlestone, to the ordinary tests for lead, the indications of its presence were unequivocally manifested; and on the spout of the pump, a piece of which was cut off and forwarded to me, there was a thick layer of a dirty whitish colour, which probably consisted of a mixture of organic deposit, and of the hydrated oxide and carbonate of lead, for a portion of it, carefully scraped from the lead, partially effervesced on the addition of acetic acid.

The following is the result of a careful quantitive analysis of the water, conducted by Mr. Kendall, of Stratford-on-Avon, in whose analytical skill and accuracy every confidence may be placed:—

Constituents, in Grains, of an Imperial Gallon, or 70,000 Grains.	
Sulphuric acid	·46
Chlorine	2·22
Carbonic acid	·218
Soda	2·31
Lime	·282
Organic matter	5
Traces of silica	—
	10·490

From which the following combination is deduced:—

Chloride of sodium	3·67
Sulphate of soda	·83
Carbonate of lime	·5
Organic matter	5
Traces of silica	—
	10·00

From the investigations of Professor Christison, Col. Yorke, Mr. Richard Phillips, jun., and others, who have given their attention to the action of water upon lead, it would appear, that the present state of our knowledge, upon this very important subject, may be expressed as follows:—

1st. That distilled water does *not* act upon lead, if precautions be taken to exclude the air of the atmosphere. (a)

2nd. That distilled water when exposed to the atmosphere *does act* upon lead, and the precipitate from it is much greater, in a given time, than from a similar portion of lead placed in the same quantity of ordinary spring or river water.

3rd. That the precipitate so formed consists of a mixture of hydrated oxide and carbonate of lead; the former being first formed from the air in the water, which is again converted into the latter by carbonic acid absorbed from the atmosphere. (b)

4th. That besides this precipitate a very minute portion of a soluble salt of lead (c) is formed in the water, which is considered by Col. Yorke to be an oxide (d), and by Professor Christison a bi-carbonate.

5th. That the chloride of lead, which is soluble to a certain extent in water, may be formed from the decomposition of muriates (e) when they exist in spring water, and the water thereby rendered

(a) If distilled water be boiled to expel the air, and put into a stoppered bottle, whilst hot, along with lead, and the stopper plunged under mercury, and water poured over it, no action takes place between the water and the lead; but, without these precautions, atmospheric air will force itself into the water, and act on the lead.—See *Pharmaceutical Journal*, Vol. IV. p. 305.

(b) See *Philosophical Magazine*, August, 1834.

(c) One part in 12,000 to 10,000.

(d) See *Phil. Mag.*, Aug. 1834; and *Pharm. Journal*, vol. V., p. 279.

(e) See Experiment by Mr. Rich. Phillips, jun., *Pharm. Journal*, vol. IV., p. 307.

poisonous; but that none of the other soluble salts of lead occur naturally in water.

6th. That water which contains a sufficient proportion of certain saline matter, does not become impregnated with lead, and that the preservative power in such waters is due to the combination of the acids of such saline ingredients with the lead, and the formation of an insoluble salt (a) which adheres to its surface as an impermeable film, and puts an end to all farther action; and that this preservative process is mainly attributable to the presence of sulphates. (b)

By the help of the facts we can readily account for the presence of lead in the Addlestone water, for, on referring to its analysis, we find that it contains not only a very inadequate proportion of saline matter, but that only a very minute portion of it is a sulphate, or in other words of a preservative quality,—whilst one-third of the whole is a chloride, which is capable of forming a soluble salt with lead. In fact any one at all conversant with the subject, could not fail to come to the conclusion, that water so constituted, must infallibly act on leaden pipes, whilst, on the other hand, it may be observed that it is remarkably pure, and very suitable for drinking and for all other purposes, if obtained without contact with lead. (c)

From the foregoing interesting report we learn that no fewer than ten individuals, in the same family, were affected with the poison of lead absorbed day by day into their systems for a period of many months. We find, that whilst one poor girl fell a victim to its effects, the health of several of the others, and of two other individuals residing a few miles off, was seriously undermined and injured, and that there are also good grounds for suspecting that they are not the only individuals in that neighbourhood who have been similarly afflicted. And do not these sad cases of suffering and fatality, so long undetected or even suspected, also afford grounds for fearing, that they are not solitary instances, but that many such have occurred, and are occurring, in other parts of the country, although not often to the same extent of severity, but on that account only the more likely to baffle detection. I must confess, that such is the impression which they made upon my mind, and which subsequent inquiry has only tended to strengthen. Indeed, when we consider the extent to which lead is employed for containing and conveying water, the probability of the same deficiency of preservative constituents existing in the water of other localities,—as in that of Addlestone and its neighbourhood, on the one hand, and the absence of a precise knowledge of the symptoms arising from the presence of very minute portions of this poison in the human system, and the difficulty of discriminating them on the other, it must be admitted, that it is a subject which cannot be pressed too urgently on the attention of the profession; that it is a source of disease which ought to be ever present in the mind during the examination and consideration of anomalous pains, and other symptoms of obscure disease, and one which is altogether deserving of a more extensive, and more careful investigation than it has hitherto received. (d)

That a considerable difference, as regards the amount and quality of the saline constituents in the water of wells of the same immediate neighbourhood does exist, I have very little doubt, for an instance lately came under my own observations, in which the water of a well of ordinary depth, was found to be remarkably pure,—to contain a very small proportion of saline matter, and to act slightly upon lead, whilst the water of the district generally, and within a few hundred yards, is very hard, and largely charged with salts of lime.

The dark blue line along the transparent edge of the gums, first noticed by Dr. Burton, when present, is a sign of great value, and not very liable to fallacy; but it is, I believe, sometimes altogether absent, in otherwise well marked cases. Such, I am informed, was the case in the gentleman at Weybridge, in whom all the other symptoms were so strongly marked, whilst in his servant, who had no paralysis of the hands, the gums were deeply and characteristically tinged. This is no doubt a fact of considerable importance as connected with this sign, and one requiring farther investigation. So far as my own experience goes I have never seen it absent in any case of lead poisoning since I had my attention drawn to the subject, whilst I have observed it unequivocally indicated in a few instances of painters, who had never had any of the constitutional symptoms of the poison.

How long minute portions of lead may be taken into the system, and what account of constitutional disturbance may take place, before there is any indication of the blue deposit on the gums, are also points of much consequence, which require further elucidation than they have hitherto obtained.

The permanency of the blue line, or rather the length of time required for its obliteration, is also deserving of further inquiry. In a very severe case of colica pictonum, with slight paralysis of the hands, occurring in a house painter after repeated attacks, a faint indication of it may still be recognised, although the attack happened nearly four years ago, and he has never since been subjected to the influence of the poison. In this case, by far the greater part of the colour had disappeared at the end of the first year, and for the last two there has been little alteration. It is still slightly, and rather more perceptible, in Mr. Stokes' gums; but it is not yet a year since he was using the poisoned water. The little experience which I have had in the treatment of lead poisoning, I am able to offer in favour of the efficacy of sulphuric acid. Ever since M. Gendrin recommended it as a remedy, and a prophylactic, in 1831, I have employed it in every case I have met with, and in all, with nearly the same satisfactory result, as in the cases at Addlestone and Weybridge.

I understand, however, that this remedy has not been equally effective in the practice of some others; but I am inclined to think that it is sometimes prescribed in too small doses. I have prescribed ʒss. of the dilute acid, largely diluted, three times in twenty-four hours; but I have found from ten to twenty drops sufficient in most cases, and to that extent I believe it may, with safety, be given, under careful observation, for a considerable time.

Within the last five or six years, Professor Liebig has added his testimony in favour of the prophylactic effects of sulphuric acid. "The disease," he says, "called painters' colic, is unknown in manufactories of white lead, in which the workmen are accustomed to take, as a preservative, sulphuric acid lemonade (a solution of sugar rendered acid by sulphuric acid)." (a) And with regard to the action of this remedy, he states, that, "the action of the proper inorganic poisons is owing, in most cases, to the formation of a chemical compound by the union of the poison with the constituents of the organ upon which it acts; it is owing to an exercise of a chemical affinity more powerful than the vitality of the organ;" and "that the soluble salts of lead possess this property in common with salts of silver and mercury, but that all compounds of lead with organic matters are capable of decomposition by dilute sulphuric acid."

It is only proper to add here, that, "The prophylactic effects of sulphuric acid have been denied in France by MM. Tanguerel and Grisolle, the latter of whom, in particular, says, that "no advantage whatever was derived from it at the white lead manufactory of Clichy, near Paris." (a)

With these conflicting statements of such high authorities, we can but come to the conclusion that this very important part of the subject is also in need of further inquiry

Within the last few weeks, public attention has been somewhat excited on the subject of lead poisoning, in consequence of its being announced that cases of this nature had occurred at Claremont, which, as bearing on the foregoing cases, it may be here mentioned, is only about five miles distant from Addlestone.

I am not aware that any authentic account has as yet been published, either of the number attacked, the extent of suffering induced, or the length of time which had elapsed before the real cause of the symptoms was suspected or discovered; but there seems to be little doubt that several members of the family and household of the Count de Neuilly were found to be suffering from the influence of lead poison, and that, upon examination of the water used by them for drinking and other purposes, and conveyed from a considerable distance through leaden pipes into leaden cisterns, for the supply of Claremont, the presence of lead was detected in it, and the cause of their sufferings traced to this source.

To the truth of this latter statement I am myself able to testify; for, when on a visit of a few hours lately at Addlestone, I obtained a specimen of the Claremont water from a pipe in the stable-yard, which, I was informed, is from the same source as the water supplied to the house, and which, upon examination, was found to be largely charged with lead, one-tenth of a grain of the sulphuret having been obtained from a pint of the water.

In other respects it is an unusually pure and good water, and similar in constitution to that of Addlestone, for, according to an analysis of it, made by Mr. Kendall, it contains not more than seven grains of saline matter in a gallon, which is principally chloride of lime or soda, and a small portion of sulphate, which altogether is considerably below the proportion which is required to prevent it from acting upon leaden pipes.

How long this insidious source of disease and suffering has existed, and who, and how many, of those who have inhabited this royal residence, have been the victims of it, are questions of deep interest, and calculated to awaken suspicions with reference to one whose memory is associated with the name of Claremont, and the immediate cause of whose premature death, neither the symptoms preceding it, nor the *post-mortem* appearances, seemed sufficiently to account for. (b)

But these are reflections which perhaps it is not desirable to indulge further in at the present time. It is sufficient for our purpose to adduce the detection of lead in the water of a Royal residence as additional confirmation of the suspicion expressed in the early part of this paper, with regard to the more frequent existence of this poison in water than is generally supposed.

When at Addlestone I saw a carpenter of the name of Dunster, who had been disabled for years, and who was then using water from a pump, which has since been subjected to analysis, and found both to contain lead and to be deficient of the requisite proportion of saline ingredients. His arms and hands are completely paralysed, and the fingers firmly bent upon the palms of the hands, his gums deeply stained, and his whole system enervated, emaciated, and depressed. It appeared that there were two sources from which he got the water, one in contact with lead, and the other not, which he had been in the habit of using indiscriminately. His wife also is affected, but not to the same extent.

An opportunity also presented itself of seeing the gentleman at Weybridge, whose case has been mentioned, and also since, of ascertaining that the water of the well he used before his illness, contains lead, and

(a) Dr. Christison states, that in the insoluble incrustation there is a small admixture of carbonate of lead, which is formed in the first instance. See Treatise on Poisons, fourth edition, p. 521.

(b) A 4,000th part of the sulphate of lime is capable of exercising this power. See ante, p. 520.

(c) In the *Times* of the 7th instant, there is a letter signed M.D., who states that he had been engaged for the last twelve months in making analysis of the spring waters of Weybridge, Claremont, &c., and who testifies to the singular purity of many of the springs of the neighbourhood.

(d) In the *Worcester Journal*, of the 14th inst., in the evidence given by Mr. Orwin, surgeon, before the Superintendent and Inspector from the Board, we find the following statement:—"Leaden pumps in this city frequently required renewal, and the result was, numberless cases of illness."

(a) Liebig's Chemistry of Agriculture and Physiology, 3rd Edition, p. 362.

(a) Christison on Poisons, p. 573.

(b) See "Medical Repository," Vol. VIII., p. 534.

is devoid of saline matter in sufficient proportion to render it protective. Although restored to comparatively good health, he has not yet recovered the entire use of his hands, a fact which is worthy of mention in connexion with the state of the gums, which are particularly free from the slightest indication of the blue tinge, and which tends to corroborate the statement previously made by himself concerning the absence of this sign.

Other specimens of water from different pumps in the neighbourhood of Addlestone were obtained, which give, with the usual tests for lead, *suspicious* indications of its presence, although not *confirmatory* ones.

The analyses of these waters, also, so far as they have been carried, indicate an inadequate amount of saline matter in each of them; but upon this point I am at present unable to speak with that precision which the importance of this subject demands.

It may be presumed, however, that more than enough has already been said to awaken suspicion, and to induce an extensive and searching inquiry into the condition and composition of the water of the whole surrounding district of country referred to in the foregoing statement.

QUININE, AN ANTIDOTE TO CHOLERA.

By W. G. MAXWELL, M.D., Hyderabad, E.I.

Prophylactic would, perhaps, have been a better word to use in reference to the influence of quinine in preventing the accession of cholera. Yet, only apparently so; for, if the word is applicable to Quinine in ague, it is equally so in reference to cholera.

I have see the paroxysms of ague so violent, with the blue or purple skin, sense of immediate suffocation, &c., that it could not be distinguished from cholera. The severe and accumulating congestion of the lungs was only relieved by immediate and free venesection, &c. *But* the return of the paroxysm was *alone* prevented by the free exhibition of quinine to affect the system, and continued at intervals till the next period of expected paroxysm (*i. e.* the same hour as last day), had passed by. Several instances, in officers, of this marked character, occurred some years ago in my practice. They are still alive, and their names and cases will be referred to at a future period. Numerous instances of a corresponding character are constantly occurring in my practice, and, notwithstanding the symptoms of cholera, (whether preceding, accompanying, or following the attack), I immediately prescribe the quinine to affect the system. Its systemic influence is known by a slight wavy undulating sound in the ears—or like that of a large hollow shell when applied to the ear.

Always, now, give the quinine as hot as the patient can drink it, in a glass of white wine, spice, lime juice, or citric or tartaric acid, and as much sugar as will dissolve in it.

The severe paroxysms (above alluded to), were brought on by giving it cold, accidulated with sulphuric acid. It is nauseous to many in this way, producing also a chill, and shuddering sensation. The patients attributed their severe attacks to the cold solution. It no doubt brought on the fit; but there is, also, as little doubt but that the paroxysm had been gradually coming on since the last one. I was too late in giving the quinine, and wrong in giving it cold; and therefore, ever since then, I make it invariably a rule to commence the quinine even before the first paroxysm is finished. We cannot prevent the first, but we can ALWAYS prevent second.

The first symptoms are often extremely mild. Therefore, (especially when cholera is prevailing), if indisposition is complained of, I make it a point to bring the system under the influence of quinine at once. Under its influence the tongue loses its white and blue-inclining aspect, and becomes of its natural florid colour. In short, the blood resumes its healthy standard, and becomes, as it were, a non-conductor, or resister of the influences of morbific agents.

To put my meaning in clearer words, if possible, suppose (during the reigning of the epidemic constitution) two or 2,000 individuals complain of slight diarrhœa and febrile symptoms, (for they are never epidemically separate),—that one is immediately brought under the influence of quinine, that the other has a bolus of calomel and aloes, or jalap, or something worse, if it is possible, on the fashionable theory of carrying off the bile, and suppose them both detailed for sentry duty during the night, near a cess-pool, or stagnant half dried tank or morass, the air from which blows on them; then, in the morning, the one with quinine will be found well and at his post, the other will be dying with Asiatic cholera. I speak from experience.

ON SCIRRHUS OF THE LIPS.

By W. P. BROOKES, M.D., Cheltenham, Surgeon to the Cheltenham Hospital and Dispensary, and Visiting Medical Officer to the Cheltenham District of Lunatic Asylums.

In a Lecture delivered by Mr. Bransby Cooper, whilst speaking of cancer of the lips, he says:—"It is remarkable the disease attacks, almost exclusively, the lower lip. Sir Astley Cooper states, he had seen upwards of two hundred cases, in only one of which the upper lip was the seat of the disease."

I have, myself, within the last four years, had two cases under my treatment, in which the upper lip was the primary seat of the disease, and three in the lower lip: short notes of each case I now append.

F. S, aged fifty-four, residing in Cheltenham, had suffered for some time from a scirrhous sore, with everted edges, and discharging a most offensive odour, in the upper lip: this had been once extirpated, but it reappeared in a few months afterwards. In February last he consulted me: I then found him with the whole of the upper lip involved in a large cancerous sore, giving out so disagreeable an odour, that the room in which he resided was barely to be tolerated. This sore also extended into the cheek on the left side, and up to the border of the eyelid, by its pressure closing the lower eyelid, so that he could not see with the left eye. It had also opened into the ductus stenonis: there was no enlargement of any of the glands. He would not hear of any operative procedure; and the sore was dressed with chloride of zinc and gypsum, but with no other effect than, in a great degree, removing the disagreeable odour. In a short time the general health gave way, and he removed into the country for change of air, so that I lost sight of him; but, I doubt not, the case has terminated in death long ere this.

Mrs. Fitzgerald, aged 60, washerwoman, residing in Taylor's-court, has had a cancerous growth of the right side of the upper lip for two years. In March, 1848, she came under my notice. I found her with more than half of the upper lip in an ulcerated state, extending down the cheek to the chin on the right side, saliva constantly dribbling away; the parotid and submaxillary glands enlarged and diseased; the ulcerated surface unhealthy; edges everted, and giving out an offensive cancerous odour; general health in a very bad state; and this gradually becoming worse, she died in a few weeks after my first seeing her.

Jesse Castle, aged 42, a strong, healthy-looking man, came under my care with a scirrhous sore of the lower lip and centre of the chin, the size of a five-shilling piece; no enlargement of glands, and general health very good. He attributed the first origin of the disease to an impoverished diet. After three applications of chloride of zinc and gypsum, healthy action was set up in the sore, and it quickly healed. I have been in the habit of seeing this man almost daily since he recovered, now more than four years back, and he continues free from any return of the disease.

W. B., aged 48, residing in Cheltenham, was admitted a patient of mine on the 1st of July, 1848. Has now a sore, the size of a half-crown, in the centre of the lower lip, with everted edges of a scirrhous nature. At the lower part of the sore was a hard red tumor, the size of a nut, and very painful to the touch. Two months back, this portion of the lip was removed by a surgeon for a cancerous growth; the edges of the wound united well, but the disease again appeared very rapidly after the operation; there is no glandular disease; the patient positively refuses to have the knife again used. This is a very favourable case for the use of the chloride of zinc, which is now being applied, and I doubt not will give him some benefit.

I have seen the chloride of zinc exert a most beneficial effect in cancerous sores; and those in which the malady has taken too great a hold on the constitution, assisting, in a great measure, to overcome the offensive odour of the disease. It also exerts a good effect in stubborn ulcers, especially with callous, hard, everted edges, and will rapidly set up a healthier action when other remedial means have failed; the surface will speedily granulate and heal.

The mode in which I use the remedy is, by taking two parts of chloride of zinc, and three parts of gypsum, spreading the powder over the surface of the sore, protecting the edges of the healthy skin with vinegar, and applying in about a quarter of an hour a soft poultice.

ON CHOLERA.

By L. F. CRUMMEY, Esq., Stokesley, York.

Asiatic Cholera has been too generally considered a disease *sui generis* and foreign, and little or nothing has been said about it, except during its existence as an epidemic. The present disease has come upon us unprepared; and chance, or caprice, or experiment, has determined the treatment, alike uncertain and unsuccessful. My acquaintance with the disease, called Asiatic Cholera, commenced in Edinburgh during the winter of 1831-2, being then attached to one of the Cholera Hospitals in that city. I also attended many persons at Hutton Rudby, a village four miles distant from this place, in October, 1832. From lengthened experience I hesitate not to assert, that there occurs in this country every year disease identical in every respect with that which was denominated Asiatic Cholera in Edinburgh and Hutton Rudby, in the years 1831-2. These cases vary in severity and type: some of them run through a course of functional derangement for a longer or shorter period, but eventually terminate in health; whilst others are death-cases from the commencement, and no human efforts avail. The same may be said of the cases of Asiatic Cholera which occurred in Edinburgh and Hutton Rudby during the epidemic of 1831-2. It has been too frequently determined, that two distinct diseases prevail under the different names of Asiatic and English Cholera, characterised by the nature of the matter ejected; but experience compels me to maintain, that the two diseases are perfectly identical—that they are both the same morbid condition of the body, circumstances alone occasioning a variety in the symptoms—that they may have a common and local origin,—may occur alike sporadically, or prevail epidemically,—and that they both maintain the essential characters of a contagious disease. That these two forms of disease may have one common and local origin, the following facts go far to establish:—On the 8th of August, 1847, M. S., aged 38, of industrious and sober habits, and healthy constitution, the mother of five children, was suddenly attacked, about six p.m., with violent vomiting and purging, the ejected matter being from the first perfectly inodorous, and rice-water looking. Excessive cramps in the extremities speedily followed, accompanied with cold, clammy skin, shrivelled fingers and toes, and extreme collapse. Every effort to induce re-action failed, and she died the following morning, about six a.m. No other instance of the disease occurred in the town or neighbourhood, with but one exception. A gentleman who resided in a healthy village, four miles distant, had occasion to pass through the same yard in which the woman lived, which has always

been remarkable for filth and dirt, a day or two subsequent to her death, when he perceived a most offensive effluvia, and remarked the circumstance to his family upon reaching home. Two days afterwards, I visited him under all the symptoms of cholera. The cramps and collapse were excessive; but the matter ejected was fetid and bilious from the first to the last. He recovered.

In support of the more malignant form of the disease being contagious, I beg to offer the following facts:—In the year 1832, whilst the cholera prevailed in the City of York, a servant-girl died there of malignant cholera. A short time afterwards, her clothes were sent to her parents, who resided in the village of Amotherby, near Malton, in Yorkshire. The mother washed part of the clothes, and almost immediately took the disease, and died. The father also was seized and died. These cases were pronounced malignant cholera, and the parish authorities had the bodies interred without delay; and then the cottage was burned down, with all that it contained. No other instance of the disease occurred in the village or neighbourhood, either before or afterwards. On the 1st of October, 1832, a man, named Cook, left the Cholera Hospital at Newcastle-upon-Tyne, labouring under the premonitory symptoms of cholera. He arrived at Hutton Rudby about 9 p.m. on the 2nd, and died a few hours afterwards in a state of extreme collapse. The women who washed his clothes, together with all who were in immediate attendance upon him, took the disease. 45 cases occurred in the village, 23 of which were fatal; the recoveries being chiefly those which had the symptoms in a mild form. It is a remarkable fact, in the history of the disease at Hutton Rudby, that it was confined exclusively to the immediate neighbourhood of Cook's residence; and the most malignant cases occurred in houses, the back doors of which opened into a common yard.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

ACADEMY OF SCIENCES.

Meeting of Dec. 18. M. Pouillet in the Chair.

DIABETES MELLITUS. By M. BIOT.

One of the most distinguished members of the Institute, said the learned member, had recently perished from the progress of aggravated diabetes, which he had allowed from neglect to become irremediable. This singular neglect could be accounted for only by the absence of pain during the first stages of the malady,—a period during which medical aid might still be of some avail. In the case, which was the melancholy occasion of the present communication, each litre of urine contained 84 or 85 grammes of sugar; and diabetic subjects, passing frequently 15 or 18 litres of fluid in 24 hours, M. Biot considered himself justified in asserting, that no less than 840 grammes (ʒ xvj) of sugar were secreted daily in the case alluded to. In such an inveterate state of disorganization the slightest pneumonia became fatal; and when it was recollected, that a little foresight and self-investigation might, in all probability, have averted the deplorable issue which had taken place, it would be a guilty action not to remind the public of the simple hygienic precautions by which similar accidents might be prevented—hence, M. Biot recommended strongly, that on the first appearance of suspicious symptoms, the urine should be boiled with a small quantity of lime water—a re-agent which produced an orange colour in the urine. By this test the presence of even a trifling amount of sugar might be readily detected; but the optical apparatus by which the deviation of the rays of light might be ascertained at even an earlier stage of the disease, was, in his opinion, preferable; and permitting the diagnosis to acquire a considerable degree of accuracy at the outset of the disease, allowed the opportunity for efficient medical treatment.

MODE OF ACTION OF ANÆSTHETIC VAPOURS.

M. Coze, Dean of the Faculty of Medicine of Strasbourg, forwarded, through M. G. St. Hilaire, a short paper on this subject, in which he brought forward the following theory on the mode of production of insensibility, from the inhalation of the vapours of ether and chloroform. These vapours, said M. Coze, were absorbed in the lung, and entered the vascular system, where, in consequence of the temperature of the circulating fluid, they acquired a greater degree of tension. A large proportion passed into the carotids, and, arriving to the brain, which is neither an organ of secretion nor of excretion, were not altogether removed by the veins, and, consequently, occasioned a degree of pressure, which, in the same manner as any other mechanical cause, occasioned insensibility by compression of the encephalon.

ACADEMY OF MEDICINE.

Meeting of December 19. M. Royer Collard in the Chair.

ELECTION OF OFFICE-BEARERS.

M. Velpeau was named President; M. Bricheteau Vice-President; and M. Gibert Secretary, of the Academy, for the year 1849.

Meeting adjourned at 5 o'clock.

DISCRIMINATION OF STAINS OF BLOOD, AND OF STAINS PRODUCED BY THE JUICE OF ACID FRUITS.

M. Moride remarks, that the method hitherto adopted for the solution of this problem of medico-legal chemistry, consists in macerating in distilled water the stained substances, adding the double cyanide of potassium and iron, and afterwards the solution of gall-nuts, in order to ascertain the presence of citric or malic acid. These reactions are not always sufficient; and M. Moride recommends the chemist to test the stains with a boiling solution of potass, when fruit-stains will become black,—a re-action which blood does not present. Further, when the stained substance is heated, organic matter, if any be contained in the suspicious stain, is decomposed, and alkaline vapours of ammonia are disengaged.

DROPSY DURING PREGNANCY.

BY DR. DEVILLIERS AND DR. REGNAULT.
(Archives de Médécine.)

The researches of these authors have led them to adopt conclusions which are not altogether in harmony with the ideas generally received on the subject. Thus, with regard to hæmatological investigations, they have failed in detecting in the blood the presence of urea. The only modifications met with consisting in the diminution of the average amount of albumen, and the increase of the quantity of water. The sanguineous temperament hitherto considered as a cause of this complication of pregnancy, has been, in the opinion of the authors, erroneously accused of its production. Lymphatic patients are more subject to it, and the accidental plethora of pregnant women has been mistaken for a really sanguineous predisposition. M. Rayer advances, that albuminuria arises from the pressure of the gravid uterus upon the kidneys or the ureters: this theory is not admitted to be correct by Drs. Devilliers and Regnault, who have frequently met with albuminous urine during the early stages of pregnancy, where the size of the womb was not sufficiently enlarged to permit of this explanation; and further, this cause existing in every case of pregnancy, it would not be easy to account for the comparatively rare occurrence of albuminuria. In nine cases the authors had the opportunity of examining the subjects after death, and in all they found the kidneys diseased: in four instances only did they meet with the anatomical characters of Bright's disease: in some cases the patients recovered, notwithstanding the productions of accidents, by which life had been more or less endangered. But, in most cases, particulary when the malady had been complicated by convulsions, the issue was fatal. With regard to the influence of albuminuria upon the production of miscarriages, Messrs. D. and R. think it necessary to divide the cases into two classes, according as the complaint was simple or complicated. In the first class, out of 37 miscarriages, it had not been possible to refer more than 5 to the influence of albuminuria. Not so in the second class of patients—convulsions particularly constitute a most unfavourable predisposition. In 12 cases of convulsion the authors observed six times premature confinement occurring between the fifth and eighth months.

ATROPINE.—(Concluded.)
(Gazette Méd.)

Messrs. Bouchardat and Stuart Cooper, of whose paper we furnished a short abstract in our last communication, publish four other cases analogous to that which we have already made known, and conclude that atropine represents completely all the advantageous properties of preparations of belladonna. The doses at which it may be exhibited should not exceed two milligrammes (1-25th of a grain) to begin with, and may be gradually increased to one centigramme (1-5th of a grain).—D. M'Carthy, M.D., Physician to the British Embassy.

IRELAND.

[From our Dublin Correspondent.]

DUBLIN PATHOLOGICAL SOCIETY.

Meeting of Dec. 16, 1848.—(Continued.)

SOLITARY ULCER OF STOMACH.

Dr. Lees exhibited a specimen of this disease. The case was important, for its history was fully known. The subject of it was a young girl of 19 years of age, a native of England, a servant in an Irish family. She had consulted Dr. Lees, a short time previously, for some symptoms connected with disordered menstruation, and complained of debility. He asked her particularly, at the time, whether she had any symptoms referrible to the stomach. She expressly denied that there was anything the matter with this viscus. The day she was attacked with the symptoms of the disease which caused her death, she appeared perfectly well, and ate a much larger dinner than usual, so much so, that her appetite was remarked by her fellow-servants. That was about two o'clock in the afternoon; about seven in the evening she complained, in the kitchen, of being unwell, and retired up stairs to the nursery. When she arrived in the latter apartment, she suddenly uttered a loud shriek and then fainted. The nurse, who was at hand, immediately ran to her assistance, and, after using, for a short time, the ordinary remedies, the girl recovered from the faint, and almost immediately afterwards vomited. Dr. Lees did not see the vomited matters, but he was told that they were apparently the constituents of her dinner. She now complained of excruciating pain in the region of her stomach. The ladies of the family, as well as the servants, thought the attack was one of hysteria, and, consequently, lost some time using the usual domestic anti-hysteric treatment, before sending for Dr. Lees. After the lapse of an hour, however, as the girl was manifestly getting worse, they became alarmed, and sent for that physician. When he arrived, he found her pale and collapsed, her pulse extremely weak, and the cold perspiration in beads on her forehead. The nurse was in the act of applying hot stupes to her epigastrium, and she herself had her hands clasped on the nurse's, and pressed in strongly against her stomach. She could not bear the nurse to remove her hands, even for a moment, while Dr. Lees wanted to examine her: however, he satisfied himself that there was superficial tenderness. Dr. Lees felt that there was difficulty in the diagnosis. She was a very likely person to have hysteria; and the existence of sudden and severe pain and superficial tenderness, relieved by strong pressure, seemed to corroborate the view which the family took of the attack. But then the vomiting and the collapse looked more like rupture of the stomach, and as such Dr. Lees resolved to treat the case, as the safer alternative. He put the girl under the influence of large doses of opium and a little mercury. In the morning, fever had set in, and the case more resembled one of low peritonitis. He now had the advantage of the

opinions of Sir Philip Crampton and Mr. Hamilton, who agreed with him in the diagnosis and treatment. The case went on under the same treatment for some days, and on the fourth day the patient seemed so much improved, that Dr. Lees began to doubt whether he had been correct in his opinion. On the seventh day, it was thought advisable to stop the opium, and give her some aperient medicine, as her bowels had been constipated since the commencement of the attack. The consequence was, copious melænic discharges, rapid sinking, and she died on the ninth day. At the autopsy much false membrane was found on the intestines and liver; upon raising the left lobe of that gland, the stomach became visible, with a circular perforation the size of a sixpence, on the anterior wall near the lesser curvature. Upon opening the stomach, the mucous membrane might be considered a little softer than natural, but in other respects quite healthy. The perforation in the anterior wall was somewhat larger internally than externally, and an appearance like as if it had been punched out. The stomach was empty; and there was no evidence of there having been any extravasation, which was probably prevented by the pressure of the liver. Dr. Lees thought this case important, because he had the positive statement of the girl a fortnight after she was attacked, that she never experienced any stomachic symptoms. Secondly, because it confirmed Louis's statement of the deceptive improvement that is apt to occur between the first violent symptoms of rupture and the fatal termination. Thirdly, because the case lasted much longer than is usual; thirty or forty, or at the utmost seventy, hours being the longest periods hitherto recorded; while this case lasted 288 hours. It was right, in addition, to mention, that this patient passed urine,—very scanty, it is true, and loaded with lithates,—but, in general, in cases of rupture of the stomach, there is total suppression of urine.

INTUS-SUSCEPTION OF THE COLON.

A child at the breast appeared, one morning, unusually lively and engaging. In the middle of the day it went to sleep; and, after it awoke, the nurse, an intelligent and observing woman, remarked, that it kicked with its legs in a manner as if it were suffering from wind in the bowels. Towards evening, it seemed inclined to pass something, but nothing came away; it then cried violently, and at length sunk into a sleep. After a time it waked up again, and the nurse, thinking that it required medicine, gave it some castor oil. Subsequently, it seemed desirous to empty its bowels, but again without effect; the castor oil sickened its stomach; it again cried as before, and then fell asleep. These attacks recurring several times, a medical man was sent for, who ordered it enemata, and some other treatment, but without any advantage. In the morning, Dr. Montgomery was sent for in consultation. He found the child crying violently, but it seemed to him to be much exhausted; it reclined its head backward, and appeared languid. He examined the abdomen. There did not seem to be any tenderness; the child showed no evidence of uneasiness, even when deep pressure was employed. He detected a cylindrical tumor in the left iliac region, and expressed it as his opinion, that it was caused by intus-susception of the sigmoid flexure of the colon. In about thirty hours the child died, and, at the request of the parents, Dr. Montgomery examined the body. He found that the upper part of the descending colon had passed down into the inferior for a distance of about two inches; and such was the descending force, that, upon cutting the intestine across, it suddenly shot down after the portion which had already descended, so as completely to disappear. There was evidence of inflammation either on the peritonæum or in the intestine. Dr. Montgomery exhibited the recent parts to the Society.

SURGICAL SOCIETY OF IRELAND.

The second meeting of this Society was held on Saturday evening, the 16th instant, at the Royal College of Surgeons.

Professor HARRISON, President, in the Chair.

ON THE TREATMENT OF CERTAIN FORMS OF DROPSY.

Dr. H. Kennedy drew the attention of the Society to the treatment of certain forms of dropsy. He described three cases which came under his observation, in which the treatment required to be very different, but in which it was successful, because judiciously chosen and boldly pursued. In one case that came on after scarlatina, he pursued a decidedly antiphlogistic treatment, together with the exhibition of large doses of cream of tartar. In such cases, he was not aware that any prognostic information could be derived from examination of the urine,—whether this secretion was albuminous or not. In a case of Bright's disease, he found great benefit from the exhibition of mercury and of colchicum; yet both mercury and diuretics have been stated by Dr. Bright as calculated to act injuriously in this disease. He considered, that, when a practitioner felt assured that a remedy was appropriate in the treatment of a case, although he might be justified in commencing with small doses, he ought not to rest satisfied with those if the medicine was without effect, but ought to increase the dose until physiological effects were produced. He has given wine of the seeds of colchicum (the preparation he prefers) to the extent of six drachms, not only without inconvenience, but with the most decided benefit, in cases where small doses were without apparent influence. The stomach tolerating the medicine is a general sign that it may with safety be increased and continued.

Mr. CREIGHTON described a case of dropsy depending on cirrhosis of the liver. There was nothing unusual in the history of the case.

Mr. CARTE (curator of the Museum) said, that he was convinced that cirrhosis of the liver, and granular degeneration of the kidneys, were analogous diseases. He looked on them both as depending on inflammation of the fibrous matrix of the glands.

Dr. H. KENNEDY asked whether Dr. Carte was in a position to corroborate, or otherwise, the statements of Drs. Johnson and Simon. According to those gentlemen there were two distinct diseases confounded under the common denomination of granular degeneration; oily granules being deposited in the urinary conduits in one class of cases; while in the other these were the results of ordinary inflammatory action.

Mr. CARTE said that those distinctions were sought to be made on the authority of the microscope. For his part he had no dependence on this instrument, except when a camera lucida was employed; in that case, perhaps, some certainty might be arrived at; but otherwise he believed that any observer could see on the object-glass whatever his fancy dictated.

Mr. BUTCHER was sorry to hear the curator of their museum hazard so rash an opinion; and that, too, in the presence of a large number of young gentlemen just entering on the study of the profession, who might be misled by his authority. No one could doubt the great benefits which the use of the microscope had conferred on diagnosis and pathology. Its employment in the examination of the animal fluids was now a matter of daily practice, and its advantages could not be disputed. The light thrown on the nature of tumors, and other morbid formations, through its instrumentality, is daily becoming better appreciated. Therefore, he (Mr. Butcher) could not but say, that he considered the assertion that any one could see, with the microscope, whatever he fancied, was, to say the least of it, a very rash one. Have not Swan, Müller, Eberle, Vogel, Sebert, and others, described the appearances which they have observed in a manner remarkably alike? whereas, if it had all been a matter of fancy, they should each have seen different things. He (Mr. Butcher) had himself paid some attention to the subject; and he would say, that he would not surrender his faith in the value of the microscope, because this instrument might be decried by some who had not educated their eyes or hands for its employment.

Mr. STAPLETON thought that Mr. Carte, at the time he made so strong a statement, must have forgotten, that the accuracy of the representations afforded by the microscope had been verified by means of photography. M. Donné, by means of the microscope-daguerreotype, had been enabled to obtain pictures of the magnified objects,—pictures executed, not by the hand of a fallible draftsman, but through the operation of Nature's unerring laws.

Dr. DARBY remarked, that the discussion had become somewhat irregular. To return to the subject of dropsy, he thought that every one enjoying extensive practice must acknowledge, that although much had been done in working out the pathology of this disease, many cases still remained inexplicable. There can be no doubt, that obstructive diseases of the heart, liver, or kidneys, give rise to anasarca and dropsical effusions; but there are certainly many cases of dropsy which cannot be attributed to obstructed circulation. He would instance the anasarca that so constantly supervenes in the latter stages of dysentery. His own impression was, that disorganising disease of any part may give origin to dropsy.

Here the discussion ceased.

A NEW METHOD OF APPLYING VIENNA PASTE TO THE OS UTERI.

Dr. MITCHELL next drew the attention of the Society to a new method of applying the Vienna paste to the os uteri. Subsequent to the healing of ulcers of the neck, or orifice of the womb, every practitioner may have remarked, that certain obstinate symptoms, consisting of debility, pain and weakness in the loins, a sensation of bearing down, &c., are apt to continue. These have been ascribed to very different causes. Some have attributed them to relaxation of the uterine ligaments, others to a flaccid condition of the vagina, and a third party to congestion of the mucous membrane covering the os uteri. With the latter class of pathologists Dr. Mitchell agreed, and exhibited drawings of the congested parts in support of this opinion. The treatment founded on this doctrine is that of leeching the neck of the uterus; but, in addition, some more powerful means of changing its morbid action has been found necessary. For this purpose, Jobert recommends the actual cautery; but although this procedure does not cause pain, it is so frightful to the patient that it ought, if possible, to be avoided. Gendrin prefers the Vienna paste, a mixture of caustic potash, and lime, reduced to powder, and kept in close bottles until about to be employed; and Bennet, of London, joins in this recommendation. Gendrin's plan of applying the Vienna paste is, to mix it with a little water, and then smear on a bit of adhesive plaster; and the os uteri being exposed by a speculum, to introduce the adhesive plaster, and paste it on to the neck of the uterus by filling up the speculum with cotton. The speculum is then withdrawn, when, of course, the vagina is left filled with raw cotton. Dr. Mitchell's plan is to employ a glass rod, spread at the end into a circular disk. Upon this he spreads the paste, and, introducing it through the speculum, gently presses it against the part of the os he has selected. If he wishes to withdraw the speculum, he passes a glass tube, rounded at the end, so as to surround the rod, and then withdraws the speculum. Dr. M. claimed no credit for the mode of practice, but merely for what he conceived to be an improvement in its application.

RE-ACTION OF UTERINE MUCUS ON LITMUS PAPER.

A discussion ensued between Dr. MITCHELL and Dr. BURNE, principally with regard to the re action of uterine mucus on litmus paper. Dr. Mitchell maintained it was acid; while Dr. Burne said, he always found it to be neutral. Dr. Bigger considered it would be desirable to appoint a commission to investigate the fact; but Dr. Burne did not think that even that method would lead to a satisfactory result. He was willing to believe Dr. Mitchell's statement, and he thought it might be reconciled with his own observation. As surgeon to the Lock Hospital, his experiments had always been

performed upon prostitutes. Dr. Mitchell's observations had been made on virtuous married females, and that might account for the difference in their experience.

SCOTLAND.

EDINBURGH.

(From our Edinburgh Correspondent.)

NOTES FROM A CLINICAL LECTURE ON MORBUS COXARIUS.

By Professor SYME.

In the course of a clinical lecture on different subjects, which presented themselves on Monday last, Mr. Syme made the following observations on disease of the hip-joint, in relation to the case of a girl, aged ten years, who was brought into the theatre and exhibited to the class:—

Morbus coxarius is most common between the ages of seven and fourteen, and is generally owing to injury, such as a bruise from a fall on the side; more rarely to a twisting of the body. Sometimes, also, it comes on without any ascertainable cause.

1st. The symptoms of morbus coxarius are,—weakness of the limb, pain from resting upon it—the pain extending from the hip down to the knee; is always greatest at the middle of the night, and worse some nights than others, being usually greatest before a change of weather. The pain in the knee is towards its middle and inside, and not at the outside as in sciatica. The form of the hip is altered, being flatter than natural, and there is no fold between the hip and thigh. The limb is longer (in some cases, but more rarely shorter) than the other. This, however, is only apparent, and is due to the obliquity of the pelvis, produced by the effort to take the stress off the leg, and thereby ease the pain. It has been estimated that, for every one case in which the limb is shortened, there are six in which it is apparently lengthened.

2. *The progress of the disease.*—Sometimes the joint may recover, and no trace of the disease be left behind; at other times, the textures of the joint are more or less altered by absorption of the articular apparatus. This, however, is the rarest of all terminations. Much more frequently the disease goes on to suppuration, and an abscess forms, which opens on the outside of the hip. Different results may now follow. The sinus may contract, and heal up with little change in the form or mobility of the joint; or there may be a slight shortening. Oftener, however, if a cure is effected, it is by anchylosis. The limb is shortened, and the toes everted, or sometimes inverted. If the head of the bone is much shortened by absorption, there is nothing to prevent the muscles inserted into the trochanter from rotating the thigh outwards, as in fracture of the neck of the femur. If the head of the bone is not diminished, but the capsular ligament be absorbed, the head of the bone will come out of the acetabulum, and be anchylosed to the dorsum of the ilium, and then the toes will be turned in, as in dislocation, on the dorsum ilii; their direction depending on the position of the thigh-bone when it escapes from the acetabulum. But the worst termination of all is, when the discharge, once begun, does not cease, but goes on so as to cause death.

Thus far all are agreed. But as to what follows, there are many differences of opinion.

1st. *As to its origin.*—In what texture does it originate? In the synovial membrane, cartilage, or osseous texture? The most common opinion is that it commences in the cartilages, but with this I can never coincide, as it does not explain the phenomena. Disease may commence in cartilage in the case of the elbow and other hinge joints, as the knee and ankle; but this is a rare occurrence in ball and socket joints. When disease commences in cartilage, there is great pain in moving the joint at the very commencement. But in morbus coxarius, though there are midnight pains, motion does not cause pain. Sometimes in morbus coxarius there is obvious ulceration of the cartilages, but then the symptoms are very different. It is almost impossible that there can be any alteration in structure for a long time, the disease remaining chronic for an indefinite period.

2. *As to its treatment.* Not long ago, as sure as the disease was recognised, so sure was the employment of counter irritation by the cautery, caustic, or seton. But milder treatment is now adopted. Rest is to be enjoined in all cases of diseased joints; but far more benefit is to be derived, in morbus coxarius, than might be expected, by carrying this injunction further than in the case of other joints. The long splint should be applied as in fracture of the neck of the femur. This secures immunity from motion to the hip, knee, and ankle joints; for it is to be remarked, that if the ankle be moved the knee is moved, and when the knee is moved so also is the hip. If the disease goes on to suppuration and abscess, the abscess should be opened by a free external incision. Cod liver oil is found to be beneficial, probably acting as a nutrient tonic.

If caries supervene no human means can remove the disease. Lately, in some of the London hospitals, it has been attempted to cure the disease by removing the carious head of the femur; but this is improper, as caries of the joint never exists without the bones of the pelvis being equally involved. I regret that these operations should have been attempted, as they tend to throw discredit on the excision of other joints, such as the elbow, where the practice is eminently useful, and which has now become an established operation in surgery. If the disease admits of recovery, excision of the head of the thigh-bone is superfluous and useless. If it does not admit of recovery, cutting out the head of the thigh-bone can only hasten the fatal termination. If the patient recovers after the head of the bone has been cut out, it is a distinct evidence of the uselessness of having excised it. If caries is curable, why amputate the head of the bone? If incurable, why remove the head of the bone, and, at the same time, leave behind carious portions in the acetabulum, which cannot be removed?

Common sense and their unsuccessful results will, no doubt, ultimately show the impropriety of such operations.

OPERATIONS FOR RESTORATION OF LIP, &c.

In the Surgical Hospital, on Friday last, Mr. Syme performed three operations, presenting characters somewhat novel.

The first was for the restoration of the lower lip, and was done on the principle described by him in his late work, "Contributions to Pathology and Surgery."

The patient, an elderly man, had his lower lip removed two years ago for disease, and there being now a want of substance, producing many inconveniences, such as exposure of the teeth to cold, pouring out of saliva, inability to eat or drink, without a bandage to supply the deficiency, &c., the operation was determined upon. The patient, having been put under the influence of chloroform, two diagonal incisions were made from the angles of the mouth to the centre of the deficient portion, where they intersected each other, and were continued on round under the jaw. The flaps formed by these incisions were then dissected off, and brought up so as to form a straight line in the direction of the original lip, thus filling up the loss of substance. They were retained in this position by needles and twisted sutures. The integuments, covering the chin and parts below the jaw, were then brought, by means of a little dissection and interrupted sutures, into contact with the flaps; and when the operation was finished, there was wonderfully little deformity. This is a decided improvement on the old plan of twisting a flap up from below the chin, which, besides its liability to slough, was never very seemly.

The other two operations were for the purpose of restoring a healthy action to two stumps, the results of amputations below the knee which had been performed elsewhere. The cushion formed by the flap taken from the calf of the leg, had, in both these cases, fallen back, leaving the cicatrices very broad, and over the edge of the bone, which prevented their healing, and rendered the stumps useless. An incision was made above, and another below the cicatrix; the integuments were then dissected back from the muscular cushion of the flap, which was now removed, along with a slice of the bone. The parts were then brought together, and retained by sutures; and, under these circumstances, it is hoped the cure will be completed.

CASE OF CONGENITAL GLOSSOCELE, OR HYPERTROPHIED TONGUE.

Dr. Delaney, of the United States navy, relates, in the *American Journal of Medical Sciences*, the case of a young woman, aged twenty, a native of Kittery Point, Maine, who was born with her tongue protruding from her mouth, and from constantly growing was a disgusting sight to the beholder. She is a finely formed, sprightly, and intelligent girl; has never had any disease save this of the tongue, and a scrofulous ulcer of the submaxillary gland, which discharged for some time, and then healed spontaneously. The legend her mother relates is, that when some seven months advanced with this child, she longed for pomegranates, which she had never seen except in a picture, and which desire continued with her till the birth of the child. Her tongue did, through infancy, and until amputation, retain the appearance of an open pomegranate,—the enlarged and diseased papillæ closely resembling the seeds of that fruit. At the time the surgeon saw her for the purpose of relieving the deformity the tongue was protruding (from upper teeth to apex) a little over four inches, circumference seven inches, and thickness at middle of tongue two inches—indeed the tongue was of nearly the same thickness from root to apex. A deep linear fissure occupied the dorsum of the tongue in its whole length. The protruded portion was quite dark, owing to the number of vesicles filled with blood; and the part in the cavity of the mouth was also covered with these vesicles, and enlarged papillæ,—but in a lesser degree. The substance of the tongue was extremely hard, and scarcely susceptible of pain: and was constantly pouring out a profuse, viscid, and offensive exudation. The tongue could not be retained in the mouth except for a moment, as its intrusion filled the whole cavity of the fauces, and prevented respiration. The inferior maxillary bone was natural in form, except at the symphysis, where the incisors and canine teeth were separated half an inch, and inclined outwards by the constant pressure and weight of the tongue. The lower teeth were covered with tartar, and rather loose in their sockets, and the lower lip everted on the chin. She had never been able to masticate with her tongue in the mouth, and consequently lived mostly upon fluids. She was subject to painful periodical swellings of the tongue, every six weeks or two months, during which time she would almost reach the point of starvation, from absolute impossibility to swallow any nourishment for a number of days. During these periodical turns (which had no connexion with the menstrual discharge, the latter being always regular) profuse hemorrhage would sometimes take place from the organ, which at these times looked black. She could make herself understood, though her words were very thick, and given with a lisping utterance. An operation was decided on, and performed in the following manner:—The patient being seated in a chair, her head supported by one assistant, and hands secured by others, I forcibly drew the tongue outwards and downwards by strong forceps, commenced a A incision with a bistoury on the left side, carried it to the median line a little inside of the upper incisors, turned and cut outwards. Thus, with two strokes excising the part, which was of great density and hardness. A formidable jet of blood immediately issued from the dorsal and ranine arteries, which were, of course, preternaturally enlarged. An effort was made to control the hemorrhage by torsion, which failed, as the arteries were so impacted in the surrounding substance that they could not be drawn out. Compression was quite as unsuccessful; dossils of lint, wetted with iced alum water, were no better, and the dorsal and ranine arteries were tied without trouble, and thus effectually stopped the hemorrhage. The patient all this time suffered so little pain, that the moment

the arteries were secured she jumped up and ran to the mirror, to see the effect of the operation. The ligatures were cut off close to the knot, hoping that in their course outward the suppuration might tend to lessen the great thickness of the tongue. The flaps were now brought together, (the coagula having been carefully removed with iced alum water,) and secured with four interrupted sutures. When this was done, the tongue was of good shape, and no point of cut surface remained exposed. Length of tongue removed two inches and three quarters. For nine hours after the operation the tongue remained within the mouth; inflammation and swelling then set in and protruded it. The only dressing applied was a dossil of lint, wetted with ice water. There was no secondary hemorrhage. On the sixth day three of the sutures were removed, and on the twentieth, complete union had taken place by the first intention. The turn of periodical inflammation had come round by this time, and the tongue became slightly swollen, and the sub-maxillary gland of the left side very much so. The application of half a dozen leeches with saline purging quickly subdued this attack. The patient had been put upon the tinct. of iodine, and it was continued with benefit. Five days after the operation the patient, for the first time in her life, chewed with the tongue in the mouth. It is now kept within the teeth, like any normal tongue, and protruded with slight difficulty. The exudation is very trifling—not sufficient to afford the slightest inconvenience, and altogether deprived of unpleasant odour. Ten days afterwards there was occasion to remove the lower incisor teeth, their horizontal projection having caused ulcers in the lower lip, which has now assumed its natural position, and completely closes the mouth. The fear of hemorrhage has deterred surgeons from amputating any considerable portion of the tongue. The recorded case of Dr. Harris, and the present one, are the only operations of the kind known in the United States. The tongue may be operated upon with as much safety as any other organ in the body, and its great vascularity ensures a more speedy union. But no operation by ligature should be attempted. The knife alone is to be relied upon, and the arteries being secured, and parts adjusted, as in the A incision, very little need be feared from secondary hemorrhage.

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THE MEDICAL TIMES.

SATURDAY, DECEMBER 30, 1848.

UNION SURGEONS AND THE BOARD OF HEALTH.

If the name of civilization has gilded many crimes, the specious pretence of the "public good" has been the minister of much injustice. No body of men has ever suffered so deeply from these causes as the medical profession. Its members are the victims of a magniloquent humanity, and of a parsimony that shudders at the pecuniary sacrifice which sincerity of purpose necessarily enjoins. John Bull claps one hand on his heart and the other on his purse, and while he protests the warmest generosity of sentiment, is resolved not to be its dupe. He is ever afraid lest the world should take him for a simpleton, and yet he cannot forego the luxury of indulging the tender sensibilities of benevolence. Prudence and impulse are at war within him. After he has enjoyed his banquet, he grumbles at paying the cost; and if, by any clever shift or jesuitical excuse, he can extricate himself from the liability, he cares not who is the victim. In too many cases it is the medical profession that is offered up on the altar of public hypocrisy. Bound with fillets, hung round with garlands, and surrounded with a choir, chanting the virtues and the graces of the victim, the sacrificing priest plunges the knife into its heart, and spills its blood on the steps of the altar. How many times have not the successive Governments of this country lauded the science and usefulness, the disinterestedness and humanity, of the medical profession, and, before the last echoes of the oration have died away, have passed laws to injure its interests and degrade its character! This is a solemn sarcasm—an elaborate hypocrisy—not, indeed, the less true, because intended as a compliment, nor the less a compliment, because designed to grace an injustice. Whilst Governments wrong us in act, our services extort an acknowledgment of our merits from their lips. This deception, however, cannot continue. If our usefulness be so great as we know that it is, and as the public acknowledge it to be, then it should be suitably recompensed. It is public infamy to command the performance of labour, and to withhold the wage. Such a condition of things is conceivable under a Chinese despotism, or in a state of Egyptian bondage; but, that the enlightened Parliament of this free country could enact laws, embracing the worst principles of the grossest slavedom that ever existed, is an anachronism and a wrong that can only be explained by the tolerant meekness of the subjects of its tyranny. Wrongs come by sufferance; and, among all classes of this kingdom, the medical profession is the only one against whom any Government would dare to perpetrate an injustice equal to that contained in the Health of Towns Act, by which the Medical officers of Unions may be compelled to perform important duties without reward, at the mere bidding of a Board of Guardians, under the instructions of a central power. Enforced labour is mere villainage, quite as detestable as serfdom in its lowest forms, though performed by gentlemen slaves.

These remarks have been elicited from us by reading the correspondence between the Committee of Poor-law Medical Officers and the General Board of Health and the Poor-law Board. The Committee resent the obligation to perform medical service without remuneration, and they are told that there is no choice for them but submission. It is true that the Boards are very indirect, and even contradictory, in their mode of conveying their ultimata, but the result is the same. To a straightforward, terse, and manly protest, they return shabby, obscure, and evasive answers. The Board of Health says, "It is all a mistake; we are not in the wrong; we have no power at all under the statute, either to enforce service or to pay for it; it is the Boards of Guardians who are the criminals, attack them!" The Poor-law Board, on the other hand, says that it is the "*Act of Parliament itself* here referred to, and not the Poor-law Board, that has imposed the duties *rendered obligatory upon the medical officers* under that Act." Now, which is right of these two authorities? It matters little. Each may be trying to excuse itself, and both may deceive. It is clear enough that the Act is so framed, that either directly or indirectly medical men are under a legal compulsion to perform unremunerated service, or, as an alternative, they may resign their offices. There can be no doubt that the General Board of Health has the power to enforce its instructions; and its disavowal of the power of enforcing its authority directly on particular medical officers is a crafty evasion, which will not tend to secure for it either the confidence of the public or the goodwill of the medical profession. We understand that the Committee of Union Medical Officers will hold another convention in the course of next month, when we hope that some decided course will be taken, that will prove to the Government that the facility with which it has hitherto heaped wrong upon wrong on the shoulders of Union Surgeons has terminated, and that for the future these meritorious public officers must be paid for the duties required from them, according to the same rule of justice which governs all other public engagements. The appointment of Mr. Baines to the Chief Commissionership of Poor-laws, is one of those on which speculation is a mere blank. We hope that he will take the claims of the Union Surgeons into his grave consideration; for he may depend upon it, that the Poor-law will never work well until justice be done towards its most important functionaries. We shall revert to this subject on a future day.

THE SUPPLY OF SUBJECTS FOR DISSECTION NOT ADEQUATE TO THE DEMAND. WHAT IS TO BE DONE?

The condition of this supply has gradually become such as to force itself upon the attention of the profession at large, as well as of the teachers. For the first few years after the passing of the Anatomy Act, though the supply was insufficient to meet the demand, all looked forward patiently and with hope that, in course of time, the Bill would work better, and, ultimately, that all would be well.

This hope has been most grievously disappointed. Instead of improving year by year, the number of subjects has fallen off, till this session we are informed that, at a well-known school, attached to one of the principal London Hospitals, with the number of pupils in actual attendance returned as amounting to nearly one hundred, the subjects received at the present date (December 21) has been five! Half the session has elapsed, and about one third of the students have as yet had no opportunity of

dissecting! At this rate, it will be seen, that it will require a session and a half for all of them to be able to do so *once!* Putting one's name down for dissecting now, is very much like entering to a Derby sweep—you have much about the same chance of drawing a prize.

If the Colleges, under these circumstances, take no steps in the matter, they ought, in common fairness and honesty, to issue a notice that the most superficial knowledge of anatomy will, for the present, be alone required from those presenting themselves for examination.

The question naturally suggests itself, Why should the supply be falling off? Has the wealth of the country so rapidly increased, that pauperism is materially diminished?—The state of the workhouses and gaols negatives this. Has the actual mortality much decreased?—The weekly bills prevent us from thinking so. Some small portion of the blame, then, must, we fear, be attributable to the present Inspector. We have no wish to say anything disrespectful of this officer, who is well qualified to fill the important office; but we fear that it forms part of human nature not to take very much more trouble than is absolutely necessary, unless we have an object in doing so. As long as the Inspector receives a fixed salary, instead of being paid a certain per centage upon the subjects actually supplied to the schools, so long we shall find, we fear, an absence of very intense ardour in the search for bodies.

The main defect, however, there can be no doubt, is in the law itself, which prevents the various parishes from sending the bodies of unclaimed paupers to particular schools. We know an instance in which a large metropolitan parish was willing to allow their unclaimed poor to be dissected, provided they might all be sent to a certain school in the neighbourhood. The offer was refused; and the parish officials, unwilling that the bodies of their paupers should be hawked about London, and unwilling, also, no doubt, to allow of too much intermeddling on the part of a Government officer, resolved to bury their dead at once, and so a large number of subjects were lost for dissection.

If each school were allowed to forage for itself, care being of course taken that due certificates, both of the place from which the bodies were received, and also of the fact of their burial, should be forwarded to the Inspector for Registration, there would then be a direct interest in the research, and we have little doubt that the supply would soon be sufficient.

If matters, on the other hand, are allowed to proceed from bad to worse, the public will suffer; not merely by having bad surgeons, because imperfect anatomists, but also because the point will at length arrive, at which it will be found worth the while of certain parties to revive the old scenes of abomination which used to take place in the days when "resurrectionists" flourished, and "burking" was found to be profitable.

THE CHOLERA AT DUMFRIES. PAROCHIAL BOARDS AND SANITARY REFORM.

The town of Dumfries has again been severely visited by Asiatic Cholera, and the medical gentlemen of the town, with a praiseworthy alacrity, agreed, immediately on its advent, to share equally the fatigues and dangers of attending the poor who should be seized with symptoms of the epidemic. On the 24th ult., the Parochial Board met for the purpose of taking into consideration the state of the town and neighbourhood, and it was unanimously resolved, that the town should be divided into nine districts, each district to be placed under the superintendence of a medical gentleman, with a distinct understanding, that, in cases of necessity, the officers of the medical staff should assist each other. For their important labours they were to receive an allowance of twenty-five shillings a-day, during the pleasure of the Board, to commence at the time the arrangement was entered into.

A more advantageous one for the poor could not have been made, as it secured for them, in the hour of danger, the services of the combined medical talent of the town, while the parish was equally benefited, as these services were obtained at a very small expense. Three days had scarcely elapsed, however, before the worthy parochial Board began to repent of the bargain, and wished, if possible, to have pauper cholera patients attended at a much cheaper rate. Accordingly, on the 27th of November, another meeting was called, and a conference appointed with the medical officers next day, in order to induce them to risk their lives and employ their skill for a sum derogatory to both parties.

During this brief space, the cholera cases had rapidly increased, and it was necessary for the medical staff not only to devote their attention to them, but to ascertain and publish the sanitary condition of the town. Were we to attempt a description of their labours, we might be considered as presenting a picture too highly coloured. It will be sufficient for us to say, that Dumfries remains in the same filthy condition as when the inhabitants, sixteen years ago, were decimated by the Asiatic pestilence. The solemn warning then given has been unheeded, and ignorance and heartless apathy have suffered the same sources of disease to remain undisturbed to the present moment.

The medical officers, in justice to themselves, could not accept the proposition made to them, and they, with one exception, tendered their resignation. The poor, however, they would not leave helpless and unprotected; and hence it was resolved that the "Guardians" should have sufficient time to procure other medical aid, if they adhered to the determination of lowering the salary originally promised. On the 30th, the Board again met, and, after a noisy and undignified discussion, directed their clerk to intimate to the whole medical men of the town that their services were no further required. Mr. Fyfe, the parochial surgeon, much against his inclination, and Dr. Macknight, were afterwards engaged, in conjunction with a gentleman from the parish of Tinwald, to take the entire responsibility of attending the poor at this alarming crisis.

Under these circumstances, the superseded medical officers considered it their duty to memorialise the Board of Health in London; and, in consequence, Dr. Sutherland was sent from Glasgow to Dumfries, on the 6th of December. On his arrival, the facts were made known to him; and, at once perceiving the propriety of recurring to the original agreement, he proposed that it should be adopted, and the parochial authorities were compelled to submit.

Now, the question arises, are Poor-law Guardians fit and proper persons to constitute local boards of health in towns where the most energetic measures are required to check the progress of a rapidly fatal disease? Are the men who generally compose these Boards adapted from their education and position to carry out in the best manner the provisions of a Bill which has for its object the efficient treatment of diseases amongst the poor, and the prevention of epidemics? If it were possible to ascertain the rank, calling, and education of all the Poor-law guardians of England, Wales, and Scotland, we should have some very curious statistics, which might prove serviceable to the Government and the public.

We are acquainted with "the birth, parentage, and education" of nearly all the Guardians of a certain union, and we will present, for the edification of our readers, a brief history of a few of these gentlemen. Robert Acres, farmer, received one year and a half schooling, in the village where he now resides; is able to write, but his orthography is wretched; never went further in accounts than division, and was never in any town except the one where he attends market. Obadiah Thickhead, farmer, went to school for two years as a day-scholar, but not making much progress in his learning, his parents would not allow him to go any longer, supposing it was the master's fault. Never could learn the multiplication table, and writes and spells very badly. Solomon Bumpkin never went to school. Was originally a horse-keeper on the farm which he now occupies. His master dying, he married his widow; can neither read nor write, his accounts being kept by his wife; never was fifteen miles from home. Timothy Grindall, farmer and miller, writes a pretty good hand, having been at a day-school for two years and a half. Went as far in accounts as "reduction," and was considered at school a sharp lad; never was in London. Is a firm believer in ghosts, having seen three, at different times, when returning late home from market. Thinks that Greece is the place where all the tallow comes from. Job Clodhopper, farmer, went to a dame's school for two years, and "finished," at a "boarding-school," for twelve months. This gentleman can trace his pedigree back for a century, his grandfather and great-grandfather having been, successively, tenants on the farm which he now occupies. Proceeded, in arithmetic, as far as "Interest," and is considered, in his parish, a man of high learning. Thinks that poor children ought never to be taught writing, and only sufficient reading to enable them to get through an easy chapter in the Bible. Attributes the increase of pauperism to the numerous schools, which make the poor too proud and too lazy to work. Is an advocate for draining heavy lands, but is utterly opposed to the draining of cottages. Mr. Clodhopper has been a "Guardian" ever since the new Act came into operation, and always occupies the Vice-chair at Board meetings.

Our space will not permit us to enlarge; and we shall only state, that this Union comprises twenty-four Guardians, fifteen of whom read and write imperfectly, five can read and write well, and four can read, but not write. Good sanitary reformers, these! and well calculated to carry out the provisions of the "Nuisances Removal Act." If many parochial Boards are composed of such materials, we cannot wonder that the salaries of Poor-law medical officers are little better than nominal, and that the health of paupers is considered of small consequence.

Of course, we do not pretend to offer an opinion upon the individual merits of the gentlemen composing the Parochial Board of Dumfries; but, as a body, they appear about as competent to manage the sanitary matters of the town, as Falstaff to command an army. They have acted, however, as most other guardians act, more with a view of saving money than of doing justice to the medical profession, and of benefiting the poor. To save a few shillings per day, the cholera is allowed to rage for a time without an adequate medical staff to check it, and nothing less than a mandate from the Government could bring back the parsimonious guardians to a proper sense of duty. To the medical officers the town owes a debt of gratitude, for we are sure that their benevolent exertions will not be without the most valuable results.

The sanitary enactments of the last session were moves in the right direction. To make these Acts, however, efficient, Parochial Boards must be compelled, in cases of emergency, to yield submission to those who are better instructed in matters relating to the public health than they are, and who will take care that medical men are fairly rewarded for their arduous and dangerous duties.

OUR DUBLIN CORRESPONDENT AND DR. SIMPSON.

In our last publication, we gave currency to a rumour which seems to have been floating about the professional circles of Dublin, to the prejudice of Professor Simpson, of Edinburgh. We do not for one moment doubt that the Professor has a triumphant reply to the rumour, now that it has assumed a specific form, and do not know that we should have any regret at the share we had in giving it publicity, had it been done in a better spirit; but, misled by the hypothetical form in which the whole is put, and by a hasty perusal in manuscript, we overlooked altogether, till too late, the spirit in which the concluding paragraph is couched. We need hardly add, that, having given currency to the rumour, our pages are open to the Professor's explanation, so far as it affects the question at issue.

REVIEWS.

Reflections on Organisation, or Suggestions for the Construction of an Organic Atomic Theory. By Henry Freke, A.B., M.B., T.C.D., M.R.I.A. Dublin: James M'Glashan, 21, D'Olier-street. London: William S. Orr and Co., 147, Strand, London. 1848.

This volume exhibits considerable power of thought, and a peculiar analytic talent, which, by its searching investigation into the laws of nature, leads the way to future generalisations of great importance to medical science. The Author sets out with an analysis and comparison of the three primary forces of inorganic nature, viz., gravity, caloric, and electricity, and thence examines the special qualities of matter, by which the particular elementary substances are distinguished the one from the other, and concludes this branch of his subject, by enumerating a series of propositions, asserting generally, that all inanimate creation is "arranged and controlled into the harmony of unity, by the same great general attributes and agencies (viz., gravity, caloric, and electricity), which, as operative agents, radiate centrally, and in every direction." Again, that these agencies "by uniting or combining themselves with inanimate matter, keeps its molecular constituents at definite distances, and may have their energy, as active agents therein, so completely expended, as to be no further productive of active results; that is, may have their energy in that condition which may be expressed by the term latent or dormant." The destruction of this molecular distance renews the activity of the agent. The author also propounds, that these agents can only be roused into activity from such a dormant state, "by the operation of something which bears to that matter the relation of reciprocal or stimulus; and the reciprocal or stimulus then becomes ranged round the matter, in the form of an envelope surrounding the nucleus." From the laws comprised in these general propositions, or deductions, as they appear in this volume, the Author derives all the action and forms of the inorganic world.

Taking these conclusions as postulates, or things granted, the Author then proceeds to inquire into the nature of the vital force; and observes, that on first becoming acquainted with a force of this kind, "Should we not be warranted *à priori* in the conjecture, that it would be found to enter into latent combination with matter, from which it could alone be roused to activity by that matter's reciprocal or stimulus; that it would then radiate centrifugally in every direction, giving manifestation during such radiation to active results, and ranging the reciprocal or stimulus round the matter, in the form of an envelope, surrounding a nucleus?" In order to embrace completely the Author's peculiar views, expressed, as they are, in a phraseology to which the ordinary reader is unaccustomed, it is necessary to read the Author's work, and to follow out his arguments, which evince, most unquestionably, both knowledge and ingenuity. We cannot pretend to do justice to the Author's inductions.

Dr. Freke supports his views on the vital force by certain analogical reasoning derived from the moral world, but to which it is unnecessary to refer here at greater length. The learned doctor regards the vital force as the antagonist of the chemical force, and denominates it the "organizing agency;" and asks these questions,—*why* this agency exists dormant in matter, in which it is known to reside, till roused into activity by some agent for such function endowed? Its recognition as a fact suggests, as a rational inquiry, *why* the activity of this principle has alone been found in connexion with matter, *while* that matter is in the state of chemical transformation?" also, "*why* such activity demands, during the periods of its manifestation, the presence of matter distinct from that within which it lay dormant, till aroused to activity as chemical transformation commenced?" He then asks, whether the new class of compounds, indicated by organic life, may not depend upon "an hitherto unrecognized *new class of atoms?*" The remainder of the book is devoted to a consideration and development of this fruitful speculation. It would be difficult for us to give even an outline of the arguments and illustrations employed; but we would recommend the scientific reader to examine the question for himself, in the Author's own pages, where he will assuredly find abundant matter to occupy his ratiocinative faculties.

The work is written with taste and elegance, and displays much literary cultivation. We opine that it is a promise, rather than a fulfilment, of the Author's capabilities.

A Course of Lectures on Dental Physiology and Surgery, delivered at the Middlesex Hospital School of Medicine. By John Tomes, Surgeon-Dentist to the Middlesex Hospital. London: John W. Parker. 1848. Pp. 397.

Mr. Tomes, in a very modest Preface, informs us, that "these lectures were written for, and delivered to, beginners: they were not, and they are not now, addressed to those already conversant with the subject of dental physiology and surgery." We think, however, that even this latter class will derive both pleasure and profit in giving the book an attentive perusal. It is well written, the subjects well arranged, and exhibit the Author as an efficient teacher and a practical dentist.

The volume is composed of sixteen Lectures, illustrated by one hundred and thirty-five excellent wood engravings.

In the Lecture on Dental Caries, Mr. Tomes defines the disease as the "death and subsequent progressive decomposition of part or the whole of a tooth." The dentine is supposed, from abnormal action, to lose its vitality, and the power of resisting chemical action, and that, consequently, the dead part is, under certain circumstances, decomposed by the fluids of the mouth. The physical changes which tell of the presence of caries, commence with discoloration of the dental tissues; this is succeeded by softening, and disintegration follows. The enamel is the first to suffer, then the dentine; for the enamel must become pervious before the destructive agents can gain admission to the dentine. The saliva, when caries is rapidly proceeding, is, in many cases, strongly acid.

In the extraction of teeth, Mr. Tomes does not advocate the use of the old-fashioned key, but recommends forceps of different forms, so constructed that they shall accurately fit the tooth to be extracted, and so fashioned at the blades, that they shall readily separate the gum from the neck of the tooth, to which point they shall arrive by simply placing the extremities of the jaws at the edge of the gum, closing the handles, and, at the same time, pressing the instrument firmly and steadily in the direction of the tooth, till it comes in contact with the free edges of the alveolar process.

This work is calculated to be highly serviceable to dentists and to those medical practitioners who are frequently required to operate on the teeth. It has been a great fault with some surgeons that they have paid but little attention to diseases of the teeth, and have, in some instances, manifested great carelessness in extracting them. Some very disastrous consequences have resulted from bungling operations. We hope, however, that a better time is coming for dental surgery.

Practical Pharmacy; the Arrangements, Apparatus, and Manipulations of the Pharmaceutical Shop and Laboratory. By Francis Mohr, Ph. D., and Thomas Redwood. Illustrated by four hundred engravings on wood. London: Taylor, Walton, and Maberly. 1849. Pp. 390.

This work will prove of great value to the English pharmaceutical chemist, as it contains a large amount of valuable information relating to every department of his business. Here he is instructed how to fit up in the best way a dispensary and laboratory, &c. Here there are directions for distillation in various ways—for the preparation of extracts—for furnace operations—for the generation of gases—for sublimation—filtration—the pulverization of drugs—granulation of metals—weighing and measuring—determination of specific gravities—cutting, drilling, and bending glass. The section which treats of dispensing medicines contains some most important counsels. Every person engaged in the pharmaceutical profession should attentively read this Chapter; and we are sure that those who follow the rules here laid down will conduct the dispensary business in the best way; and, consequently, with the greatest accuracy and dispatch. The wood engravings in the book are well executed.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—Dec. 12, 1848.

CREEPING BUBO.

As our Report, last week, of Mr. Lloyd's speech, contained some inaccuracies, we consider it necessary to publish it, as corrected by himself, in order that the profession may be made acquainted with the opinions of so eminent a surgeon on Creeping Bubo:—

Mr. LLOYD concurred very largely in the views which had been set forth by Mr. Cooper. As far as he had seen, these cases arose from primary sores; but it could not be inferred from these sores what was the character of the sores that preceded them. They could not, therefore, say, in a case of this kind, that such and such having been the nature of the primary sore, such and such a course of treatment should be pursued in that which was secondary. Surgeons, of course, were guided by the appearance of the sore in the treatment they employed. There were cases in which he would decidedly say at once, mercury is the remedy, and will certainly prove a cure. When this turned out not to be the case, it was the exception, and not the rule. He considered that, in all true venereal sores, there would be no difficulty, with proper treatment, in preventing secondary symptoms. Mr. Solly distinctly states that, in one of the cases he adduces, there had been a primary sore, which got well without mercury. He appealed to Mr. Solly as to the accuracy of this. He thought that a true Hunterian chancre would not get well without mercury; had they, therefore, any right to infer that a secondary sore, consequent on a primary sore, which healed without mercury, was syphilitic because it got well under the use of mercury? He had several times seen cases of this kind in a husband or wife, in which the primary disease had been the consequence of its existence in the other. He had seen bubo, in the one, get well, as in ordinary cases; while, in the other, it continued throughout a lengthened period, having assumed the character of the "creeping bubo." In one case of this kind, in which mercury had been tried to the full extent, till the patient's constitution appeared as if it were completely worn out, sarsaparilla also being given, the disease continuing to spread the whole time, the patient was sent into the country, and there completely recovered without any specific treatment whatever. He instanced, also, a case that had lately occurred at St. Bartholomew's Hospital. The patient had been previously in the Lock Hospital. Local and general means of various kinds, and mercury, to a considerable extent, had been employed; but the disease continued to spread, and the patient's health suffered. On one occasion, when going round the hospital with a gentleman, formerly a fellow-student, he asked him if he could communicate any remedy for such a disease. He acknowledged the difficulty that sometimes occurred in curing such diseases; but stated, that he had known a case recover under the use of conium, the patient taking 120 grains of the extract daily. Mr. Lloyd then determined to try the same treatment, and, at the commencement, gave the patient five grains three times a day, and went on gradually increasing the dose to 120 grains daily. At this period, a marked improvement in the sore was visible; but, to keep up the healing process, it was necessary to continue increasing the dose of the hemlock till seven drachms were taken, in the form of pills, daily. The patient perfectly recovered, and gained flesh and strength under the treatment. Fifty-six ounces of the hemlock were taken, in the whole.

THE POOR-LAW CONVENTION, THE POOR-LAW BOARD, AND THE BOARD OF HEALTH.

(COPY.)

To the Honourable the Poor-law Board:—

The Memorial of the Chairman and Committee of the Medical Officers of Unions in England and Wales,

Sheweth,—

That your Memorialists having been duly appointed a Committee of a Convention of Poor-law Medical Officers, assembled at the Hanover-square Rooms, on the 27th October, 1847, for the purpose of seeking an amelioration of the present system of Poor-law medical relief, respectfully beg to call the attention of your honourable Board to the powers conferred by the "Act for the Prevention of Nuisances and Diseases," whereby your honourable Board is authorized to require from the medical officers of unions the performance of various duties in reference to sanitary regulations, without awarding any remuneration for such onerous and important services.

Your Memorialists beg to protest firmly, but respectfully, against the imposition of such duties.

1st. Because the said duties are altogether foreign to the special duties of Union surgeons as medical attendants on the sick poor, and are not named nor even contemplated by the Honourable the Commissioners of Poor-laws in their order defining the duties of the medical officers of Unions, and because they are entirely distinct from the functions assigned to the medical officers of Unions in their contracts with the Boards of Guardians.

2nd. Because such sanitary duties not being embraced in the legal contracts, nor in the instructions of the honourable the Poor-law Board, under which the Union surgeons entered into their engagements with the Boards of Guardians, the orders of your honourable Board are a violation of the rights of Union surgeons as private citizens, and are contrary to the spirit of the common law of the land.

3rd. Because it is unjust to require the medical officers of Unions to perform arduous and valuable services without remuneration, and because such orders are at the present time peculiarly obnoxious and oppressive, inasmuch as the medical officers of Unions have for a long time complained of the great inadequacy of the present payments for the ordinary services of the medical attendants on the sick poor.

Your Memorirlists, therefore, pray that your Honourable Board will imperatively award such remuneration for sanitary services as shall be equitable and just.

Signed in behalf of the Committee,

THOMAS HODGKIN, M.D., Chairman.
CHARLES F. J. LORD, Hon. Secretary.

Convention of the Poor-law Medical Officers,
Office, 4, Hanover-square, December 9th, 1848.

Poor-law Board, Somerset House,
18th Dec., 1848.

SIR,—I am directed by the Poor-law Board to acknowledge the receipt of a memorial of the Chairman and the Committee of the Medical Officers of Poor-law Unions, acting under the authority of a convention of Poor-law medical officers, assembled on the 27th October last, in which Memorial the attention of this Board is called to the powers conferred by the 11th and 12th Vic. cap. cxxiii., in requiring from the medical officers of unions the performance of various duties having in view the removal of nuisances and the prevention of contagious and epidemic diseases; and a protest against the imposition of such duties is conveyed therein for the reasons set forth.

The Board desire to observe, that the Act of Parliament itself here referred to, and not the Poor-law Board, has imposed the duties rendered obligatory upon the medical officers under that Act.

All that this Board is able to do in the matter, is to point out to the Guardians of Poor-law Unions, the provision contained in the General Consolidated Order of the Poor-law Commissioners, which enables them to give gratuities for extraordinary services rendered by their officers; also, the provisions of the statute rendering it competent to the Guardians to appoint persons in aid of their officers, where the duties they are required to perform under it, would press too much upon the time of those officers. This course the Board has followed in very many instances, since the directions of the General Board of Health have been issued.

I am, Sir, your obedient servant,
W. G. LUMLEY, Assitant Secretary.

To C. F. J. Lord, Esq., Hon. Secretary,
Committee of Poor-law Medical Officers,
4, Hanover-square.

The General Board of Health, Gwydyr-house,
Whitehall, 16th Dec., 1848.

GENTLEMEN,—I am directed, by the General Board of Health, to acknowledge the receipt of your Memorial dated the 12th instant, calling the attention of the Board to certain provisions of the Nuisances Removal and Diseases Prevention Act, whereby they are empowered to require and enforce the performance of various duties in reference to sanitary regulations by the medical officers of Unions, and pressing upon the attention of the Board the injustice of enforcing the performance of such duties without awarding just and suitable recompence; and praying that the Board will deem it expedient to issue such instructions as shall give the Union surgeons performing the duties of a medical officer of health, a legal claim to remuneration.

I am to inform you, in reply, that in the object of your Memorial, namely, that the Union surgeons should receive fair and adequate remuneration for the extra services which are required of them under the Nuisances Removal and Diseases Prevention Act, the General Board of Health entirely concur; but they have to call your attention to the fact, that the power of requiring the performance of these duties by the Union surgeons, and the payment of all expenses which may be incurred therein, are left entirely with the Boards of Guardians by the 12th and 14th sections of the Act itself, and are not determined by the regulations of this Board, as you would appear to apprehend. The Board, therefore, are not in a position to enter upon questions of right upon which they are not authorised to adjudicate; but that you may be made acquainted with the feeling of the Board upon the subject of remuneration for these extra services, I am to transmit you, herewith, a copy of the second notification issued by the Board on the 31st October last, and to direct your attention to the following paragraph therein marked in the margin, which would appear to have escaped your notice:—

"It appears to the General Board of Health to be absolutely necessary, in the present emergency, to concentrate responsibility on the medical officers, and to entrust them with discretionary powers, because the rapidity of the course of cholera will not allow them to wait for direction from the Guardians at their weekly meetings; and seeing the many and arduous duties that devolve upon the medical officers, the General Board of Health cannot but express a hope, that the remuneration of these officers will be more proportionate to the value of the services required of them, than it was upon the former occasion."

I am, Gentlemen,
Your most obedient servant,
HENRY AUSTIN, Secretary.

To Thomas Hodgkin, Esq., M.D., Chairman, and Charles F. J. Lord, Esq., Honorary Secretary of the Committee of Medical Officers of Unions in England and Wales.

MR. KAY'S CASE OF HYDATIDS EXPELLED FROM THE UTERUS.

[To the Editor of the Medical Times.]

SIR,—Having felt much interested by the perusal, in the *Medical Times*, of two cases of supposed pregnancy, which were terminated by the expulsion of masses of hydatids, I wish to inquire, through your medium, whether, in either of the cases related by Mr. Kay, the secretion of milk became established subsequently to the expulsion of the tumors? I am desirous of ascertaining this point, from the fact of my having, now nearly twenty years ago, been called upon to attend a married woman who was supposed to be pregnant, and who, being seized with pains, expelled a large mass of hydatids, with immediate subsidence of the uterine enlargement. On the second day after this delivery, my attention was called, by the mother of the patient, to the distension of the breasts, and I was enabled, by slight traction of the nipples, to procure a discharge of milk; indeed I have no doubt, if an infant had been applied, the woman would have been able to suckle it. Milk fever of mild character supervened, after which the patient perfectly recovered.

This case I consider valuable in a medico-legal point of view, since, had it been a case involving a suspicion of pregnancy and concealment of birth, and had my opinion been taken *on all the appearances* subsequent to the discharge of the hydatids, I am free to confess I should up to that time have given an opinion that my patient had recently been delivered of a child.

JOHN PEARSON.

Stalybridge, Dec. 26, 1848.

THE POOR-LAW SURGEONS, AND THE CONVENTION.

[To the Editor of the "Medical Times."]

SIR,—Some little time back, a letter appeared in the *Times* from a physician, denouncing, in no measured terms, his supposed connexion with the Poor-

law Medical Staff. Short, brief, and cutting were the words he wrote; they were full of manly sentiment,—a sentiment which every one of us must appreciate from the inmost recesses of our hearts. We do, indeed, feel the truthfulness of his satire. We feel, and have felt, for many a long day, the injustice of our position towards the poor. We know the recompense we receive is incommensurate with the duties we perform, and in a legitimate and straightforward manner our efforts are being used to place before the public the necessity of a change hitherto unsuccessful. We still retain our appointments under the Poor-law. Nevertheless, under a firm conviction that "better days are coming," in which the opprobrium of supplying advice and physic at 1d. a bottle shall no longer attach itself to us. But, Sir, how comes it, the Committee of the Poor-law Convention receive no better support, in their steady perseverance to force upon our rulers a consideration of this important subject, from the profession generally? How comes it, that the finances committed to their charge to carry on the agitation, have never exceeded, seldom come up to the amount required for ordinary contingent expenses; and that an appeal is again necessary to raise the requisite funds to carry on the noble design of meliorating the distress which a niggardly system must cause to the poor who dwell in every nook and corner of old England.

These are the causes:—Some Union officers are frightened to act in the matter, lest the influence of their Boards of Guardians should be used against them (having annual appointments) to bowl them out of their present office, and so cause a slur to be fixed upon their professional character; these are a numerous class—loaded with onerous duties—working in wide and extensive districts—on bleak downs—the confines of the sea, or some malarious and pestilential swamp. Their energies are devoted to their calling, and they wish not to deprecate, by agitation, or a contribution to it, those means of doing good to the poor, which they can only secure by being on the most frtendly terms with the Local Board or their parishioners. Such are absentees from choice.

Young men are appointed to Unions for a specific period, and by these, perhaps, greater hardships are endured than where the districts are given with a license to practice generally. The limit of their contracts is a cause for not "entering an appearance" against the system; but how fully alive are such to the fact, that the system is raised upon the worst and most vicious foundation: for the salary of shopmen is the intellect taxed, from the rising to the setting of the sun, for wages which a gentleman's man would spurn; disease is combatted in every form, however pestiferous it may be; and, the taste of the occupation becoming nauseous before the expiration of their term of servitude, they vow to abandon for ever the Poor-law surgeon's office, and care not about raising the position of the foolish men who succeed them.

A third class accept, abuse, and prostitute the office of Union surgeon to their own ends; they truckle to their masters; they care not for the misery they see around them; they are poor, ill-mannered, thoughtless, and, if ten thousand paupers died unrelieved, through the defect of the present law, they would raise no cry, support no movement which is calculated to make him and the system work better. Will such contribute to the funds of the Committee? No.

And others, too, there are, holding on these offices, so poor they cannot give a farthing, for wife, children, horse, drugs, require to be maintained and found from a fund which will not, properly speaking, do either if the pauper gets his due.

The Committee have facts before them now which warrant them in bringing the case more fully before the public, and laying before Parliament the abominations of the system practised under the name of Poor-law Medical Relief. And we urge upon every member of the profession, in the event of a general meeting taking place in London, to attend. We urge upon every one an active co-operation, for the principle involved is one, not of self, but of humanity. Men must not be doctored worse than brute beasts. Everything which tends to such a state of things must be annihilated, routed out, exposed to the full gaze of light. Disease must not run on to death because it afflicts a pauper. The State should be compelled to remedy the evil, and at the ensuing meeting of the convention we are glad to see, not only the profession, but members of Parliament, are invited to be present. Let each Union officer personally confer with his provincial Member of the House, and let every exertion be made to excite Government to equalise the payment of Union medical officers, and to compel Boards of Guardians to raise the standard of remuneration in their contracts,—so as to recompense medical men as other men are,—and may this meeting prosper in its efforts to blot out from England's escutcheon that foul stain,—the system of Poor-law Medical Relief as it exists in 1848.

I remain, your's very truly,

ALFRED EBSWORTH.

Bulwell, Notts.

THE ADVANTAGES OF UNION MEDICAL PRACTICE.

[To the Editor of the Medical Times.]

SIR,—Having waited a week, in hopes of seeing the emanations of a more able pen than my own in answer to the letter of "J. P." in the *Times* of the 25th Nov., but being disappointed, I must devote a few minutes to reply. With due respect to the author of the paper, I cannot suppose he has ever been, or at all understands the duties of, a union surgeon, or he never could apply such a simile as that of the great and amiable Doctor Hope, whose name recalls that noble pleasing face with delight to my imagination. In regard to his being a gratuitous doctor to an infirmary, I have seen paper war and wreckless danger of disapprobation encountered to be permitted to fill such a situation; but oh, how widely different are the duties to those of the parish surgeon! The former is at no expense; he merely lends his head to please himself, and I confess I should much enjoy the same thing, as, at the expense of the good and benevolent, he is able to try every means of cure, backed with well regulated and suitable diet, by which means (if in human power) he can scarcely fail either to relieve or cure his patient. Not so the weary parish surgeon, who, instead of visiting and prescribing for his patients in one house, (as in the case of the infirmary practitioner,) must (as the first necessary outlay) keep a horse, consequently a man to attend upon it, with the accompanying taxes, and ride perhaps many miles, wet or dry, summer or winter, dark or light, to the bed-side of some indigent and wretched being, wasted by continued fever, and requiring nutriment more than medicine, which, from their frequently isolated habitation, it is next to impossible to obtain in time to save the life of the sinking being. And were it not so, who could think of expense in such a case? Wine, brandy, and the most expensive medicines are immediately supplied, regardless of their cost. And even these may be of no avail, as, from the ignorance of the parties, medical aid is but too frequently sought when disease has done its worst. The surgeon's frequent journies are, therefore, fruitless. This single circumstance, it will be felt, must rob one of a little of the poetry of Union practice. But this is but one case: thousands, of a similar nature, occur during the year; and, in hundreds, complaints are made, and you are summoned to appear before the Guardians, at six miles' distance, (in my own case,) to answer to the groundless accusation of a person whose distressed condition has imbued him or her with the cunning of an American Indian, with the hope of obtaining extra relief by this means; as the usual cause of complaint is, your returning them as "able to do light work," when they *will not* do any, as, by *feigning* sickness, they may lead an idle life at the expense of the parish. This is humiliating, indeed, to be summoned for *such* a cause before *such* a tribunal; and, through disappointment, vexation, ingratitude, and expensive unremunerated services, you must sink beneath the station you have been accustomed to fill in society, to compete with these scandalous accusers.

I cannot help referring to the idea of the practice and experience gained by attendance on the poor, than which nothing (in my opinion) can be more ungenerous, unjust, and awful. Fancy an inexperienced, semi-qualified man, *digging* his experience out in *such* a way. What sacrifice of life! A Napoleon of destruction! In the country, he must take cases—severe or slight—on his own responsibility: no one to interrogate as to the propriety of treatment, till death or permanent disability shall unfold the fatal secret. The more I write, the more I am impressed with the serious responsibility of our calling. I hope I shall not offend the unknown writer, but I cannot help suggesting these things, being a parochial country practitioner of ten years' standing, and having experienced (with hundreds of my brethren) the unceasing anxiety and fatigue attendant on our duties, accompanied with the great inevitable expenses.

In answer to the assertion, that private practice is acquired through parochial appointments, I beg to say, that in several cases I have found it has had a contrary effect, from the number of pestilential habitations the surgeon is naturally supposed to enter.

Trusting I have not encroached too much on your valuable columns, I beg to subscribe myself yours obediently,

A SUBSCRIBER, M.R.C.S., L.A.C.

ON THE TREATMENT OF CHOLERA.

[To the Editor of the Medical Times.]

SIR,—I know nothing more liberal than the offer you make in your last week's "Review" of certain works "on Cholera," that, "if any Author will only contribute one new fact, or two new ideas—for ideas are cheaper than facts—to the history of this appalling disease, we will promise him a generous and kindly reception."

In the happy hope of a speedy fulfilment of intentions so laudable, an old contributor—one of your earliest subscribers, in fact—would beg your attention to the "Revelations on Cholera, by Dr. Dickson." Though that book, as your critic candidly admits, figures "in *our* list," it is quite clear he can know nothing of its contents beyond the title-page; otherwise, he could scarcely have spoken either of it or its author at *second-hand*; the more especially, as, in doing so, like most people who prefer evidence on *hearsay* to evidence *direct*, he has contrived to misrepresent both Dr. Dickson and his practice—unintentionally, no doubt, but very seriously, nevertheless. To a critic with the kindly feeling he evinces, this must be a matter of regret—regret, however, which can be easily assuaged, by an early correction of the mistakes into which, by trusting to other rather than his own eyes, he has most assuredly fallen. Let me explain.

1. To "Dr. Dickson, of chrono-thermal repute," he ascribes—nay, he actually places under inverted commas, as a quotation from him,—a passage which is notoriously contradicted by everything Dr. Dickson, for the last seventeen or eighteen years, has penned, printed, or published on the subject of cholera. This, your critic informs the world, he has done, on the authority of a gentleman named Rogers. And,

2. On the authority of the same gentleman, he publishes a statistical Table of cases, said to have been treated by Dr. Dickson. "Mr. Rogers," he says, "slily appends this Table, as an illustration of Dr. Dickson's practice." Slily indeed—very sly!

Readers of the Fallacies of the Faculty, what do you imagine is the practice Mr. Rogers accuses Dr. Dickson of advocating? *Blood-letting*, in all cases of cholera! *Proh pudor!*

Turn, Mr. Editor, to Dr. Dickson's own book—to his own "*Revelations* on Cholera." Come, there's at least a bold title—a title that one would think might have led your critic to expect a "new fact" or two,—"two ideas," at any rate—something, in a word, that he might welcome with a "kindly and generous reception." Nothing of the sort. He would rather quote Mr. Rogers, mystify Dr. Dickson, and laud Mr. Ross,—Mr. Ross, who, according to him, knows *all* about cholera. Perhaps he will tell me if Mr. Ross knows what is the immediate cause of those most terrible symptoms—the sinking, difficult breathing, and loss of voice—those *essential* symptoms of *suffocative* cholera—of cholera asphyxia? How are they produced?" Does Mr. Ross know that? If he does, he keeps his knowledge to himself.

Those symptoms, Mr. Editor, "are the direct result of a loss of the brain's influence over the *pneumogastric* nerves,—those nerves that supply the stomach, lungs, and vocal organs. Whatever will, directly or indirectly, diminish the brain's energy over those nerves, will produce the identical symptoms of suffocative cholera. The passion of terror will do it; any local injury that may give a shock to the brain will do it; loss of blood will do it; the direct *artificial paralysis of the nerves in question* will do it." Examples of the essential symptoms of the disease, from each and every of these causes, will be found in the "*Revelations*." Are these, Sir, "new facts," or are they not? How happy your critic will be, to have so speedy an opportunity to fulfil his promise of a "generous and kindly reception" of "new facts!" But these are not the only "new facts" in the "Revelations on Cholera." The question your Correspondent, Mr. Ross, declares his inability to solve,—namely, "Whether the disease begins in the blood,

or in the nerves?"—you will find settled by a "new fact." What is that? Why, that the blood of a cholera patient can be, and has been, changed from black to red by the inflation of the lungs with atmospheric air, the same change being also effected, by the same process, on the blood of an animal whose *pneumo-gastric* nerves have been artificially paralysed by their division! Permit me, in conclusion, Mr. Editor, to trespass on your space, by referring your readers to Dr. Dickson's mode of treating cholera, as given in his "Revelations on Cholera," pp. 49, 50:—"In addition to the remedies previously recommended, I would here suggest a trial of '*chloroform*,' as an anæsthetic agent, in the earlier stages, particularly when the cramps are painful and severe; that agent having, in my own hands, given speedy relief to patients suffering from other spasmodic complaints, depending on a similar loss of nervous energy."

Just *one month* after the publication of the *Revelations*, a most satisfactory statement appeared in the *Times* newspaper, of the benefit derived by this practice at the Peckham Asylum,—something like ten out of twelve cases cured by the inhalation of chloroform.

I remain, Mr. Editor, your old subscriber,

THE AUTHOR OF THE "FALLACIES OF THE FACULTY."

Bolton-street, Dec. 18, 1848.

GOSSIP OF THE WEEK.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise on Thursday, December 21, 1848:—Robert Ingram Stevens, London; James Bernard Ruck, Prestbury, near Cheltenham; William Henry Slade, Frome; John Marsh, Mansfield, Notts: Robert Savignac Stedman, Great Bookham, Surrey; Thomas Coutts Morison; George Beck, Harpley, Norfolk; Pryce Jones, Helmston, North Hants; Nicholas Marsh, Liverpool; George Carfrae Hope, London; Frederick John Earle, Winchester; Thomas Blanshard, Selby, Yorkshire; Philip James, Elborough; Samuel Weston Devenish, Weymouth; Banfield Teague Vivian, Crowan, Cornwall; Frederick William Armstrong Rawlins, Congleton, Cheshire.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College, at the meeting of the Court of Examiners on the 22nd inst.:—Messrs. Henry Hooper, Cornhill; Edward Marshall, Clapham; Maurice Levett Manthorp, Thorp, Essex; Joseph Alfred Bean, Peldon, near Colchester; David Philbrick Morris, Colchester; Henry Axford Mantell, Farringdon, Berkshire; Francis McAree, Royal Navy; Edward Waylen, Devizes, Wiltshire; Frederick Hodson, Goole, Yorkshire; and Frederick William Dix, Long Buckby, Northamptonshire. At the same meeting of the Court, Mr. Frederick Foster Morgan passed his examination for naval surgeon. This gentleman had previously been admitted a Member of the College, his diploma bearing date, February 2nd, 1844.

OBITUARY.—On the 16th inst., aged 51 years, Mr. John Howard, surgeon, late of Oldham-street, Liverpool.—On Tuesday, the 19th of this month, at his residence, Suffolk-square, Cheltenham, Wm. Greaves, late of Mayfield-hall, in the county of Stafford, Esq., M.D., one of Her Majesty's Justices of the Peace for the counties of Stafford, Derby, and Gloucester, in his 78th year.—On the 20th inst., at Brighton, George Drysdale, Esq., M.D., R.N., in his 67th year.—On Wednesday, the 20th inst., Thomas South, Esq., surgeon, of Judd-street, Brunswick-square, aged 49.—On Friday, the 22nd inst., at his residence, 1, Woburn-place, Russell-square, in the 63rd year of his age, Dr. Prichard, formerly of Bristol, Commissioner.

Lunacy.—On Tuesday at his house in St. Aldate's, Oxford, Charles Lewes Parker, M.A., of Wadham College, surgeon to the Radcliffe Infirmary.

WAR OFFICE, DECEMBER.—34th Foot: James Edmund Clutterbuck, M.D., to be Assist.-Surg., vice Eaton, appointed to the 70th Foot.—82d Foot: Ensign John Sprot, from the 83d Foot, to be Ensign, vice Richardson, appointed to the 83d Foot; Acting Assist.-Surg. George Thomas Finlay to be Assist. Surg., vice Adams, appointed to the 64th Foot. *To be Assistant-Surgeons.*—Assist.-Surg. Deodatus William Eaton, from the 34th Foot.—Acting Assist.-Surg. Christopher Bakewell Bassano.—Assist.-Surg. William Henry Short, from the Staff.—Assist.-Surg. Andrew Leith Adams, M.D., from the 82d Foot.—Assist.-Surg. William Nettleton Boyce, from the Staff.—Acting Assist.-Surg. James Hamilton Bews. *Hospital Staff.*—Acting Assist.-Surg. Thomas Manners to be Assist.-Surg. to the Forces, vice Short, appointed to the 64th Foot.—Grahame Auchinleck, M.D., to be Assist.-Surg. to the Forces, vice Boyce, appointed to the 83d Foot.—12th Light Dragoons: Assist.-Surg. Robert Villiers George, M.D., from the 69th Foot, to be Assist.-Surg., vice Gunning, deceased.—2d Regiment of Foot: Staff-Surg. of the second class George Roche Smith to be Surg., vice Harvey, appointed to the 70th Foot.—18th Foot: Assist.-Surg. Frederick Burton Phillipson, from 34th Foot, to be Assist.-Surg., vice D'Arcy, who exchanges.—34th Foot: Staff-Surg. of the Second Class William Denny to be Surg., vice Bain, promoted on the Staff; Assist.-Surg. O'Connor D'Arcy, M.D., from 18th Foot, to be Assist.Surg., vice Phillipson, who exchanges.—40th Foot: Assist.-Surg. Joseph Burke, from 50th Foot, to be Surg., vice Mapleton, appointed to the Staff.—50th Foot: Acting Assist. Surg., Andrew Acres Stoney to be Assist.-Surg., vice Burke, promoted to the 40th Foot.—57th Foot: Staff Surg. of Second Class Charles Alexander Gordon, M.D., to be Surg., vice Richardson, deceased.—69th Foot: William Watson Somerville, M.D., to be Assist. Surg., vice George, appointed to the 12th Light Dragoons.—70th Foot: Surg. William Harvey from the 2nd Foot, to be Surg., vice Pilleau, appointed to the Staff.—Inspector-General of Hospitals, with local rank, John Davy, M.D., to be Inspector-General of Hospitals.—Deputy-Inspector-General of Hospitals Alexander Stewart, M.D., to be Inspector-General of Hospitals in the Windward and Leeward Islands only, vice John Davy, M.D., who retires upon half-pay.—Staff-Surgeon of the First Class William Munro to be Deputy-Inspector-General of Hospitals, vice Stewart.—Surgeon William Bain, M.D., from 34th Foot, to be Staff-Surgeon of the First Class, vice Monro.—Surgeon Henry Pilleau, from 70th Foot, to be Staff-Surgeon of Second Class, vice Thomas Lewis, M.D., who retires upon half-pay.—Surgeon Henry Mapleton, M.D., from 40th Foot, to be Staff-Surgeon of Second Class, vice Gordon, appointed to 57th Foot.—Staff-Assistant-Surgeon James Alexander Fraser, M.D., to be Staff-Surgeon of the Second Class, vice Smith, appointed to the 2nd Foot.—Staff-Assistant-Surgeon Sandford M'Vittie Lloyd, M.D., to be Staff-Surgeon of the Second Class, vice Denny, appointed to the 34th Foot.—Acting-Assistant-Surgeon Nicolson Colin M'Kenzie, M.D., to be Assistant-Surgeon to the Forces, vice Fraser.—Joseph Farmar Matthew, gent., to be Assistant-Surgeon to the Forces, vice Lloyd. *Memorandum.*—Assistant-Surgeon to the Forces William Smellie Johnstone, M.D., has been permitted to resign his commission.

APPOINTMENT.—Edward Cock, Esq., Surgeon to Guy's Hospital, has been appointed Consulting Surgeon to the Deaf and Dumb Asylum, in the room of Mr. Callaway, deceased.

PROFESSORSHIPS IN THE QUEEN'S UNIVERSITY, IRELAND.—There are already 1,500 applications for the Professorships of the New Colleges in Ireland; and (singularly enough) there is not now living a single man who had taken a scholarship in Trinity College, Dublin, for the last fifteen years, save a few who have succeeded in their professions, who is not among the candidates.

THE CHOLERA AND INTEMPERANCE.—Glasgow last year spent one million sterling in intoxicating drinks. Of 30,000 houses in Glasgow, 3,000 are devoted to the sale of intoxicating liquors—a proportion probably not to be equalled in the world. It has also been ascertained, that at least 30,000 persons, or a tenth part of the population, go to bed drunk every Saturday night. 25,000 persons were committed for drunkenness and disorderly conduct during the year; and, of these, 10,000 were women. Nor is it uncommon for the police to convey to the station-house, in wheelbarrows, thirty or forty persons in a state of beastly intoxication. In Aberdeen, last year, 2,000 men and 5,000 women were taken out of the streets in a state of drunkenness; and, at one time, 45 drunken women were huddled together in a small cell in the police office.

FLEET DITCH AND CHOLERA.—At the last visit of the cholera to London more genuine cases occurred on the line of the Fleet ditch than in any other part of the metropolis: and the attention of the Commissioners of Sewers might be humanely directed to that abomination, the existence of which (nearly wholly uncovered from Peter-street to Ray-street, Clerkenwell, a distance of 1,000 feet) is not known to the public in general.

CHOLERA IN LIVERPOOL.—There have been several cases of cholera in Liverpool, and all the patients have died, or are in a likely way to die, with two exceptions. The report of the London Board of Health, on Wednesday week, included seven cases and six deaths from Liverpool.

CHOLERA IN GLASGOW.—Cholera has been on the increase here, extending itself over the city, without regard to advantages of locality or other mitigating circumstances. The total number of new cases and deaths reported since Tuesday week are, 256 new cases, and 108 deaths. Two or three cases have occurred in the upper circles, but for the most part the disease has been confined to the lower classes.

CHOLERA AT NORTH BLYTH.—There have been several cases of cholera at North Blyth in the last fortnight, and four fatal—one of them after five hours' illness. The great sickness and mortality at this place (the population being below 100) is the more remarkable, as the houses stand dry, are clean, and have plenty of good air, and the inhabitants are principally fishermen and pilots and sober, industrious people.

FEVER AT BARBADOES.—At Barbadoes there is great sickness among the troops; about a third of the artillery and a large portion of the 66th regiment having fallen victims.

DYSENTERY AT HONDURAS.—At Honduras the wet season had set in with unusual severity; the temperature was particularly cold during the "northers." Dysentery had broken out to an alarming extent among the Spanish refugees from Bacalar, daily carrying off numbers, chiefly owing to the miserable state of poverty to which they are reduced, and the vegetable substances upon which they chiefly subsist. There had been a few cases amongst the old settlers.

IN OPPELN, IN SILESIA, some cases of disease have occurred within the last fortnight, which, it is feared, must be considered a return of the cholera: since the 18th the number of deaths have been four and five a day.

THE CHOLERA IN POLAND.—The cholera reports from the official Polish journals:—"The number of cholera cases which occurred in the kingdom of Poland, from the 3rd of August, being the first day of its appearance, to the 13th of November is as follows:—Government of Warsaw—Cases, 3,980; recovered, 2,343; died, 1,581. City of Warsaw—Cases, 9,497; recovered, 3,583; died, 5,260. Lublin—Cases, 13,710; recovered, 2,327; died, 5,966. Radom—Cases, 2,071; recovered, 686; died, 1,119. Plock—Cases, 6,301; recovered, 2,530; died, 3,491. Augustow—Cases, 7,583; recovered, 4,460; died, 2,559. Total number of cases since commencement of disease officially reported throughout the kingdom of Poland, 39,162; total recovered, 18,586; deaths, 18,395.

ARSENIC SOLD BY A DRUGGIST FOR MAGNESIA.—Wm. Reed, a druggist, at Yarm, was sentenced to three months' imprisonment for poisoning a child, seven months old, by selling arsenic for magnesia. The mother had some doubt, after having received the drug, whether all was right, and, on sending it back, was assured by the prisoner that it was magnesia. The child died in three hours after taking the arsenic.

UNIVERSITY OF LONDON.

NUMBER and AVERAGE AGE of CANDIDATES for MATRICULATION and the several DEGREES, and the Number that have passed each Examination, in each Year.

	Matriculation.			Bachelor of Arts.			Master of Arts.			Bachelor of Laws.			Doctor of Laws.			Bachelor of Medicine. First Examination.			Bachelor of Medicine. Second Examination.			Doctor of Medicine.		
	No. of Candidates.	No. passed.	Average Age of Candidates.	No. of Candidates.	No. passed.	Average Age of Candidates.	No. of Candidates.	No. passed.	Average Age of Candidates.	No. of Candidates.	No. passed.	Average Age of Candidates.	No. of Candidates.	Not passed	Average Age of Candidates.	No. of Candidates.	No. passed.	Average Age of Candidates.	No. of Candidates.	No. passed.	Average Age of Candidates.	No. of Candidates.	No. passed.	Average Age of Candidates.
			Yrs. M.			Yrs. M.			Yrs. M.			Yrs. M.			Yrs. M.			Yrs. M.			Yrs. M.			Yrs. M.
1838	23	22	17 11	17	17	21 1			25 8	3	3	27 4	0			25	16	22 6	10	9	24 1	2	2	27 6
1839	31	30	18 7	22	20	20 9			23 8	3	2	22 6	0			49	38	23 2	20	19	23 6	1	1	29 0
1840	77	69	19 0	40	35	22 0	4	3	22 0	10	8	22 6	0			80	50	22 6	21	18	24 10	7	5	31 5
1841	89	64	21 1	40	30	20 0	1	1	22 0	2	2	22 0	0			38	25	24 8	23	19	22 6	5	5	25 0
1842	83	66	20 10	33	26	20 0	1	1	22 0	1	1	24 0	0			41	21	22 6	23	21	23 6	4	4	28 2
1843	96	80	19 7	39	30	21 0	3	3	22 4	2	2	21 6	0			35	26	23 2	22	20	24 6	4	4	27 4
1844	95	77	19 4	33	26	23 7	1	1	21 6	1	1	26 0	0			33	21	22 6	17	16	24 6	2	2	29 0
1845	113	104	19 6	40	30	22 6	3	2	20 6	2	2	29 6	0			53	41	24 8	14	13	23 6	1	1	27 5
1846	110	96	19 4	32	31	21 10	2	2	27 0	2	2	27 3	0			31	26	22 10	21	20	26 6	1	1	30 5
1847	160	151	18 10	44	26	21 10	3	3	24	4	4	24	2	1	30 6	53	24	22 10	24	20	26	1	1	38 2
1848	171	161	19 7	47	41	22	4	4	26 3	4	4	27 3	2	2	22	41	27	23	24	20	26	1	1	10 years.
	1,048	920	19 8	347	304	21 9	23	20	24 2	30	28	24 6	5	3	25 5	400	271	33 1	194	175	25 1	74	77	
			9 years.			9 years.			9 years.			10 years.			3 years.			6 years.			4 years.			

CURIOUS ANALOGY IN THE PERIODICAL VISITATIONS OF ASIATIC CHOLERA AND THE ENGLISH SWEATING SICKNESS.—The average visitations of new and fatal exotics have been calculated as recurring at each revolution of forty years, and there is none on record which has been in this country less fatal than Asiatic cholera. After the first appearance of an exotic epidemic, failing of naturalization, it has a tendency to repeat its visit once in each revolution of sixteen years. Thus, the Sweating Sickness, which was said to have been brought over along with the army of Richmond, afterwards Henry VII., first appeared at Milford Haven in the year 1483, when, meeting with no apt epidemical condition, it soon disappeared. It repeated its visitation, under epidemic influence, in 1485; and it re-appeared, altogether, five times, with an average interspace of sixteen years; not until its fourth visitation reaching the Court, and proving mortal to many of the courtiers in six hours, Henry VIII. owing his emergence from a severe attack to the well-known vigour of his constitution. At its fifth and last return, or sixth visit, in 1551, it carried off 120 in a day within the precincts of Westminster alone, where the two sons of Charles Brandon, both Dukes of Suffolk, died of it,—1551—1485=66+4=16½,—which agrees with the interspace between the two visits of Asiatic cholera.—*From Dr. Collier's Code of Safety, &c.*

MIDDLESEX HOSPITAL.—It is stated that a retired physician in Dublin has bequeathed one-third of all his property, expected to realise 60,000*l.*, to the cancer ward of this Institution.

SUSSEX COUNTY HOSPITAL.—Mr. Hodgson has just been elected House Surgeon to this Institution in the vacancy occasioned by the resignation of Mr. Parson.

SOUTH STAFFORDSHIRE GENERAL HOSPITAL.—A Special General Meeting of the Governors of this noble Institution was held at Wolverhampton last week, for the election of medical officers, when Dr. Topham was elected Physician, and Messrs. E. F. Deliane, G. Edwardes, and J. T. Cartwright, were appointed Surgeons.

MORTALITY TABLE.

For the Week ending Saturday, Dec. 23, 1848.

CAUSES OF DEATH.	Total.	Average of Five Autumns.
ALL CAUSES	1,118	1,154
SPECIFIED CAUSES	1,116	1,149
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	331	270
SPORADIC DISEASES :		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	46	52
Tubercular Diseases	163	184
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	113	127
Diseases of the Heart and Blood-vessels	29	38
Diseases of the Lungs, and of the other Organs of Respiration	177	222
Diseases of the Stomach, Liver, and other Organs of Digestion	57	67
Diseases of the Kidneys, &c.	14	12
Childbirth, Diseases of the Uterus, &c.	11	14
Rheumatism, Diseases of the Bones, Joints, &c.	10	8
Diseases of the Skin, Cellular Tissue, &c.	1	2
Malformations	2	3
Premature Birth.....	38	23
Atrophy	29	19
Age.....	39	64
Sudden	12	12
Violence, Privation, Cold, and Intemperance	44	32
Causes not Specified	2	5

PLYMOUTH PUBLIC DISPENSARY.—A special general meeting of the Governors of this excellent Charity was held last week, to commemorate the 50th year of the Institution, and the services during more than thirty years of Dr. Cookworthy, its senior physician, by the presentation to the Institution of the portrait of that gentleman, and for the presentation to Dr. Cookworthy of a silver tea-service, in token of the regard of the Governors and Subscribers for his long services. The portrait was placed in the physicians' rooms of the Dispensary, opposite that of the late Dr. Remmett, painted by Northcote. The following is the inscription on the testimonial:—"This tea-service was presented to Joseph Collier Cookworthy, Esq., M.D., Senior Physician to the Plymouth Public Dispensary, by 154 subscribers to the Dispensary, as a token of respect, after his connexion with that Institution for a period of more than thirty years." On the reverse is the following:—"At the same time his portrait, painted by Thomas Roads, Esq., (of London), was deposited by them in the Dispensary, as a further mark of their esteem for him. A.D. 1848; and in the 50th year of the Institution."

TO CORRESPONDENTS.

Erratum in Mr. Robinson's letter last week. The word "than" should not have been inserted. The passage should read thus:—"I have been enabled to effect a more desirable stopping *with* gold."

"Neglectus."—Want of space, and other circumstances oblige us to decline the communications.

"Nemo."—We retain the opinion formerly expressed.

"Delta" has had a communication sent by post.

"Examiner, Cambridge."—We are grateful for the offer, but the interest has now subsided.

"A Surgeon."—The smaller sum would be sufficient.

"M. B., Lond."—The matter is still under consideration. When anything definite is agreed on, we shall make it known.

"An Old Friend."—The letter shall be inserted.

"Adolescens."—We do not know of any place in London.

"James."—The difficulties may be overcome by perseverance.

"Dr. Beamish."—The delay has been unavoidable.

"A Constant Reader, Ely."—The work is one of high value, and our correspondent would do well to purchase it.

"A Hater of Quackery" sends us a long account of the "doings" of a man in his neighbourhood, "who expels worms, cures gout, restores sight, draws teeth, and has discovered a sure remedy for consumption." The showing up of such an impostor in a medical periodical would effect no good—the only punishment suited to men of this order is the tread-wheel.

"Mr. Macpherson."—The Clinical Lectures on Medicine are delivered Monday, Tuesday, Thursday, and Friday, at Twelve o'clock.

"Juvenis," Islington.—The term "stone" is a fanciful one, as it does not appear that the substance supposed to possess such wonderful powers was of a lapideous nature.

"A.M."—It appears to be a variety of Pellagra.

"Anglican."—1. The Hotel Dieu is open to English Medical Practitioners, without the payment of a fee. It is necessary, however, to present the Diploma of one of the British Medical or Surgical Colleges. 2. The Schools of Medicine are open to students gratuitously. 3. Subjects may be obtained for a few shillings.

"A Student of Bartholomew's" writes us, that he has been waiting for some weeks to obtain a part of a subject for dissection. He says, "It is utterly impossible, with the present supply, to learn practical anatomy; and many students are now going up to the College, who have had but few opportunities of dissecting." We have received complaints from other places; and we hope that some means will be speedily adopted to furnish a greater number of bodies to the schools. The scarcity does not arise from the improved health of the people, but from defects in the Anatomy Act.

"A Subscriber," Leeds.—The School of Physic, in Ireland, is connected with Trinity College, and the King and Queen's College of Physicians.

"Civilian."—1. Under ten years' actual service, the army assistant surgeon receives 7s. 6d. per day. 2. A letter, unsealed, should be sent, addressed to the Secretary at War, with the words, "Army Medical Department," on the cover.

"Rusticus."—The urinometer.

"Dr. Kidd, Limerick."—Letter received.

"Dr. O. B. Bellingham, Dublin."—A private communication has been forwarded.

"Kaf."—Communication received.

"Mr. Liddle, Alie-place, Goodman's-fields."—The letter came too late for insertion in the present Number.

"Llycaed Twyn y Barriwyn."—The letter has been received, but it requires considerable alteration, in order to suit the readers of a Medical Journal.

"Mr. Southee, Cambridge."—The request shall be complied with.

The communication of "A Fellow" has been received, and will be published next week.

"Dr. J. M. Winn, Truro."—Communication received.

"Mr. W. Smith, Belper."—The Article is under consideration.

"Dr. Blacklock, Dumfries," is thanked for his promised communication, which will be highly acceptable.

"Dr. J. C. Hall, East Retford."—Communication received.

ORIGINAL LECTURES.

LECTURES ON FEVER.

BEING AN ATTEMPT TO DEVELOPE MORE DEFINITE VIEWS OF ITS NATURE AND TREATMENT, BY THE CONSIDERATION OF THE PHENOMENA, AS OBSERVED IN THE PRACTICE OF MEDICINE AND SURGERY; BEING A CONTINUATION OF "MEDICINE AND SURGERY ONE INDUCTIVE SCIENCE."

By GEO. MACILWAIN, F.R.C.S., Author of the abovementioned Work, "Unity of the Body," "Tumours," &c., &c., &c.

LECTURE I.

Introductory Matter.—Teaching.—Retrospect of former Discourses.—Law of Inflammation.—Fever interesting to Surgeons.—Plan of Inquiry proposed.—Importance of Facts most widely distributed, as Guides to Analysis.—Tests of Analysis as proposed.—Causes.—Synthetical Argument.—Tests from Treatment—from Morbid Anatomy—from Diversity of Opinion.—Commencement of Subject.—Facts of Intermittents.

As it will be the object, in the following lectures to lay before the Profession certain views of a practical nature, and in a manner as easily intelligible as possible to the student, I would venture to submit a remark or two on a mode of teaching, still, I fear, too common, and which, perhaps, has had some share in impeding the progress of science. Teaching medical science, as it appears to me, does no, consist in enumerating the symptoms of dis de s with the appearances which they produce, the remedies employed by practitioners, however celebrated, or that selection which the ecturer may have himself found most successful. However necessary a preliminary thereto, these and other facts may be, it is too evident that no mere enumeration of them can ever of itself constitute a science. The student may, indeed, remember them all, but they may not necessarily in any degree excite, or even be addressed, as it were, to his reflective faculties. The whole is pretty much the sort of thing we see adroitly condensed in an article in a medical or surgical dictionary; very useful for purposes for which they are intended, but not for teaching a science.

If I were to hazard a remark as to what a teacher should do, I would suggest that he should place before the student whatever knowledge is definite and positive, together with the facts whence it can be legitimately deduced, and clearly and carefully separate it from that which is merely hypothetical or doubtful; he should generalise his phenomena so as to point out the law in obedience to which they occur; and, when he cannot do this, state clearly why he cannot do it. In this way he would, in delivering to the student as knowledge, that only which was clear and positive, be daily instituting tests of the amount of his own, and, in thus showing the actual status of the science, be pointing to its next or more immediately important desiderata.

Authors no doubt should be referred to, but not for the purpose of detailing their opinions so much as quoting their facts, examining their reasoning, and pointing out, where the opportunity offered, the grounds of the success which they may have achieved, or the causes of the fallacies into which they may have fallen. Employed in this spirit, many works on fever become highly interesting, and to no one more than to one who has all his life been accustomed to deal with diseases at the bedside; even in authors whom we most revere, he sees, in endeavouring to interpret the laws of Nature, how little the most gifted minds can dispense with any of the assistances which she has offered, still less with those which logic and inductive philosophy have shown to be necessary guides to and tests of the correct "conduct of the understanding," and how circumspectly and submissively he must invoke the aid they afford, if he would either render his catalogue of facts sufficiently comprehensive, or elicit from them the legitimate conclusions they involve. By the means at which I have just glanced, we may not only, perhaps, induce a pupil to think, but suggest to him how to set about it,—a preparation much required in our schools. One of our most acute writers may be cited in illustration. I know of no writer who has shown more quickness of perception than Dr. Fordyce. In every thing he has written, he appears to me to evince a mind admirably fitted for investigation, but he throws away his advantages, by neglecting the most ordinary requisitions of careful inquiry or correct reasoning. His opening on Fever, in which he announces, so happily, the peculiar necessity of studying fever in the *living* body, as distinguished from all other sources of information, however varied or extensive, is to me simple and beautiful; yet, in twenty pages, he makes a pure assumption, which gratuitously excludes from his inquiry a multitude of facts of all others, as I hope to show, the most instructive. I might specify these, and give you many other examples of the necessity of being careful and strict in your mode of inquiry; but we must proceed, as, before I commence the present investigation, it will be necessary to revert briefly to the plan and objects of our previous discourses. (a)

In the first place, we showed that the progress of all sciences had resulted from the careful observation of the most common and ordinary facts, and the developement of the relation of these facts to the laws in obedience to which they occurred, by a process consisting of a close observation of the rules which common sense shows to be essential, and which are, for the most part, comprised in what is called Inductive Philosophy. (b) Applying the method though far from perfectly) to medical science, a number of facts were adduced concerning the various organs of the body, in demonstration of the intimate relation and lively association of all parts with each other: and also a number and variety of phenomena in disease which were thus rendered intelligible. We then endeavoured to develope the nature, causes, and treatment of inflammation. Strict inquiry here at once elicited the startling fact, that those characteristics which had been supposed to constitute inflammation, and which, in conjunction, had been usually received as a definition of that process, were not one of them essential thereto; that the really essential and common, or universal character of all inflammations, had been either wholly overlooked *as such*, or recorded in connexion with some circumstance of subordinate importance, and which referred, as well as the words used to express it, merely to the manner in which it was manifested, and not at all to such general character, or to the law of which it was an illustration.

An endeavour to develope the law in question disclosed to us a generalization, which, whether it be regarded as the *law*, or as an *axiom* in approximation thereto, proved to be of the greatest importance—1st, in explaining many things before unintelligible; 2ndly, in defining the nature and principles of the treatment of inflammation in diseases over which we had already some control: and lastly, in teaching us how we could successfully combat others which had hitherto pretty generally proved fatal.

To mention a few of the more salient facts thus elicited, it was shown, first, that the *quantity* of blood *in the body* had not *necessarily* any influence in the production of inflammation, and, consequently, that the abstraction of blood had not *necessarily* any thing to do with the removal of inflammation—that the cause influencing the *distribution* of the blood was the real desideratum, and that which alone furnished the clue to the successful treatment.

It was further demonstrated, that in all inflammations whatever, the object of nature was clearly and essentially to rid the œconomy of that which was resolvable into the term injury, if mechanical, or other direct lesion of continuity, by determination of blood *to the part*, for purposes of repair; but in regard to all other injurious influences, on whatever organs they might *primarily* act, by endeavours to determine the actions *towards* the surfaces of the body. In illustration, first were cited, the multitudes of skin diseases and affections of mucous surfaces, the former especially, and as emphatically carrying out the conservative character of the law. 2nd. The incalculable majority of cases, wherein, notwithstanding that the disturbance *has been primarily directed to the organ*, the inflammation was placed on the serous membrane investing it, familiarly seen in the multitudes of affections of the peritoneum, pleura, pericardium, arachnoid, and tunica vaginalis, as compared to those occurring in the tissues of the organs which they respectively invest, and so on. Lastly, numerous examples were then brought forward of the successful application of the law in the treatment of diseases, both in healthy, as also in unhealthy inflammations, as they are termed. To these were added successful applications in some of the most destructive inflammations of the eye; because here the treatment must be prompt, the success unequivocal, whilst the site of the disease, and the well known characters of such inflammations being alike open to observation, put aside all error of diagnosis. Subsequently to the foregoing, the general nature of tumours has been discussed; and it has been shown, that whilst they exemplify the direction inwards to the cellular tissue, of the law under which morbid depositions occur, they evince in the state of organs *coincident* interferences with its more ordinary manifestations; whilst treated with reference o the removal of these interferences, they contribute some of the most triumphant examples of the efficacy of the treatment arising out of the law in question. I cannot now, however, proceed further, without considering the subject of fever. Fever is supposed to be in the province of the physician; but whatever class of phenomena a man chooses for *practice*, rely upon it, to understand *any*, he must study *all*. No *single* thing is more interesting to the philosophical surgeon than fever. Almost every severe accident, often the most trivial injury, too frequently operations, very many affections of joints, numerous disorders of the mucous canals, erysipelas, and many other diseases, oblige the surgeon constantly to deal with every variety of what, for the moment, I will call febrile disturbance, from the most trivial to the most destructive, so that it would be impossible to discuss the nature or treatment of such subjects properly without having attained to something more clear and definite than generally exists on the nature and treatment of fever. I have thought of the subject some years, and it is one of great difficulty. Fever, you know, occurs in a multitude of forms, acknowledged as such; and also under various phases in many diseases where the fever is recognized only as a sort of symptom, or adventitious accompaniment. Were I to pursue fever in its almost endless forms, I should weary you with the length of the details. Yet, to arrive at any generalization, I must at least endeavour to get types of most of them.

I will now, therefore, place before you the plan I propose, so that, at every step of our progress you may be able to look backwards or forwards, to understand our bearings, and to examine, with the greatest ease, as we proceed, the relation of the whole argument to its several parts, or that of any of them to each other.

The first step will be to collect as rapidly as we can, in some cases rather fully, in others more briefly, the facts of the various fevers we propose to review. The varieties, at first, appear puzzling. We hope to render them useful, because we expect that, exactly in proportion to the variety of the evidence which they afford will be the value of that in which they agree, viz., their common characters; and to unveil such common characters will be the next step in our proceedings. I need scarcely remark, that everything, so far, depends on our unflinchingly rejecting everything concerning which there is the smallest uncertainty. As I am solicitous that the student should understand me, I will suppose that a man, never having seen a feather, had a bundle of old pens, with a few quills, given him, to investigate the uses of feathers. Now, out of a hundred, he would find some short, some long; some with more feather, some with less; some, perhaps, with more or less transparency; some pointed, some not; some coloured at the ends,—black or red, and so on,—so that there would not be any two without some variety. But now, you see, he would find them all

(a) In Vol. I., Medicine and Surgery; On Inductive Science.

(b) See Lord Bacon's Novum Organum, &c.

very tough and very light; and though years might elapse before he saw a bird, or had any means of ascertaining the uses of feathers, he would have had nothing to unlearn, for toughness and lightness would have only become more intelligible. Now, suppose, on the other hand, that, misled by the prevailing pointed or coloured ends, he had omitted to observe a few which were not so,—or, seeing them *so few*, had merely regarded them as accidental exceptions, and have assumed *the prevailing*, but still, you *see*, *partially* distributed, character as the common character of *feathers*,—you may readily perceive into what whimsical conclusions he might have fallen. The fertile imagination of Voltaire could hardly have invented a position more laughable than that which such an error might, very conceivably, have produced. Now, I could easily give you an example of this sort of mistake on this very subject of fever; but my object is merely to sketch our plan, and not further to remark on errors than is necessary to guard you against them.

Having determined on our common characters, then, we must carefully examine their relations, to see if they offer any suggestion as to the essential nature of fever. If they do, we must endeavour to express this in the simplest and most unobjectionable form, and then proceed to test the truth of it by means which the future steps of our investigation will be certain to furnish.

The first test will be supplied when we consider the causes of fever, and in order to reason safely, we shall restrict the application of the words, cause and effect, to such occurrences as are *invariable sequences*. For example, a man going to St. Paul's Churchyard sees a tree. Now, his going thither is in the sense intended, not the cause of his seeing the tree, neither is the image of the tree depicted on his retina the cause, because both of these occurrences may take place without his seeing the tree. The cause of his seeing the tree is a certain action of the brain; this taking place, the perception of the figure is invariable. Now, the alleged causes must, of course, not be obviously in any way opposed to the alleged essential nature of the malady; that is, if the allegation be true. But further, if the causes cited be really such, why then we shall be supplied with a test still more direct and unequivocal than any mere absence of obvious incongruity could furnish. For, according to our own definition, wherever the cause exists, fever must follow. This is just what the chemist does, when, having analysed a substance into the elements of which it is composed, he puts them together again to see if he can reproduce the substance. He expresses this by a term borrowed from the Greek, calling it synthesis or putting together, and just of the same kind is our synthetical argument.

Another very important test of correctness will be afforded by the facts of treatment. If the views held be true, the principles legitimately deducible from, or necessarily arising out of them, ought to embrace everything that experience has really sanctioned. There ought to be nothing, either in success or failure, which they do not explain, or with which they are not perfectly and easily reconcileable. In this way we institute a second crucial experiment, as it were, by making the conclusions legitimately deducible from our premises, and the facts of practical observation, mutually tests of each other.

By such means we hope to arrive at more clear and positive views, and to deduce principles of treatment, which *necessarily arise* out of a previous exposition of the true nature of the malady. If we can do this, we shall marshall very many facts which appear now puzzling and contradictory, under the principles which they exemplify, or the laws in obedience to which they occur. Further, we may in this way render the labours of many of our distinguished predecessors contributory to the development of a practice, clear, definite, and intelligible, instead of that practice of opinion which has tended so much to maintain an impression, that medical science is little more than mystery and conjecture.

In conclusion, we hope to have space for explaining the relations of fever and inflammation, and the bearings which the whole argument must have on epidemics, on contagion, on sanitary measures, and the health of nations. Now, then, we will collect our facts,—to *define* the *thing* fever is, as you know, the *ultimate* object of our inquiry. The meaning of the *word* will be readily conveyed, by citing some common example of that series of occurrences to which it refers. We shall suppose, then, that a person, having been in his usual health, begins to feel poorly: he has a sense of lassitude and weariness; complains of chilliness, draws near the fire; but he is still chilly, even shivering; he has some pain in the head, loins, back, or limbs; he has no disposition to eat, rather nausea, or even a disposition to be sick. Well, getting no better, he goes to bed. Now, after a time, he begins to lose his sensations of chilliness or shivering; but his pains, if he had any, are not diminished, but rather increased. He feels his arteries throbbing; his skin is hot, dry, and burning, as it were; he is thirsty, and feels very ill. After a time, his skin begins to be imbued with moisture, which gradually becomes augmented into a profuse perspiration. As this proceeds, he finds the heat and thirst, and other symptoms, gradually subsiding; and after a certain time,—it may be some hours,—the perspiration subsides also, his skin resuming the ordinary condition. He now, perhaps, rises,—feels, it may be, a little shaken, but still comparatively free from complaint. Now, there may be many other things observable, which, for the moment, I purposely omit: I wish to state the matter as simply as possible. Well, then, nothing perhaps is said about fever, and yet these phenomena constitute what is called a paroxysm of fever; and it is *very important* that you should not forget this description of case,—*this fever of a single paroxysm*. I shall now suppose, however, that, having remained comfortable for a certain number of hours, he is again visited by the same symptoms, which, having run the same course as before, again subside. Now, we say that he has fever; and, naming it from a very obvious fact, we call it an intermittent. I must at once observe, that this so-called fever is manifested in so many different forms, that no description which I could give you of a paroxysm will apply to all. Even the most constant precursors—chilliness or shivering—vary extremely, or may not even have been observed: the hot stage is very long and severe in some cases, slight in others, scarcely distinguishable from the sweating stage in a third, and so on. Still, no doubt, there is a general analogy, which is sufficiently striking in all. As to varieties, the fever may, I say, intermit, and the intermissions may be of any length, from a few hours to many days; but, in those fevers usually intended by the term *intermittent*, there is a great tendency to the periods of twenty-four, forty-eight, and seventy-two hours, constituting, respectively, quotidians, tertians, quartans, &c., as they are called; or the interruptions may be short or irregular, and the fever is said to remit (remittent fever); or the patient may still remain weak, and on the perspiration having subsided, the skin shall again begin to get hot and dry, thirst, head-ache, and other symptoms which had perhaps abated, become again increased; constituting a condition in which the changes are chiefly those of greater or less suffering; in this case the fever is said to be "continued." Now, here I would insert a caution. Until we have got a little further into our subject, I wish you to hold the terms intermittent and continued with some reservation, and not as referring to a disease which absolutely and entirely intermits on the one hand, or which, on the other hand, is continued without any remission whatever; for we shall see occasion to lay some restriction on so absolute an application of these terms. Well, then, we are said to have intermittent, remittent, and continued fevers. Now all these fevers are accompanied by certain conditions of skin, many of them by eruptions on the surface. We cannot indeed say, that *any form* is at *all times* unaccompanied by appearances on the skin; but there is a very large family in which the eruption on the surface is a very striking and almost invariable symptom,—such are small-pox, measles, scarlet fever, &c. Besides, there are various febrile disturbances which follow severe direct mechanical or chemical injuries, such as compound fractures, burns, severe wounds; and not unfrequently surgical operations. Sometimes, even very small punctures, whether these be made by instruments endued with some irritating matter, or *wholly free from anything of the kind*, are followed by very serious febrile phenomena. *Puerperal* fever and erysipelas, are very interesting forms of disease in our inquiry, and, lastly, there is what is called, *hectic* fever. It will be necessary for us to glance at most of the forms which I have mentioned; which, with an occasional reference to some other conditions of the œconomy, (as those produced by poison, for example,) will enable us to collect, not literally all, or nearly all, the phenomena, but a catalogue sufficiently comprehensive to contain *types* of the whole. In our selection, we shall endeavour to rest our inquiry, first, on such facts, in regard to which all reporters are agreed; second, such as are most universally distributed, and such as have fallen under our own observation. To proceed, then, with the facts of intermittent fever. Already I have described one example of the ordinary kind, and I could not, in any one example, give you an idea of the varieties. I have said very little about the tongue, or, indeed, any of the secretions, except that of the skin; they vary so much, that all we can say is, that we never find them all natural, although there are great varieties, both as to the organ most prominently disturbed, as also the manner in which disturbance is indicated.

It may be remarked, that amongst many things which are, although not universally, still pretty generally, observed in fevers, some are more striking in this or that variety. Thus, in intermittents, the stages are usually distinctly marked. There are many exceptions, but that is the prevailing tendency. In the cold stage the features shrink, the skin is pallid, the chill very decided, and the shivering commonly severe; all this is strongly contrasted again, by the more prominent feature, the hot burning skin, and the vascular excitement of the hot stage; and then the perspiration which follows is exceedingly profuse, so as in some cases to suggest measures for a gradual and cautious mitigation of it, and the relief so decided, that the patient often returns to a state scarcely distinguishable from his condition previous to the paroxysm.

I have already referred to the subject of periodicity, and the intervals most commonly observed. A remarkable tendency also is observed for the access of the fever to return at particular hours more commonly than some others. Then it would seem, that in hot climates or warm localities there is of the quotidian, tertian, or quartan type, an inclination to the quotidian. I have not M. Maillot's book, (a) but I copy the subjoined table, given by that author, from Dr. Bartlett's very interesting work on the "Fevers of the United States," a book which, of all others on the subject of fever, appears to me to give the student the least to unlearn. The statements are remarkably cautious, they are put forth apparently in a spirit vividly perceptive of the present unsatisfactory state of the subject, and in a manner well calculated to form the foundation for improving it. I shall probably have more than one occasion to refer to that volume.

M. MAILLOTS' TABLE, showing the Hours of Access in Periodical Fever.

QUOTIDIAN TYPE.

From Midnight to Noon.

Hour...	1	2	3	4	5	6	7	8	9	10	11	12	Total.
No. of cases	12	15	17	18	31	51	82	116	163	239	137	206	1,089

From Noon to Midnight.

Hour	1	2	3	4	5	6	7	8	9	10	11	12	Total.
No. of cases...	70	113	65	58	54	47	19	22	8	21	10	8	493

TERTIAN TYPE.

From Midnight to Noon.

Hour.....	1	2	3	4	5	6	7	8	9	10	11	12	Total.
No. of cases...	12	5	12	30	22	38	68	63	86	87	73	55	550

From Noon to Midnight.

Hour	1	2	3	4	5	6	7	8	9	10	11	12	Total
No. of cases ...	33	39	23	27	11	11	9	10	8	8	4	3	180

QUARTAN TYPE.

From Midnight to Noon.

Hour.....	1	2	3	4	5	6	7	8	9	10	11	12	Total.
No. of cases.....		2		1	2						3	5	13

(a) Sur les Fèvres Intermittents.

From Noon to Midnight.												
Hour.....	1	2	3	4	5	6	7	8	9	10	11	12	Total.
No. of cases	3	4	1	2	1	1			1				13

Of 3,586 cases occurring at Bona, in Africa, also at Algiers; and in France, 2,379 were Quotidians, 1,116 were Tertians, and 91 were Quartans. Thus—

	Quotidian.	Tertian.	Quartan.	Total.
Bona	1,582	730	26	2,338
Algiers	599	171	6	776
France	198	115	59	372

All sorts of irregularities may happen. Any of the foregoing may occur twice in twenty-four hours, and then return at the usual period, in which case it is said to be doubled, and so on. Even in the very same season, the current fever, if I may so speak, may exhibit, in different cases, all forms, from the most clearly intermittent, up to the most continued. Intermittent fevers may occur under every variety of circumstance, and in any place; but there is certainly a well established connexion between swampy, undrained places, and intermittent and remittent forms of fever. The frequent occurence of fever in such localities is sufficiently intelligible; the inclination to intermission not so readily explicable. A certain range of temperature seems to be the great instrument of mischief, and within that the severity of the fever seems to augment *pari passu* with its elevation. Moisture, "*cæteris paribus*," seems a great element of mischief. Both would, of course, tend alike to that minute division and diffusion of any form of noxious matter, which rarefaction and solution necessarily imply. If, indeed, the quantity of water be excessive, as in its fluid form, it might, and probably would, dilute the noxious matter, so as to render it inert, still heat is to be regarded as the great agent,—great moisture does not appear to be necessary. There is probably generally sufficient moisture if there be sufficient heat, although the situation may not be swampy. It is probable that no substance whatever can be wholesome for respiration but that mixture of oxygen and nitrogen, with such other elements as constitute the atmosphere; and again it is certain, that every form of matter is affected by heat—that expansion, which universally pervades a body, must, at the surface, with the mechanical agency of wind, &c., be constantly sending into the atmosphere, either vaporized or finely divided particles of the various matters constituting the surface, and on the nature of these, rather than on moisture, probably the various unknown principles are to be referred. Still, whatever the elements are, it is quite certain that marshy localities are the general habitats of intermittents,—*that they are not, however, peculiar thereto*, and that, in all places measures which at once allow the earth to receive the rain on the one hand, and to readily give exit to it on the other, viz., efficient draining, always improves the salubrity of the locality. It is important, before I quit this subject, however, to remark, that the simple existence of high temperature and great moisture constitutes an atmosphere exceedingly trying to all animals whose skin and lungs are analogous to those of man, for reasons which are not easily explicable on what is, I believe, the generally received doctrine of respiration, but very harmonious with the views which I have advocated, and with the direct experiments of Edwards. In temperate climates, intermittent fever cannot be called, in the usual acceptation of the word, a fatal disease—that is, people do not die *in* the fever; but, if they continue to reside in the district where it prevails, and, in many cases, also, when removed from it, intermittents, are found to be followed by various evidences of their deleterious influence. Indigestion in various forms, diarrhœa, dysentery, visceral disorders or disease, and dropsies, are amongst the more frequent sequelæ which destroy the enjoyment and shorten the span of life, in those who have suffered either from repeated attacks or severe forms of intermittent fever. In tropical regions, however, intermittents are often very deadly, frequently sweeping off large numbers. The paroxysms may set in with great violence, delirium and coma very soon take place, and the patient rapidly succumbs, sometimes even is destroyed, by a single paroxysm, and even in the cold stage of it. Now, we must recollect that, however powerfully any locality may combine the elements of malaria—as heat, moisture, evaporation from the surface of decomposing organic matters, and the actual presence of fever, however deadly and general, yet many escape; nor can it be predicted, in regard to any individual, whether he will be attacked or not. It is not intended to represent that there are not general differences observable—as, for example, between the healthy and temperate, and the dissipated or diseased—but that, in men of somewhat similar habits, as the men composing a regiment, you cannot predict who shall or shall not be affected. Then, of those affected, the results, you know, are, in some, death; in others, recovery; and in others, again, that kind of impaired condition to which I have already alluded.

Another thing observed in intermittent and remittent fevers is, that a person shall reside a long time in a marshy district, or at least where there is an active malaria, without being affected by fever, and yet some time after he has removed from the district, he may be seized by a fever of exactly the same type as that which was prevalent in the district whence he was removed. This is what Dr. Fordyce called the fever continuing independently of the causes which produced it, but which, I trust, when we come to apply the facts we are collecting, may admit of a more philosophical explanation. Intermittent fever, especially when it has been repeated or severe, is very apt to confer, as it were, an intermittent character on any other malady with which the patient may become subsequently affected.

The common intermittent (ague) of the British islands shows instructively enough the connexion of this fever with marshy districts, and the comparative, and, in some instances, the total disappearance of it, where the districts have been drained and brought under cultivation.

I have elsewhere mentioned an interesting point in the history of ague in certain districts in Essex, on the authority of Mr. Curwarden, viz., the comparative infrequency of the severer forms of the disease, and of organic alterations of the spleen, since, by the practice of boring, the inhabitants had obtained good water *to drink*.

The singular accuracy, so to speak, of the intermission and access in many intermittents, has at all times excited much interest, and given rise to much speculation. Without meaning to say that the explanation is not very difficult, it seems to me that it has seldom been regarded as a mode favourable to the disclosure of things which have been to us amongst the secrets of nature. It has not always been connected with these multiform phenomena of periodicity which occur in the human body, many of which are quite as unknown and inexplicable as is the periodicity of intermittent fever, and even where these phenomena have been looked at, they have more frequently been regarded in connexion with matters in nature in the way of general analogies, which can teach us nothing practical, than they have with certain other conditions, with which they *must* be connected, and on which they *probably* depend. I hope our space will allow us, by-and-bye, to open this part of the subject; but as it is not essential to the object of these discourses, I must leave it for the moment in abeyance, to be taken up in the present fasciculus or not, as circumstances shall determine. I may, however, here at once remark, that the first object in assembling the phenomena of periodicity, will be to examine the connexion which exists between them and the relative condition of the organization. If we can succeed in getting any light here, we shall soon get a practical peep, at least, into the true nature of the apparent mystery.

I should remark on the subject of intermittents generally, that we have very many interesting phenomena in the practice of surgery. And although they are by no means confined to any one class of diseases, they are most commonly observed in connexion with diseases of the urinary organs.

The mere passing of a bougie will, in many instances, produce an attack of intermittent fever; nor are the circumstances connected with it less interesting than the fact itself. For example, if you have a patient who has resided in a warm climate,—and especially if he has laboured under intermittent or remittent fever,—and you pass a bougie without certain precautions, which we will not stop here to consider, the chances are, that you will give him a fit of ague. But the very same thing will happen, *without due precautions*, I repeat, in persons who have never resided in warm climates, or had these fevers, although not with the same frequency. The worst case I ever saw of the kind, was in a remarkably fine man, who lived to a very great age, but who, at the time, was about sixty-five. He had come up to London on other business, and, having formerly been treated for stricture, he thought it a good opportunity to have a bougie passed: he, therefore, called on an eminent surgeon, who—as is done every day—passed a bougie, which, as I have shown many years since, is always an imprudent, and sometimes a dangerous practice. (a) I was sent for, in haste, to visit this gentleman in the evening; and though a very fine man, yet seeing him somewhat advanced in life, (at that time about sixty-five,) I was really alarmed at the severity of the attack. The rigor was terrific,—the very bed shook under him; and there was altogether, in his appearance and pulse, such fearful evidence of collapse, that, although all my life familiar with all forms of disturbance connected with the urinary organs, I really feared whether reaction would take place at all, and, even then, whether he would recover. However, he ultimately did well, and lived many years.

I need scarcely remind you of the succession of the phenomena of intermittent fever, the repetition of which so frequently characterizes the latter days of those who are gradually succumbing to diseases of the urinary organs, or the manner in which repeated rigors and profuse perspirations ultimately exhaust the remains of declining power.

The morbid anatomy of intermittent fever should be mentioned in this place; but as I must by-and-bye consider the facts derived from this source, together, I thought it would save time to speak of the morbid anatomy of fever in a separate and distinct section.

The facts of the treatment of intermittent will not in this place detain us long; the whole subject, *so far as relates to our inquiry*, will be considered in its proper place. We shall then endeavour to show, that the diversity of opinion which has been evinced, in the treatment of this and other fevers, is highly instructive, and also in what manner. The few facts which I alone wish to press here, are such as are, I believe, universally agreed on by writers.

There is *no one certain* way, in any given case, of cutting short intermittent fever, nor of preventing the recurrence of the paroxysm.

Whatever mode of treatment is specially advocated by any author, it is always admitted that, in particular cases, certain modifications are necessary.

All parties seem, in a general sense, to agree in the efficacy of Peruvian bark, though there are various differences as to the time, the mode, the dose, the kind of bark, and sometimes in regard to the steps necessary previously to its exhibition. Then, again, all seem to admit the occasional utility of arsenic, zinc, ipecacuanha, antimony, purgatives, and aromatics.

All seem to admit the expediency of acting on the digestive functions, so far, at least, as may be supposed necessary to discharge any accumulation; and all seem to admit, though, perhaps, not in a manner equally unreserved, that bark is administered more auspiciously when preceded by such measures. So with regard to purity of air, absence of all excitement, tranquillity of mind, all agree; but, on all other points, we find great differences of opinion. Now, the morbid anatomy excepted, the foregoing are the facts I want you to bear in mind in regard to intermittent, and, indeed, I may add, remittent fever, excepting so far as is necessary to connect the present with the next subject,—"continued fever," the principal phenomena of which it will be next our object to consider.

(a) Diseases of the Mucous Canals of the Body.

A COURSE OF LECTURES
ON
SOME OF THE MORE IMPORTANT POINTS IN SURGERY.

By G. J. GUTHRIE, Esq., F.R.S.,
LATE PRESIDENT OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

(Published with the sanction of the Lecturer.)

LECTURE II.

HOSPITAL GANGRENE.

Gangrene often prevails in crowded hospitals, and has, therefore, been called hospital gangrene, hospital sore, or *pourriture d'hopital* by the French. The formidable nature of this terrible disease, as it is called by Delpech, will be best understood by the following document :—

RETURN of the Number of Cases of HOSPITAL GANGRENE which have appeared at the Hospital Stations in the Peninsula between 21st June and 24th December, 1813.

Stations.	No. of Cases occurred.	Discharged cured.	Died.	Under treatment.	No. operated upon.	
Santander ...	160	72	35	53	25	
Bilbao.....	972	557	387	28	183	Most of these cases were sent from Vitoria.
Vitoria	441	349	88	4	74	
Passages ...	41	2	2			Thirty-seven transferred to Santander.
Vera	...	...	...	...	...	Vera, being almost on the field of battle, had no case.
	1614	980	512	85	282	

The mortality amounted to nearly one third of the whole, and was greater at Bilbao than anywhere else, until the treatment introduced by Dr. Boggie was fully carried out, and which was during the last three months of the period stated. The smaller number of eighty-five remaining at all the hospital stations on the 24th December, 1813, when compared with the total of 1,614 attacked during the six months, shows that the disease had been everywhere overcome, if not entirely removed, by all the different means employed; and, that no one means in particular deserved to be solely precognised as the cause of the general improvement which had taken place. That the disease had been nearly prevented or subdued at all the stations except one, will be better understood by the fact, that early in March, 1814, no case remained at Bilbao, nor at Santander, nor Vittoria, nor Vera. 133 were at Passages on the 20th February, 12 at the newly-formed station of Fuenterabia, and 3 at St. Jean de Luz, in France—in all, 148; and the disease did not appear as the army advanced into France. Among the wounded at Toulouse, although suffering much from heat, no case was seen. A certain quantity of vanity, mingled with an equal portion of egotism, enables me to give the reason. It had not my permission to originate amongst the wounded. They were too well taken care of, even at a most favourable season of the year for its production, and there was no importation of it.

The cause of this awful calamity has been sought for by different persons under varied circumstances, and all seem now to consider it, with one accord, to be a morbid poison, always contagious, and which some are willing to believe to be also infectious, or communicable through the medium of the atmosphere, in crowded hospitals, to which opinion I assent. It is a disease, then, according to this view, more analogous to the small than to any other pock.

The most important question, however, is—How is this morbid poison generated?—how does it originate? The answer I am about to give is a very dangerous one. I suspect I am the only person who would venture to state it. It is tripartite. It originates in consequence of—1st, a failure in the discipline of the army. 2ndly, a failure in its medical organization; and 3rdly, from the absence of a sufficient number of good surgeons, regularly drilled to their various duties. Hospital gangrene never appears whenever these three essential points are duly attended to; or, if it should occur, it does comparatively little mischief, and is always to be subdued. Hospital gangrene ought not, in fact, to originate in a British army, and it is the fault of its officers whenever it remains long, if it should appear.

I have said, in my last lecture, that Sir James M'Grigor alone should write on the constitution of the medical department of the army in Spain and France during the war extending from the end of 1812 to 1814, and I shall not willingly infringe on these rights, which are so highly honourable to him, by saying one word more on this subject. A London doctor has little business to think of anything but the complaints of the Londoners, except by way of amusement.

The most ancient surgeons are supposed to have been acquainted with this disease even before the introduction of fire-arms. Ferrus, who published, in 1534, one of the first treatises extant on gun-shot wounds, was of opinion that they were poisoned, from the appearances of mortification which frequently followed. Parey and Wiseman were both acquainted with this corrosive or putrid ulceration which followed gun-shot and other wounds; and believed that if this putrefactive process were not checked, mortification followed, and the death of the sufferers generally ensued. Both these great surgeons treated such wounds by destructive remedies, and by an ointment called Ægyptiacum. Wiseman particularly recommends the actual cautery, in preference to ordinary caustics, if the sufferers will submit to the application—a proceeding which in the present day stands pre-eminent in utility, when persons will submit to it, not only on account of its being the most efficient, and the cheapest of all means which have hitherto been devised, but from its being the least barbarous or cruel in reality, whatever it may seem to be in appearance. La Motte was acquainted with this disease, and its general existence at the Hotel Dieu of Paris; and of its attacking, not only wounds, but even abscesses after they had been opened; and Pouteau, in his posthumous works, published at Lyons in 1783, well describes the disease, and its most efficient remedy—the "actual cautery." In 1788 Dusassoy, also of Lyons, confirmed the views of Petit. Dr. Gillespie, in 1785, and Sir Gilbert Blane, in 1789, both physicians in the navy, described an incurable phagedenic ulcer, "the most destructive complaint incident to a sea life, particularly in a hot climate." They recommended, especially, the application of the juice of limes and lemons to the ulcerated or mortified parts, with such diet as was usually ordered in scurvy. Dr. Rollo, at the end of his "Treatise on Diabetes," published in 1797, alludes to a disease of this nature occurring in the Military Hospital at Woolwich, and considered, *rightly*, that it depended on the application of a morbid poison to the sore. To destroy this, he used the oxygenated muriatic acid, diluted, and the nitrates of silver and mercury. Mr. Cruickshank, the celebrated chemist, engaged with Dr. Rollo in inquiring into the nature of this poison, was of opinion, that an ulcer in a healing state, might be preserved from it by washing the ulcer, every dressing, with a weak solution of the nitrate of mercury, or of the oxymuriatic acid; and, if the disease were actually formed, he recommended the undiluted nitrous acid to be applied to the part.

The surgeons of the Royal Navy, about this time, added their information to the general stock, particularly Mr. Ballard and Dr. Harness, in 1800, in the fourth volume of the *Medical and Physical Journal*; and Dr. Trotter, in 1804, published, in the different volumes of his "Medicina Nautica," several reports on this complaint from different surgeons of the navy, particularly Mr. Caird, of the "Queen Charlotte;" Mr. Brown, of the "Triumph;" Dr. M'Dowal, in the West Indies; and Mr. Arthur, of the "Belleisle;" Mr. Briggs, of the "Ajax;" and Mr. Jarvis, of the "Indefatigable." Mr. Little, in 1809, who published a pamphlet on the "Malignant Contagious Ulcer," says it caused a greater loss to the navy than all the other diseases incident to seamen, and he concluded that it was a specific contagion, derived from some *exterior source*. Dr. Thomson, in 1813, Professor of Surgery in Edinburgh, reviewed all these different opinions in his work on "Inflammation," but added nothing definite to the modes of treatment then adopted, and which were all of them thoroughly inadequate for the cure of the disease. Professor Brugmans, of Leyden, published, in the *Annales de Literature Medicale, Etranger, et Nationale* for July, 1815, an able paper on this disease, which he saw, in 1798, at Leyden, and in 1805, in Amsterdam. Delpech, of Montpellier, did not publish his valuable paper until 1815, although it was read, in October, 1814, before the Institute of France. Mr. Blackadder and Dr. Hennen published their respective memoirs in 1818; and Mr. S. Cooper has summed up the opinions of them all in the late editions of his "Surgical Dictionary."

The British army, in Portugal and Spain, had nothing to refer to which could render them any essential service; they had not the opportunity of procuring the books above alluded to; and it was only at the end of the year 1813, when they heard of the success which attended the use of the actual cautery in the French army, that they were led to believe in the essentially local nature of the disease, in the first instance, however it might be subsequently accompanied, or even preceded, by fever of various kinds.

The battles of Rollica, Vimiera, Corunna, Oporto, and Talavera, gave no cases of hospital gangrene, although Dr. Boggie, to whom I have alluded, thinks it was visible among the wounded on the retreat from Talavera to Merida, and subsequently to Elvas, and more particularly at the convent of Deleytosa, where the wounded assembled whilst the army bivouacked around it, and at Jaracejo. This convent was an object of particular attention to me, and I always take the liberty of describing it as the slaughterhouse of the wounded of the army, for reasons I shall some day explain; but the gangrenes seen in it were the consequences of excess of inflammation under mismanagement, and not of a morbid poison, which requires a longer period to originate than elapsed between the battle of Talavera and the bivouac of Deleytosa. It was only when the unfortunate wounded who survived were sent to Elvas, at the end of 1809 and 1810, that the disease appeared for the first time; and from this moment it was usually to be found in almost all the general hospitals in Portugal and Spain. It appeared not in the field hospitals after Albuhera, in 1811, although it infested all the general hospitals at Elvas, as soon as the wounded were amassed together in them. Nevertheless, it did not appear among the wounded sent there after the assault of Badajos, at which period the medical discipline of the army was more perfect, although the cases were quite as numerous as after Albuhera; proving what I have said as to its mode of origin. In the villages in the more northern part of Portugal, between Almeida and Ciudad Rodrigo, in which I retained many of the wounded after the siege of Ciudad Rodrigo, and particularly at Gallegos and Aldea del Obispo, no gangrene appeared; but when I was subsequently obliged to send these and other unfortunate men to Celorico, whence they were forwarded to Viseu or Coimbra, the fate of many was sealed, and I therefore never sent a sick or wounded man to a general hospital in the rear, whenever I could help it, although in contravention of the general orders of the army, and which more than once brought me into great difficulties.

The following report from Staff-Surgeon Widmer, from Celorico, in December, 1812, shows the nature of the disease at that time, and the treatment pursued :—

"The surgical cases I received from Staff-Surgeon Woolrich consisted of ulcers produced by sloughing after gun-shot wounds, in various stages, some being quite clean and granulating, others becoming clean after extensive sloughing, and others in that deplorable state in which the sloughing process is rapidly going on. In the first of these stages, I find them heal fast by the application of adhesive plaster and tight bandaging. In the second stage,

the application of the solution of nitric acid hastens the process of separation, and more quickly produces a healthy sore. But in the third stage, when this dreadful havoc is going on, and skin, cellular membrane, and muscle, are undergoing such hasty destruction, I have been at a loss which plan to give a preference to. In weak and debilitated habits I have always pursued the cordial and strengthening plan; bark, port-wine, opium in small doses, frequently repeated, and a nourishing diet, with the application of lint dipped in a solution of the nitric acid. This application I consider the best auxiliary to the foregoing treatment, having in two cases witnessed its good effects; and in two others, the worst cases I have ever seen, where the whole of the gastrocnemii muscles were diseased, separation was brought about, and clean sores produced much earlier than I conceived could have been effected by any other application. Many of the clean sores have become foul again, after having begun to cicatrize, and this, too, very often without any constitutional affections, and in spite of the care that has been taken to keep separate the clean from the foul sores. In this case, as soon as I notice the foul spot—which is at first very small—in the healthy sore, I have found advantage from changing the diet from the stimulating to a milk one, giving a purge, and applying the nitric acid solution. There is always pain in the wound when this foulness begins to appear, and sometimes constitutional irritation, but not always, and a bloody discharge. I have, by this plan of treatment, again brought those sores which were beginning to relapse to a clean and healthy state; but, in the subjects much debilitated, I was fearful of adopting it; it was only those who had pretty good strength, and with healthier countenances, that I durst deprive of the stimulus of wine and animal food. In the former habits, sloughing has again gone on, and all the new parts, which it had required weeks to produce, have in a few hours been destroyed.

"C. WIDMER, Staff Surgeon."

The following one, from Staff-Surgeon Humfrey, at Coimbra, December 21, 1812, is equally interesting:—

"Gangrene has been the predominant complaint in this hospital during the last month; few of the wounded men who were admitted from the army being exempt from this disease. It has very rarely originated in the hospital. Where fever has supervened—which was very commonly the case about a fortnight after receiving the patients—death was almost a certain consequence, and thirty-eight men have been lost during the month. The admissions have been 107, the discharges 29, the number remaining 254, who, with some few exceptions, are doing well, most of their wounds wearing the best appearance. Attention to the general health of the patients has been the object kept in view, and they have derived much advantage from the use of bark, Columbo root, camphor and opium, the succulent fruits and vegetables, wine, and occasionally spirits. A great variety of stimulants have been applied to the diseased parts. Camphor dissolved in oil of turpentine has been found the most beneficial.

"R. HUMFREY, Staff-Surgeon."

This disease prevailed with great violence after the battle of Salamanca in the hospitals in the town, two only of which remained free from it; because their military and medical discipline were carried out with a strictness that admitted of no error. It had not the opportunity of occurring.

As soon as the wounded of the army in 1811 began to be amassed together in small houses, as at Celorico, in Portugal, and in 1813, at Passages, in Biscay, without the possibility of separating them, the disease appeared; or when they were brought together in numbers in large convents, as at Coimbra, without sufficient ventilation, and without, perhaps, a severity of government that men alone who have been regimental officers, and will not be beaten, can alone carry out, this complaint spread with a rapidity and violence beyond all reasonable belief.

No instance of this disease appeared in the great and even crowded hospital at Madrid, nor in the line of march on the retreat from Madrid to Ciudad Rodrigo, with 2,000 sick and wounded men, at the end of 1812.

In other instances, as at Bilbao and Santander, the disease was imported from Vitoria, San Sebastian, and Passages. I received at Santander, during the last four months previously to the 24th December, 1813, 3,402 sick and wounded from Passages, each shipload including some cases of hospital gangrene, and thus renewing the mischief which had been overcome from the preceding importation. In this way I had of the imported, and of those infested by them, 160 cases, or one in twenty-five; whilst out of 5,758 admitted at other stations under similar circumstances, 972 occurred, or one in six; a difference arising, not from any superiority of treatment, but, in all probability, from the greater opportunities afforded for instant separation; and where such opportunities did not offer, the unfortunate sufferers were placed in the open air, lightly covered, or not covered at all, by anything which could be obtained—the disease was thus conquered or eradicated more by separation and exposure than by the surgical or medical means employed, for it was not until near the termination of the month of November, that the two great means then precognised were introduced—viz., venesection, and the use of the acids and arsenic, carried to the extent of cauterisation.

The disease in question owes its names of hospital gangrene, phagedena, gangrenosa, *pourriture d'hôpital*, sloughing ulcer, &c. &c., to the different appearances the affected parts assume on different occasions, governed by the intensity of the morbid poison applied, and, possibly, by the state of the constitution of the individual attacked. The peculiar nature of this poison has not been ascertained. Professor Brugmans says, that in 1797, in Holland, charpie composed of linen threads cut of different lengths, which, on inquiry, it was found had been already used in the great hospitals in France, and had been washed and bleached, caused every ulcer to which it was applied to be affected by hospital gangrene; and the fact of this disease being readily communicated by the application of instruments, lint, or bandages, which had been in contact with infected parts, was too firmly established by the experience of every one in Portugal and Spain to be a matter of doubt. Its character as a thoroughly contagious disease is indisputable. Its capability of being conveyed, through the medium of the atmosphere, to an ulcerated surface is also admitted, although some have thought that the infection was not always applied to the sore, but affected it secondarily, through the medium of the constitution; an opinion maintained to a certain extent by Dr. Boggie, and on which his constitutional treatment is founded. Brugmans says, that hospital gangrene prevailed in one of the low wards at Leyden in 1798, whilst the ward or garret above it was free. The surgeon made an opening in the ceiling between the two, in order to ventilate the lower or affected ward, and in thirty hours, three patients who lay next the opening were attacked by the disease, which soon spread through the whole ward. Our experience in Portugal and Spain confirmed this fact, and left no doubt on the mind of any one who had frequent opportunities of seeing the disease, that one case of hospital gangrene was capable of infecting, not only every ulcer in the ward, but in every ward near it, and, ultimately, throughout the hospital, however large. The disease, as long as it remains unaltered by destructive applications, may be considered infectious as well as contagious.

This infection can penetrate the dressings so as to affect the ulcer through them, although requiring a difference of time in different parts of the body. Ulcers on the lower extremity experienced the influence of the morbid poison in general at an earlier period than those on the upper extremity, and a wound might be seen in a healthy state on the arm, whilst one on the leg was evidently suffering from this disease, for some days, if the complaint had become mild, or somewhat chronic, but not if the morbid poison was in its active state, when the deterioration of the ulcers on the arms was almost, if not quite, contemporaneous with that on the legs.

Constant inquiry was made, and great attention was paid to the investigation of a point some time disputed, whether this complaint occurred spontaneously amongst the hospital orderlies, servants, or nurses, who had no open sores or ulcers previously to the appearance of the disease upon them; and, although it was soon ascertained that these persons did suffer from fever, apparently induced by the particular situations they held in the wards appropriated to hospital gangrene, it could not be satisfactorily established that these febrile or constitutional affections terminated in, or even caused, a gangrenous ulcer. Dr. Tice, who had the greatest opportunities at Coimbra, and subsequently at other places, of treating this disease, expressly says, in a manuscript Report before me, that he had numerous examples of hospital orderlies becoming ill from their attendance in wards containing persons suffering from hospital gangrene and sloughing ulcers; but, that they recovered under the use of proper remedies, without any ulceration or sloughing taking place on the surface of the body; and the Reports I have seen from all the hospital stations confirm this statement. The attention of all the medical officers of the army employed at Brussels, Antwerp, Yarmouth, and Colchester, was especially drawn to this point by Sir James M'Grigor; and the only case I have obtained, although there may be others with which I am unacquainted, bearing on this point, is the following, which was transmitted to me by my old friend, Mr. Boutflower, now no more:—

"Serjeant Grim, 52nd Regiment, admitted, 14th July, 1815, into the General Hospital, Colchester, with a wound in the head, and discharged to Depôt, the 27th of the same month.

"Some days prior to his going out of hospital a small pimple appeared on the inside of the right leg, which rapidly increased to a large boil, and broke on the 26th. He did not mention the circumstance, but applied a sort of paste, composed of brown soap and sugar, for the purpose of drawing it. He found himself feverish on the morning of the 28th, and the sore looked very foul. He applied a poultice, but did not report himself; says he lived very regularly. On the 29th, his leg and health were both so much worse, that he at length made it known, and was taken into hospital. The sore was about six inches in circumference, and sloughing. He was purged, and equal parts of sulphuric acid and water applied. After two applications the sore was perfectly clean, and every symptom of fever had vanished.

"CHARLES BOUTFLOWER,
"Surgeon to the Forces."

Mr. Boutflower, commenting on this case in a letter to me, adds, "I can scarcely conceive that he was exposed to contagion, as no dressing was applied to the sore until he was admitted on the 29th. The circumstance of his being in hospital one day after the boil broke, however, just renders it possible.

Mr. Blackadder has given the following account of the disease from inoculation in his own person, which is, therefore, more to be relied upon than any other. Page 43:—

"While engaged in examining the stump of a patient who had died of this disease, I accidentally wounded one of my fingers with the point of a double-edged scalpel, but so slightly, that not a drop of blood made its appearance, and on this account I did not consider any particular precautionary means necessary. In the course of about sixty hours, however, the wound had become inflamed, and to which I was attracted by an occasional smart, stinging sensation, which ultimately extended a considerable way up the arm. On the fourth day, the inflammation had increased, and the stinging sensation was almost constant. Headache, nausea, and general indisposition followed, with frequent chills, which increased very much towards evening; but which, with the other symptoms, were considerably relieved by the use of neutral salts, the pediluvium, and warm diluents. A vesicle, having

a depression in its centre, and containing a watery fluid of a livid colour, was now forming upon a hard and elevated base; the surrounding integuments became tumefied, of an anserine appearance, and extremely sensible to the touch; and at about the distance of the fourth of an inch from the base of the tumor, a very distinct areola, of a bluish-red colour, made its appearance, and remained visible for several days. At this period, circumstances rendered it necessary for me to be exposed to wet, and to undergo considerable fatigue, and immediately afterwards to travel to a considerable distance. The inflammation, however, gradually subsided, but the stinging, accompanied by a burning sensation, still continued, and the sore had no disposition to heal; yet it did not enlarge externally, but was disposed to burrow under the integuments. This phagedenic disposition was ultimately got the better of by laying open the sore, and by repeated applications of caustic; but it was two months before a complete cicatrix had formed. The new cuticle remained for a length of time extremely sensible to the touch; and it was upwards of six months before it had acquired the colour of the surrounding integuments."

M. Delpech was disposed to consider that the misfortunes and sufferings of the French army had a great depressing influence on the soldiers, from which at other times they would have been exempted, and which aided the propagation of this malady. I am not inclined, however, to assent unconditionally to this opinion, for many soldiers of the British army, free from these particular depressing causes, suffered in a similar manner. Dr. Tice, to whose paper I have already alluded, says:—

"An uncommon depressing affection of the mind often exists among persons suffering from this disease, painful to witness—a morbid dejection, or apathy, which could scarcely be removed, and in very bad cases, in which no impression could be made. In others, the humane solicitations of the medical officers have failed against the influence of oppressive gloom, amounting to despair. Expectation and hope seemed to be exiled from their minds by the dominion of painful despondency, which, prevailing in melancholy disorder, seemed uncontrolled or checked by the intrusive importunities of the present, or the consciousness of a future existence."

ORIGINAL CONTRIBUTIONS.

OBSERVATIONS IN THE AMBULANCES AND HOSPITALS OF THE CONTINENT, AFTER THE REVOLUTIONS OF 1848.

By Dr. KIDD.

———, Brussels.

The positions which I ventured to bring under the notice of the profession in my former papers with respect to gun-shot wounds, requiring, if possible, the most extended research, will, account, in some way, perhaps, for my continuing the subject, and venturing again among the troubled mazes of the Continent,—positions, the accuracy or error of which must influence, I think, in no insignificant manner, our future practice in this particular branch of military surgery in this country.

The year just closed has been, indeed, a year of wonders—an *annus mirabilis*, which must take its place among the most eventful and wonderful the world has ever seen. Its lessons are, too, such lessons as the world will not willingly forget. And were I not fearful of my vaticinations, like those of Mr. Cobden, proving false, I should say, we are for the present done with wars. Such an opportunity, therefore, as that offered among the wounded at present in Hungary and Vienna not being likely to be met with, at least on this side of the world, for some time, I have taken advantage of it.

The mass of facts recently added to this part of surgery by Mr. Guthrie, in the pages of the *Medical Times*, as well as the fearful recitals of our military surgeons in India during the terrific battles lately of Sobraon and Aliwal,—details more like the thrilling fictions of De Foe than the sufferings of ordinary every-day men,—leave little doubt, I think, on many points, in this particular study. On one in particular, in which I am glad to see I have been supported by such a "cloud of witnesses," the value, namely, of *primary* operations on the field,—this, indeed, has been, to my mind, sufficiently eliminated out of the crowd of statistical returns, and lessening, as it must do in value, if not totally abolishing, operations of a secondary character, must be recognised as a principle of the very highest importance.

Of the value of primary operations over secondary, there can be now, indeed, but one opinion. A question, however, of another kind, and one not easy, in the ordinary modes of reasoning, to disentangle from it, is, Whether Nature herself, in her good offices, is not interfered with, sometimes by the too complete character of this principle itself; and when we have thought we have done something very wonderful with our knives and ligatures, Nature may not have been all the time saying, "Very good, indeed; your surgery is quite orthodox, I'm sure; but I could have done without ye entirely;"—in other words, whether the phenomena observable of late in the confusion and delay of civil strife on the Continent, in which the principle was necessarily neglected, and nothing done for the wounded, are merely exceptional, the *vis medicatrix* being capable of doing more, a great deal, than we are ready to give it credit for?

Whether, indeed, the *vis medicatrix* may supersede the knife in many operations, and prevent pain and mutilation, seems to me a question second to no other, at present, in surgery, and one of such great and increasing importance, that I deem no inconvenience or trouble too much to get at the truth, and leave the matter, if possible, beyond discussion.

To many the thing may not seem of such importance—300 patients without arms or legs being quite equal to 250 *with* those necessary appendages, according to some writers. Calculations of this kind are, however, a disgrace to surgery. Figures, indeed, in such cases, are quite inadmissible, and have, perhaps, prevented our seeing the matter in a proper light. How often, for instance, does it present itself under some such guise as this—it is necessary to go to details, perhaps, to feel the matter properly—A young man is brought in off the field, with what appears a desperate wound—a poor fellow full of life and hope, getting up the ladder of his profession, not always, by the way, very like that seen by the prophet in his dream, when there are men able to buy over his head—struggling hard to get on—his heart and soul in his profession—married to it, if I might so speak, "for better for worse"—the question is, whether this poor youth is to have all his hopes blighted—his leg cut off, or his arm taken out at the shoulder, simply because the rule of practice runs so; or whether, from the multitude of facts the last year has furnished us, we may not trust, in her wondrous resources, to Nature, and assist her in every effort she seems anxious to make.

The question, I conceive, is not, that because so many have recovered after *primary* operations, the canon is irreversible. I am quite satisfied the entire bevy of fine old men at Greenwich would "again shoulder their crutch and tell us how fields were won," and tell, also, as one of the most particular features of the fights, how they, themselves, were operated on in the field—which really tells a great deal. This is not the question, however; it is, how many of them would live to tell over their valorous achievements had no operation whatever been performed. It is, how many of them would be now hale and hearty as they are—*plus* a leg or *plus* an arm—had Nature been left to herself? Very many, I am quite satisfied.

The deepest thanks of the profession are due, I think, to Mr. Guthrie, for the facts he has brought forward on the subject. Like another Druid, laying down his laws in the field, from which there was no appeal. Surrounded, however, as he was by all the terrors of an army that made this very old town once on a time to tremble, he had no means of giving Nature "fair play." She had no time, as it were, to "think for herself," as in some of the late Paris hospitals. The results, of course, were different. A man had his leg or arm off, simply because the army of Napoleon was after him, and there was no hospital where he could be left. The practice was the best under the circumstances.

Waterloo, even here, however, seems now an idle tradition—*nous avons changé tout cela*—seems the boast of the gentlemen of the barricades. We have turned our weapons on ourselves, and the "cock-pit" of Europe, as this fine country, Belgium, was once called, seems now given up to the more ignoble, but more useful, reign of the ploughshare and spade. Things are changed,—our surgery, also, I conceive.

In default of anything in the way of a little revolution here, with its contingent of gun-shot wounds, our Flemish friends have been trying experiments, I find, on the character of such wounds on the *dead* body.

The old, but interesting question, of the wound, of "exit" and "entry," has been opened up at *Antwerp*, by MM. Matthyssens and Gourée. A physician at Strasbourg, (M. Malle,) it seems, some time since offered exception to the ordinary rule on this point; and, to clear up the subject, the present experiments were instituted. The experiments have nothing but their originality to recommend them; and, as far as they go, seem to negative the opinions of M. Malle. They have all, to my mind, this fatal objection,—that a wound in a dead body and in a living are quite different. Dead surgery and living surgery are as distinct, perhaps, as dead chemistry and living chemistry; and, though men like Liebig have given a sort of Frankenstein existence to the latter, we are as far from that inscrutable essence—life, as ever. Experiments of the kind are, therefore, little else than useless.

The idea is certainly new; and I do not know but in our dissecting-rooms something might be learned on other points. What the result has been in the Austrian hospitals, however, we shall find in due time; indeed this, with the subject of *débridements* and other details of practice, cannot fail to afford subjects of interesting study.

In Hungary, I find the hospital arrangements some little time back on a very miserable scale; this is much to be regretted. Though the city of Pesth had thrown off her sackcloth and ashes after the memorable inundation of 1838, and, through Government and other aid, shown some signs of life; though national theatres and museums, bridges and churches, meet you at every turn, anything in the shape of a great public hospital in this fine city is not to be found.

The arms of Lilliput, if I recollect rightly, are an angel lifting a sick man off his bed; of such fine fancies, however, the Magyar knows nothing. The fault has been ascribed, with what amount of truth I am not aware, to the neglect of the Hungarian aristocracy. The largest hospital in the kingdom, that of St. Roche, contains but 300 beds; many of these even being taken up with lunatics. All the country about the lower parts of the Danube also, are liable to floods; here, consequently, typhus and ague have raged, time out of mind, with perfect fearfulness; yet the Government has left things very much to themselves.

In March, 1838, St. Roche proved a second ark—an Ararat amid the swelling waters. In the fearful inundation you are told four thousand wretched creatures sought its walls.

An excellent woman, one of the "Sisters of Charity" one meets in all the continental hospitals, ministered to their wants for three successive days; the scene was perfectly fearful, and still remembered in Vienna by thousands; the rushing waters of the Danube rose higher and higher; the wretched patients crept to the upper part of the building; everybody that could, made for it; persons of all ranks were huddled together; and when the last fearful night gave place to the dawn, 450 dead bodies were found, and laid out in the several wards. The memory of the matter still haunts many of the people along the Danube; its horrors have been very great indeed; yet, if possible, exceeded by

the events of the past year, both here and at Vienna. Of these we shall speak again in detail.

To be continued.]

TERCHLORIDE OF CARBON AS A REMEDY FOR CHOLERA.

By JONES LAMPREY, M.D., London, Author of "Remarks and Observations on the Cholera at present Epidemic in Berlin."

It has lately been announced, in several English and Continental Papers, that a "new and successful remedy for cholera had been recently discovered by a "Young Physician, at Berlin,"—I allude to the terchloride of carbon. This assertion is not at all correct: for, although it had been extensively used in the treatment of this disease at Berlin, it was neither discovered there, nor did it prove uniformly successful.

Terchloride of carbon was originally used as a remedy in the treatment of cholera, by an English physician practising at Calcutta, and was lately tried at St. Petersburgh by the Russian physicians, on whose recommendation it was introduced into Berlin by Professor Throshell, from whom I have this account of it, he having mentioned it to me, in the course of conversation, when attending the Cholera Hospital, in August last, when he also informed me that he purposed trying it on his patients; but, as I left Berlin before he could obtain a sufficient quantity of it, it being at that time both exceedingly expensive and difficult to procure, I had not the opportunity of witnessing its effects myself; but as I have since been fortunate in meeting with my friend Dr. Willbrand, whom I had known when attending the Cholera Hospital, and who, remaining for a long time after my departure, had seen Professor Throshell use it very frequently, I had the opportunity of learning the following particulars as regards the manner it was administered, and the success that attended its use. But, before entering upon these subjects, I may be excused in giving a short account of its chemical constituents and medical properties, that the reader may more readily understand its mode of action, &c.

Chloride of carbon Ch 4. C 4. was originally discovered by Mr. Faraday in the year 1821, who produced it by bringing olefiant gas in contact with chlorine, and exposing the whole to the influence of light; when chlorine is brought in contact with olefiant gas, which is a compound of 4 equivalents of carbon and 4 of hydrogen, the latter is abstracted and replaced by the same amount of carbon; hence the different chlorides of carbon, all which, with the exception of the perchloride and subchloride, are colourless, volatile, ethereal liquids, having a pungent and sweetish taste, and, when given internally, they are found to act instantaneously as powerful diffusible stimulants to the nervous and circulating organs, at the same time allaying pain and spasm similar to chloroform; it is, also, somewhat diaphoretic. (a) Nor had it any direct chemical action on the blood, as it was originally supposed by those whose theory was, that the phenomena of cholera were owing to a septic condition of that fluid. That chlorine and carbon being found to act as powerful antiseptics, the compound (terchloride of carbon) also possessing this property, and being of an ethereal nature and readily diffusible, would, when administered, serve to counteract this putrifying tendency, and cure the disease. On the other hand, practical experience shows, that all its virtues depend upon its stimulating and antispasmodic properties, and further examination proves, that it could have no beneficial effect were it purely a direct chemical antidote, as the blood in cases of cholera, though found to be unoxidized, abounding in carbon, black, in a disorganized condition, and closely resembling, is yet deficient in many of the characteristics of putrified blood; these appearances being solely attributable to defective pulmonary circulation.

(a) It is also found useful in correcting the fœtor of foul ulcers, from the antiseptic properties of its constituents.—See Mr. Tuson's Letter to the *Medical Times*, December 2nd, 1848.

The medical properties that have been enumerated above make it highly valuable as a remedy in the treatment of certain stages of cholera, though comparatively useless when applied without the assistance of other remedial agents, as when cholera patients were brought into hospital they were always found in a state of great collapse, resembling asphyxia, and in order to restore animation, as it were, it was necessary to have recourse to the most powerful stimulants; of these, cold effusion, which you have already drawn attention to in your review of my "Remarks and Observations on the Cholera at Berlin," was found to be the most efficacious, and was accordingly applied to every case; but its effects being transitory, it required frequent repetition, and, under such circumstances, the discovery of some remedy that would keep up or increase the stimulus given by the cold effusion would be of the utmost importance; for this purpose the terchloride was found to answer in a great number of cases, but, unfortunately, not so in all, and was administered in the following way:—After the vital powers of the patient had been stimulated by the cold effusion, a dose of five drops of the terchloride was given, which had the immediate effect of increasing the stimulus,—giving the pulse greater volume, raising the temperature of the body, and restoring the natural colour and elasticity of the integuments. The dose was repeated every hour, and in extreme cases every half hour.

This treatment was chiefly applied to the worst cases, and frequently attended with astonishing success; but, unfortunately, though many bad and hopeless cases recovered, it did not prove uniformly successful, (not more than half the number of cases so treated having recovered,) nor did it prevent the occurrence of the usual fatal complications.

At first its action was thought to have been specific, but, like all other remedies recommended as such for this disease, it was found equally valueless when applied without the assistance of other remedial agents; it was also found to be quite inert without the previous application of the cold effusion, as a case that was treated with warm applications, frictions with warm flannels, extensive application of sinapisms, with other stimuli, and in which the terchloride of carbon was given, in addition to the above, terminated fatally.

In conclusion, I wish to add, that all the remedies that have been hitherto recommended for the treatment of this most formidable and complicated disease as yet partake more or less of the character of empiricism, owing to our anxiety to discover a specific for it, which, no doubt, if discovered, would prove a great blessing; but, whilst seeking after this chimera, the only true and satisfactory means of arriving at a scientific mode of treating the disease has been neglected; for how can we expect to be successful in our treatment of cholera so long as we remain ignorant of its physiology and pathology, more than we could expect to treat any other disease were we equally ignorant of its nature and causes.

ON SCARLATINA.

By J. W. TRIPE, M.D., M.R.C.S., and L.A.C., London.

(Continued from page 128.)

B. c. β. It has already been shown, that a vast difference exists in the mortality from scarlatina between the months of November and December, and the early winter months; and, also, that the number of deaths increase from April to November, when they begin to decrease, and continue to do so until April again arrives. In the years 1838—42, embracing a period of five years, the deaths from this disease, in England and Wales, were 14,597 in the winter quarters, 12,652 in the spring quarters, 15,092 in the summer quarters, and 20,570 in the five autumns, making a total of 62,911. These variations are much too great to arise from any other than certain and determinate agents, which are invariably more active at one period than at another. The very great difference between the mortality for those five autumns and winters, points to some change in the temperature as one of the chief conditions or events by which the disease is influenced. This influence of temperature over disease generally has long been admitted; but it is somewhat strange, that but little has been done to elucidate the effects produced by its variations on individual maladies. The injurious effects of an intense degree of cold on the human frame has been repeatedly pointed out by the Registrar-General; but the number of deaths from scarlatina decrease as soon as the cold weather sets in. This, however, is forestalling our subject.

I shall not adopt precisely the same arrangement, in treating of the influence of temperature, as that used in the preceding section; but shall first consider each month separately, and then collectively.

To prevent any misunderstanding in regard to the terms employed in the subsequent pages, I may mention, that the word "comparative," when applied to temperature, signifies, when speaking of a *month*, that the temperature has been compared with the preceding month, and is either plus or minus one or more degrees or fractions of a degree; the same obtains, when speaking of a quarter, when it refers to the preceding *quarter*.

The words "comparative mortality" are used to indicate, that the number of deaths in the month or quarter under consideration were a certain number, say 120, to 100 in the preceding month or quarter: the number 100 always being taken as the standard. I may also observe, that the absolute and the comparative mortality for each month are invariably corrected; the explanation of this term will be presently given: the absolute and comparative mortalities have been deduced from four weeks in each month, so that the number of days are the same for all. The quarters, however, contain thirteen weeks in each.

The first column of the following, and of the corresponding Tables for the other months, shows the corrected number of deaths in the metropolis for four weeks in each month of the years 1840—8: the second columns shows the number of deaths in each month to 100 in the preceding month; and the third column indicates the mean temperature for each month:—

Table B. c. β. 1. January.
FOR THE METROPOLIS.

	No. of Deaths from Scarlatina, corrected.	No. of Deaths to 100 in each preceding Month, corrected.	Mean Temperature.
			°
1840	205	... (a)	40·2
1841	83	77	33·6
1842	29	45	32·9
1843	116	71	39·9
1844	205	92	39·1
1845	168	90	38·3
1846	73	96	43·7
1847	63	72	37·0
1848	180	96	34·5
	Mean... 124·6	79	37·6

N.B. The mortality for each month has been deduced from the returns of the Registrar-General, the proper corrections having been made in all, to show, as the Table now does, the number of deaths which would have occurred had the Bills of Mortality comprised, in each year, the same number of persons that they now do. This is especially to be borne in mind, as the area comprised within the Bills of Mortality for the metropolis has been twice extended since 1838, the first extension having been made in 1844, and the second in 1847; so that the population comprised within them during the years 1838—43, taking the census of 1841 as the standard, amounted to 1,872,317 persons, during the years of 1844—7, to 1,912,172 persons; and since the latter period (1847) to 1,948,369 persons. The population for the metropolis has, during this period, increased at the rate of 1·55 per cent. per annum; so that the number of deaths returned in the Registrar-General's weekly reports had to be corrected for this increase in the area and in the

(a) No returns were made for the month of December, 1839, separately, so that the comparative mortality for January, 1840, cannot be ascertained.

population, otherwise the weekly or monthly returns could not have correctly shown the influence of temperature or of any other atmospheric variations. It will, therefore, be understood, that the word "corrected," wherever it is used conjointly with "mortality," has this meaning.

We will now proceed to the consideration of the month of January. The average mortality for this month, during these 9 years, is 124; the mean comparative mortality, 79; and the mean temperature, 37°·6. On examining the Table, we find that the mortality was above the average in four and below in five months, the mean temperature being five times plus and four times minus. On comparing the months having the highest temperature and the greatest number of deaths, we perceive that both were co-existent in four out of the five, whilst in one only did a high temperature and a low mortality exist together; and, on the contrary, three out of the four cold Januaries were marked by a low mortality.

Comparative Mortality and Mean Temperature.—To examine the question more accurately, we will contrast the one with the other. We here see that the number of deaths in every January was less than that of the preceding December, the mean proportion being 79 to 100; we also see, that four were below and five above the mean. Of the four in which the comparative mortality was below the mean, three were cold, and one was a warm month. The latter was, however, only an apparent exception, as the temperature was only 2°·1 above the mean, whilst the previous December had been 4°·0 above; the diminution of the temperature was, therefore, greater than usual. Four months had an excess in the comparative mortality, with an excess of temperature in three, and a minus in one. This exception rather supports than weakens the other results, as the following will show:—

	No. of Deaths.	Mean Temperature.
		°
January 1	43	24·8
,, 8	57	40·3
,, 15	40	36 0
,, 22	45	32·5
,, 29	38	29·1

We here see, that a reduction in the temperature during the last two weeks of the month, reduced the number of deaths from 57 per week to 38. The mean comparative mortality for the four cold months of January was 72; for the four warm months, 86.

It is, therefore, very evident, that the number of deaths from the disease in the month of January are greatly dependent on the temperature,—a cold January having a small mortality, and a warm January a comparatively large mortality; or, in other words, a great reduction in the temperature of the month, from that of December, causes an unusual reduction in the number of deaths from scarlatina.

Table B. c. β. 2. February.
FOR THE METROPOLIS.

	No. of Deaths from Scarlatina, corrected.	No. of Deaths to 100 in each preceding Month, corrected.	Mean Temperature.
			°
1840	197	96	39·5
1841	54	65	36·3
1842	43	138	40·8
1843	90	77	36·0
1844	167	81	35·2
1845	147	86	32·7
1846	91	114	43·9
1847	66	104	35·5
1848	195	108	43·2
	Mean... 116·6	95	38·0

In the month of February, the mean number of deaths is 116, the mean comparative mortality 95, and the mean temperature 38°·0. Five Februaries in the above Table were above, and four below the mean mortality. Of the five months in which the mortality was less than ordinary, two were above and three below the average temperature; whilst of the four in which the mortality was above the standard, two were above, and two below the mean temperature. On comparing the comparative mortality for each month with the mean temperature, we obtain more satisfactory and accurate results. Taking 95 as the standard of the former, we find four minus and five plus; four out of the five plus also presenting an excess of temperature, the increased mortality in the exception being only 4 per cent. Of the five that were below the mean, all were below the mean temperature. The excess in the comparative mortality did not occur in the same ratio with the excess of the temperature; this was very marked in 1842, when the excess of temperature was only 2°·5, whilst the number of deaths, instead of diminishing, increased from 29 to 43; but the previous month of January had been unusually cold, so that the increase of temperature for this month was 7°·9, the ordinary increase being about 1°·0. The mean comparative mortality for five cold Februaries was 83, and for four warm Februaries, 114. We may, therefore, say, that a warm February is favourable, whilst a cold February is unfavourable, to the spreading of scarlatina.

Table B. c. β. 3. March.
FOR THE METROPOLIS.

	No. of Deaths from Scarlatina, corrected.	No. of Deaths in each month to 100 in preceding, corrected.	Mean Temperature.
			°
1840	181	92	38·3
1841	43	80	46·2
1842	47	109	44·9
1843	105	116	42·9
1844	171	102	41·5
1845	111	75	35·2
1846	60	66	43·3
1847	48	73	41·4
1848	193	99	42·5
	Mean ...106·5	90·2	42·2

On examining the above Table, we perceive that the number of deaths exceeded the average four times, and were minus five times; that the temperature was plus five times and minus four; and that the comparative mortality was also plus five and minus four times. The number of deaths which occur in this month, when compared with February, are 90 to 100, and, as before stated, were in excess in five months,—the temperature being plus in three and minus in two of these; being minus in one 4°·1, and in the other 0°·8. In the former of these, the mortality was only 1·8 per cent. in excess; in the latter, (1844,) the temperature was minus 0°·7, and the mortality plus 3 per cent.; but in February the temperature was below the average 3°·0; so that the comparative temperature for the month was plus, although the absolute temperature was minus.

The mean temperature was below in two and above in two of the months in which the comparative mortality was minus; one of the two years in which it was plus was 1841. This, as the year following, the epidemic scarcely offers a fair comparison, as the tendency to fall existing in every year following an epidemic is here so well marked, that, contrary to the usual course of the disease, the mortality continued to fall until June, and never exceeded 75 in any month of four weeks in the year. The other exception happened in 1846, when the temperature was plus 1°·1, and the comparative mortality minus 25 per cent.: this may be partly accounted for by the temperature and mortality for February having been greatly in excess above that of the preceding January; so that the temperature for March, although in excess, was absolutely less than that of February.

The mean comparative mortality for the five warm months of March amounted to 94, and that for the four cold months to 85.

We may, therefore, say, that, when the temperature of March is higher than that of the previous February by an amount greater than the ordinary excess, the comparative mortality will also be in excess, provided that the disease had not been epidemic in the previous year; and that, when the temperature is below the comparative and monthly means, the comparative mortality will also be below the mean.

Having thus briefly discussed this subject in each of the three first months of the year separately, we will next pass on to the consideration of them conjointly as the winter quarter.

Table B. c. β. 4. Winter.
FOR THE METROPOLIS.

	No. of Deaths from Scarlatina, corrected.	No. of Deaths to 100 in preceding Quarter, corrected.	Mean Temperature.
			°
1839	505	72	40·2
1840	620	57	39·2
1841	197	40	38·4
1842	141	67	39·5
1843	337	56	39·6
1844	583	72	38·6
1845	456	48	35·4
1846	233	81	43·7
1847	199	58	37·2
1848	615	81	40·9
	Mean ... 388	63	39·2

The corrected average of deaths from scarlatina for the winter quarter of the years 1839—48 is 388, the comparative mortality 63, and the mean temperature 39°·2. The comparative mortality for England and Wales, during the years 1838—42, embracing a period of five years, was 70.

The second column shows that the comparative mortality was plus in five and minus in five winters, the temperature being plus four times in the former and three times in the latter quarters, and was mean in one of the latter. We thus see, that an excess in the temperature is ordinarily coincident with an excess in the comparative mortality, and *vice versa*, the only marked exception occurring in 1844, when the mortality was plus and the former minus the average. This discrepancy partly originated in the unusually high temperature of the summer and autumn of 1843, which caused the disease to assume an epidemic form, when, as before stated, a diminution of temperature does not proportionately reduce the mortality; and we must also bear in mind, that the reduction in the temperature did not exceed 6°·6.

The mean comparative mortality for the five warm winters amounted to 71, and for four cold winters to 58 only.

This difference between the cold and warm winters is greater than it otherwise would have been, had not the two years 1841 and 1845, which followed the epidemics for 1840 and 1844, been included in the cold winters; excluding these, the comparative mortality for the warm winters would be, as before, 71, whilst that for the cold would be 65.

There can be but little, if any, doubt of the influence exerted by the weather over the progress of scarlatina, or that a cold winter is the most effectual means of checking the disease.

Table B. c. β. 5. April.
FOR THE METROPOLIS.

	No. of Deaths from Scarlatina, corrected.	No. of Deaths to 100 in preceding Month, corrected.	Mean Temperature.
			°
1840	178	98	45·7
1841	40	93	47·0
1842	38	81	46·2
1843	98	93	47·1
1844	145	85	51·7
1845	67	60	46·3
1846	58	96	47·1
1847	47	98	45·8
1848	190	98	49·9
	Mean... 95·6	89	47·2

The mean number of deaths, corrected, for the month of April, may be taken at 95, the comparative mortality 89, and the mean temperature 47°·2.

The mortality in these nine months of April was plus in four and minus in five, the comparative

mortality being plus in six, and minus in three; and the mean temperature above the average in two, and below it in seven months.

It is, therefore, evident, that the connexion hitherto well marked between the comparative mortality and the mean temperature becomes less defined. On glancing over the second column, we cannot but be struck with the great uniformity in the comparative mortality; for not even in the years during which the disease was epidemic, did the number of deaths in this month equal those of the last. The mean temperature for the month is also very uniform; the utmost variation in the ten years between any of the months being less than 7°·0.

This peculiarity in April may be partially explained by the effect produced by the cold weather in January and February on the disease, which, as already shown, is always much less fatal in these months than in December. An examination of the mean mortality for these months shows, that the fatality of the disease having been checked by the cold, continues to decrease until May, when, the temperature having risen, the mortality increases, and continues to do so until November.

Taking the mean number of deaths for the month to be 95, the mean comparative mortality to be 89, and the mean temperature to be 47°·2, the deaths were above the average in four, and below it in five months; the temperature in the four former being plus twice, and minus twice.

The comparative mortality was plus six times, and minus thrice; the temperature for the former six months being plus once, and minus five times; and for the latter, minus twice, and plus once.

It is, therefore, evident, that the temperature of the air does not have that marked effect on the progress of scarlatina that it exhibits in the previous months. But that it really exercises some influence is shown by an accurate examination of each April separately, taking it in connexion with the three preceding months. This, however, our space will not admit of.

To proceed;—in 1840 the comparative mortality was + 19, whilst the mean temperature was − 1°·7; the difference between the mean temperature of this month and of March, was + 7°·4; and as the ordinary variation is only + 4·4, it will be seen that the comparative mortality and the comparative temperature were both in excess. In 1844 the comparative mortality was minus four per cent., and the mean temperature was + 4°·5; in 1847, the comparative mortality was plus nine per cent., and the mean temperature − 1°·9, in neither of which can any satisfactory reason be adduced to account for these variations.

The mean comparative mortality for the two warm months of April, is 91, and for the seven cold months, 88, an agreement much greater than has hitherto been observed. The evidence of any great effect of temperature on the mortality of scarlatina is certainly wanting, the whole weight of the data tending rather to show that it is comparatively slight; still, on the whole, the balance is somewhat in favour of a cold April being less fatal than a warm one; but where the variation is so small as 3 per cent., I think we are scarcely warranted in deducing any very decided conclusions from an examination of so comparatively short a period as nine years.

(To be continued.)

CONTRIBUTIONS TO THE MEDICAL TOPOGRAPHY OF THE MEDITERRANEAN.

By WILLIAM THOMPSON KAY, Esq., Assistant-Surgeon of the Plymouth Division of Royal Marines.

SYRIA.—*Its Situation, Name, Extent; Divisions, Ancient and Modern; Physical Characters; Productive Industry; Manufactures; Civil and Social State; Climate; Diseases; State of Medicine and Surgery; Works on the Topography, Natural History, &c., of Syria.*

[Continued from p. 74.]

Music.—The peculiarity of the Arab system of music is the division of tones into thirds, which gives a softness to their music, peculiar to themselves, remarkably plaintive and simple, but confined. They have very few books on music, as the characters are not generally well understood by them. That they are remarkably fond of music, is shown by their always employing chaunts or songs, when engaged in various labours, to regulate their motions, as in sawing, rowing, carrying goods, reaping, &c., and by the great attention they pay to any European performances on musical instruments.

The musical instruments are generally noisy and harsh, consisting of wind, stringed, and hand instruments.

The *wind instruments* comprise the *náy*, a kind of flute, (a) made of a reed about eighteen inches long, pierced with six holes in front and another at the back, which produces fine, soft tones, when played well: the *zummárah*, a double-reed pipe, pierced as the *náy*, but furnished with a moveable mouth-piece, and a rude kind of bagpipe, made of a goat's-skin, similar to the *zagg* used at Malta.

The *stringed* instruments consist of the *kánoon*, a kind of dulcimer, made of walnut-wood, inlaid with mother-of-pearl and light-coloured woods, the pegs formed of poplar-wood, the chords of lamb's gut, and the instrument is played with two plectra of buffalo's horn, one being attached by means of a ring, like a tailor's thimble, to the forefinger of each hand, and the instrument placed on the knees of the performer; the *rabáb*, a kind of viol, with a horse-hair chord; the *kemeugeh*, another kind of viol, much used by the story-tellers, which resembles a walking-stick with half a cocoa-nut shell lashed to the back of it, about one-third from its inferior extremity,—it has two chords of horse-hair; the *'ood*, a lute played with a plectrum,—it has seven double strings of lamb's gut.

The *hand instruments* are the cymbals, brass castanets, the kettle-drum, the *tabl shámee* or Syrian drum, the *tár* or tambourine, which is inlaid with mother-of-pearl, ivory, and tortoise-shell, with five double brass plates attached to it, and the *darabukkeh*, a kind of hand-drum. It is about fifteen inches long, shaped like an old-fashioned decanter, the base of which has been removed, and supplied with fish-skin or parchment. This is placed under the left arm, and being suspended by a string passing over the shoulder enables the performer to use both hands to beat it, the left generally performing the bass. The best kind is made of wood, ornamented with mother-of-pearl, tortoise shell, ivory, &c., while the more common one is made of earth, and is about eighteen inches or two feet in length.

RELIGION.—There are in Syria, as in other countries, a variety of religious sects, which, for convenience sake, we will consider under three great divisions, 1. Christian sects; 2. Mohammedans; 3. Shiya'ees or Heretics.

1. *Christian Sects.* — This division comprises Greeks, Greek-Catholics, Maronites, Syrians or Jacobites, Syrian-Catholics, Armenians, Armenian-Catholics, and Latins.

The *Greeks* are virtually Arabs; they speak Arabic, their religious ceremonies are performed in that tongue, and their religious book printed in it. Their bishops and priests are generally foreigners, often Greeks by birth, which tends to retard the diffusion of the tenets of the Greek Church, as they seldom speak Arabic well. The doctrines and ceremonies of the Greek Church in Syria, are the same as in other countries. It is divided into the two patriarchal dioceses of Antioch and Jerusalem, the head of the former being styled "Patriarch of Antioch, Syria, Cilicia, and all the East," and usually residing at Damascus; the latter is styled "Patriarch of Jerusalem," and lives at Constantinople, being represented by a board of bishops at Jerusalem.

The *Greek-Catholics* are a sect by themselves, constituting an Oriental Papal Church. They observe the Oriental calendar, believe in purgatory and the Pope, eat fish in Lent, keep fast days, receive the Sacrament of the Lord's Supper in both kinds, as formerly, and their priests are allowed to marry. Their religious ceremonies are performed in the Arabic tongue.

The *Maronites.*—Their religion is of a Syriac origin, but has been described before. (a)

The *Syrians* or *Jacobites* are looked upon by the other sects as heretics. Their religion is of a Syriac origin, and their service is performed in Syriac. The patriarch resides in Mesopotamia, and they have a bishop at Mâr Mûsa near Nebk, another at Aleppo, and one at Hums.

Syrian Catholics.—They are Romish converts, retaining the Oriental rite and use of Syriac in their churches. This sect has been long established at Aleppo, but also has its convents at Damascus, and Râsheiya in Jebel-esh—Sheikh, on Lebanon, though they are of more recent origin.

Armenians.—This sect comprehends the chief merchants and mechanics in the large towns, whose number is very limited. The patriarch is styled "Patriarch of Jerusalem."

Armenian Catholics.—They are seceders from the Armenian to the Papal church, but, nevertheless, preserve their oriental ceremonies, and have a patriarch, who resides at Bzummar, on Lebanon.

Latins.—Their language is Arabic, and their convents at Nazareth, Bethlehem, St. John in the Desert, and the Terra Santa at Jerusalem, are celebrated for their hospitality, for which, however, they expect to be liberally rewarded.

2. *Mohammedans.*—There are six commandments in the Mohammedan religion, viz.: 1st. There is no deity but God 2nd. There is no prophet but Mohammed, he is God's Apostle; 3rd. to fast during Ramadan every day; 4th. (b) To pray and practice ablutions five times a day; 5th. To apply two and a half per cent. of their property to the poor; 6th. To make a pilgrimage to Mekkeh and Mount 'Arafát.

This religion is so general that it has nearly one-fifth of the population of the globe as its followers.

Its most important duties are prayer, alms-giving, fasting, and pilgrimage.

The hours of prayer are five: 1st at sunset, 2nd. when the evening has closed, and it is quite dark; 3rd. at day-break, on the first faint appearance of light in the East; 4th. at noon; 5th. about midtime, between noon and nightfall.

3. *Heretics or Shiya'ees.*—The religion of the Mehawitch Druzes and Ismaelites, have been described before in Vol. XVII.

(a) The ancient Egyptian flute was only a cow's horn with three or four holes in it, and their harp or lyre had only three strings: the Jewish trumpets that made the walls of Jericho fall down, were only rams' horns: the psaltery, was a small triangular harp or lyre with wire strings, and struck with an iron needle or stick; their sacbut resembled the *zagg* used at Malta in the present day,—a species of bagpipe; the timbrel was a tambourine, and the dulcimer a horizontal harp, with wire strings, and struck with a stick like the psaltery,—such as are seen about the streets of London in the present day. Imagine the discord produced by 200,000 of such instruments, while playing at the dedication of Solomon's Temple.

HOSPITAL REPORTS.

ST. BARTHOLOMEW'S HOSPITAL.

EXTENSIVE ULCERATION IN THE PERINÆUM, OF SYPHILITIC ORIGIN, CURED BY LARGE DOSES OF CONIUM, AFTER THE UNSUCCESSFUL EMPLOYMENT OF VARIOUS OTHER REMEDIES.

Reported by T. M. GIRDLESTONE, Esq., M.R.C.S Formerly House-Surgeon to St. Bartholomew's Hospital Surgeon to the Blenheim-street Dispensary.

Communicated by E. A. LLOYD, Esq., Surgeon to the Hospital.

John Frost, aged 22, a bricklayer, temperate

(a) Vol. XVII. p. 445.

(b) The custom of turning the face towards the East, when praying, is thus alluded to by Virgil.

"Spectans orientia Solis
Lumina."

Æneid viii., 68 and 69.

habits, middle height, rather robust, light hair, florid complexion.

Was admitted (under Mr. Lloyd) December 9, 1847. He had a large sore on the left side of the perinæum, not deeper than the cellular tissue immediately beneath the skin, but extending from the scrotum to the side of the anus, and encroaching on the inner part of the left thigh, being bounded in front, and on the inside, by recent cicatrices of the groin and side of the scrotum. The surface of the sore was dull and livid; the discharge thin and watery, without the appearance of pus. Its edges were irregular, hard, and overhanging the surface. This ulcer had been situated in the perinæum for five months.

History.—In the summer of 1846 he had a sore on the body of the penis, which healed in three months without medicine. Shortly after this another sore appeared on the prepuce, which remained open eight months, and was accompanied with a bubo in the left groin. With this sore and bubo he entered the Lock Hospital, on May 6, 1847. He there took Plummer's pill; his mouth was made tender; the sore and bubo healed. Before he left the Hospital, a copper-coloured eruption spread over his body; this was cured on his mouth being again affected with mercury, but was soon followed by a swelling on the left side of the scrotum, which terminated in an ulcer. This healed anteriorly towards the groin, while it spread backwards into the perinæum, and continued to increase. He left the Lock Hospital on December 9, and entered St. Bartholomew's on the same day. The sore then presented the characters described above. His mouth was tender from the use of mercury.

On his admission he was ordered a mild aperient every other night, a linseed poultice to the sore, meat diet, and perfect rest in bed.

December 27.—Mr. Lloyd applied the nitrate of silver to the sore, introducing it freely under the overhanging edges.

January 3, 1848.—The nitrate of silver has produced no material effect on the sore. He is ordered to take the following draught three times a day:—Potas. iodidi, gr. v.; tinct. iodinii comp., M. x.; aquæ destill. ʒviij. M.; and to apply zinc ointment to the sore.

(The above medicine is ordered to be taken in a large quantity of water, in order to make it less likely to disagree with the stomach.)

From Jan. 31 to Feb. 5.—Calomel was daily sprinkled on the sore. The draught continued.

Feb. 10.—The potassa fusa was freely applied. To continue the draught.

Feb. 24.—As it continued to spread, though slowly, and the various caustics had not altered its condition, the previous medicine was discontinued, and he was ordered pil. hydrarg., gr. v., three times a day. Ung. hydrarg. nitrico-oxydi to be applied instead of the zinc ointment.

April 13.—The pills have been persevered in up to the present time without benefit. Mouth not affected. Leave off the pil. hydr. and take hydr. iodidi gr. j., in the form of a pill, four times a day. Continue the ointment.

May 22.—Since the last date, the following applications have been tried, without changing the aspect of the sore. First: the strong nitric acid, which did not seem to have the power of penetrating its callous and diseased structure, neither did it give rise to the pain that usually follows such an application. Secondly: Cinnabar fumigations.

These medicines were left off, and he was ordered to take again the iodide of potash, and apply a lotion composed of two grains of sulphate of copper to an ounce of distilled water.

May 29.—The sore is now somewhat larger than it was when the patient came into the Hospital. It also occupies a position posterior to its former one, being situated more on the buttock and posterior parts of the thigh, and extending beyond the anus. Its form is semilunar. There is a remarkable difference between its two sides or margins, the one healing, the other spreading. The former (that nearest the scrotum) presents a smooth and almost rounded edge, level with the ulcerated surface, while the latter is hard, rough, and irregular, raised above the surrounding skin, and overhanging the ulcer. It is not accompanied with inflammation, nor is it painful. The discharge from it is still thin and watery. There are no granulations on its surface. It has not secreted any pus. It has spread by ulceration, and not by sloughing. It has not increased in depth.

There is now also a fresh sore on the right buttock, about the size of a five shilling piece, and exactly similar to the one on the left side. In case it should be thought that this may have arisen from contact with that on the left side, I must state, that they are too far apart to be made to touch each other.

A gentleman who was going round the Hospital with Mr. Lloyd, remarked that he had seen a case exactly similar to this cured by large doses of conium, this medicine being gradually increased until the patient took 120 grains daily. Mr. Lloyd determined to employ this medicine, and ordered extract. conii, gr. v., three times a day.

This was commenced on May 30, and continued without intermission, the dose being increased every four or seven days, until September 18th, when the sores were healed. During this period (112 days) the patient took fifty-seven ounces and two drachms of conium; the first and smallest dose being fifteen grains of the extract daily, while the largest was seven drachms daily, and was continued for seven days. (See "the table," which shows the quantity taken each day.) When the sore had healed, the medicine was reduced to six drachms daily; in the space of a week it was diminished to one drachm daily, and so gradually discontinued.

A TABLE, SHOWING THE QUANTITY OF CONIUM TAKEN EACH DAY.

Dose taken Daily.	Number of Days it was continued.	Total.
Grains.		Grains.
15	3	45
30	4	120
45	3	135
60	4	240
75	3	225
90	4	360
105	3	315
120	7	840
150	9	1,350
180	2	360
210	3	630
240	4	960
240	3	720
270	7	1,890
300	4	1,200
300	3	900
330	7	2,310
360	7	2,520
360	4	1,440
360	7	2,520
390	7	2,730
390	3	1,170
390	4	1,560
420	7	2,940
	112	Total. 27,480 = 57 oz. and 2 dr.

The effects of this medicine were sensations of fulness in the head, accompanied by giddiness, also heaviness of the eyes, on account of which he often found it difficult to read. He said it used to make him feel as if he had been smoking an unusually large quantity of tobacco. These sensations were most apparent when the dose was increased, and they invariably diminished as he got accustomed to the quantity taken, which was the case in four or five days or more. He never experienced any decided inconvenience from the medicine; it did not make his head-ache, interfere with his appetite, disorder his intellect, nor did it make him sleepy. But while he was taking it he gained health and strength, and improved in general appearance. Slight relaxation of the bowels occasionally took place; this was always cured by chalk medicine, without opium, the hemlock being given at the same time. Simple ointment was the only dressing applied.

Sept. 26.—He left the hospital.

Oct. 2.—He remains quite well, and has returned to his work.

Remarks.—An ulcerating bubo of this description is not uncommon in a London hospital. Its peculiarities are, that it is a sore following the venereal disease, exceedingly difficult to heal by the use of mercury or any of the usual remedies. It generally occurs in scrofulous persons, or those whose health has been impaired by syphilis, or possibly by the use of mercury, or the confinement of an hospital. Its seat is the cellular tissue immediately beneath the skin, and it does not extend deeper than this structure. It generally spreads on one side while it heals on the opposite; hence it is called by some surgeons "creeping bubo." Sores of this kind are described by Sir E. Home as "obstinate irritable ulcers." They very much resemble some forms of cancer; this was very remarkable in the case related. Its general appearance described on May 29, is that which is usually presented by these sores. The most interesting peculiarity of this case was the success of the remedy,—a remedy not often employed to a similar extent. Some useful information on the effects of conium is given by Dr. Earle, in the American Journal, July, 1845. They are the result of a series of experiments made on himself (a), and confirm what we see recorded in other cases, namely, that the dose of this medicine may be gradually increased, to what may seem an almost unlimited extent, without danger. That if the dose is not increased, in a few days the patient becomes accustomed to it, and it ceases to produce its usual effect on the constitution. This was very remarkable in the present case. The medicine produced its usual effects every time the quantity was increased; these would last only a few days, when it had to be again increased, because it was found, by repeated observation, that the healing of the sore invariably stopped when the patient was accustomed to the dose he was taking; this also proved that it was the hemlock and not accidental concurrent circumstances that cured the ulcer.

I do not conclude from this case that conium will cure the venereal disease, for in a bubo of this description the venereal virus may be already destroyed, or, in the words of Hunter, "lie dormant." He remarks, "it often happens that venereal abscesses will not heal up, although they may have gone a certain length towards it, for while the venereal action remained in the part, the mercury disposed that part to heal; but, under that course, the constitution and part had acquired another disposition, proceeding from a mercurial and venereal irritation, affecting a particular habit of body or part at the time, which new disposition differs from the venereal, mercurial, and natural, being a fourth disposition, arising out of all three. I suspect, however, that it depends chiefly on the constitution," &c. "Some of the sores formed in this way not only resist all means of cure, but often inflame, ulcerate, and form hard callous bases, so as to put on the appearance of a cancer, and are often supposed really to be so." (b) The sores here described by Hunter very much resemble the subject of the present case; for their cure he recommends hemlock, which he has often found of service. In one instance, he says, a young gentleman who had buboes "swallowed an ounce in the course of a day for some time, which was afterwards increased to an ounce and a half, two ounces, and even two ounces and a half." "His general health did not suffer, but, on the contrary, kept pace in his improvement with the ulcers." This patient unfortunately returned to the medicine after having left it off for some time, and commenced by taking ten drachms, which killed him. Hunter relates the case of a woman who had severe old venereal sores, which were very much improved by conium. "The parts affected were ordered to be held over the steam of a decoction of hemlock every four hours, and as

(a) See Dr. Ranking's Half-yearly Abstract.

(b) See Palmer's Edition of Hunter, Vol. II. Lues Venerea and Buboes.

much extract taken internally as the patient could bear." Pearson (a) relates two cases of venereal sores which were cured by hemlock after mercury and opium had failed. One of these patients, a woman, took one drachm daily. Several other surgeons recommend conium in these cases, as well as for the cure of cancer. Mr. Travers mentions the case of a lady (Medico-Chirurgical Transactions, vol. xv.) who took extract of hemlock *ad libitum* for cancer, and recovered. In two cases of cancer, one of the tongue, the other of the tongue and side of the face, which lately occurred in St. Bartholomew's Hospital, under Mr. Lloyd's care, the condition of the sores were very much improved by the use of conium, but in these cases the medicine could not be continued in, on account of the headache and other symptoms it produced.

In order to prove that the conium that was given so largely in the case I have related was of a proper strength, the same drug was given to several other patients in the hospital, and it was found to produce all the usual effects of this medicine.

HOPITAL BEAUJON.

INTERMITTENT NEURALGIA — BENEFICIAL EMPLOYMENT OF LIGATURE TO THE LIMBS.

It is important to record, from time to time, the practice of physicians in the treatment of important diseases, in order that benefit may result to science. An important class of diseases is that which appears more immediately to affect the nerves, and to assume an intermittent character. The following case, admitted into the hospital, under M. Sandras, presents some points of interest.

Pauline Génin, a dressmaker, thirty years of age, was admitted in consequence of neuralgic pains, affecting the right side of the head. These pains were very intense, occurring daily, generally at a stated time, but occasionally exhibiting some irregularities. She was ordered a julep containing ten centigrammes of acetate of morphia, which, however, afforded her no relief. After taking the medicine for some time, the patient lost her appetite, complained of vertigo, nausea, &c. The morphia was then discontinued; and the neuralgic pains, which had continued up to this time, ceased.

M. Sandras remarked on this case that he had frequently observed certain neuralgic affections resist the action of the medicine exhibited up to the point of saturation, when, it being discontinued, in consequence of the vertigo, &c., the pains have speedily ceased.

This female was rather fantastical in her manner, and approached almost to an idiot. During her stay in the hospital she was seized with an epileptic fit, marked by frothing at the mouth, contortion of the features, &c. These attacks occurred daily for some time, and frequently many times in the course of twenty-four hours. They were preceded by a peculiar sensation in the left leg and foot (*aura*). In the interval of the attacks, the limb was affected with a jerking kind of movement, which was almost intolerable to the patient. One day, when the surgeon was in the hospital, the patient had evident symptoms of a speedy return of a fit, when he ordered a ligature to be placed upon the thigh, with a pad over the crural artery. The attack was in consequence averted. The ligature was continued on the part for some days, with decided success. The other remedies were discontinued as the spasm of the limb ceased.

In the meantime the patient was seized with varicella, and, if we had not recorded many examples of this mode of treatment in the same circumstances, we should not dare to affirm that the secondary disease did not contribute to the speedy cure of the epilepsy.

Van Swieten, in his learned Commentaries on the Aphorisms of Boerhaave, mentions this ligature in the treatment of epilepsy; and Galien notes the beneficial results produced on an infant affected in the same way, by the application of the ligature.

(a) Observations on the Effects of various Articles in the Cure of Lues Venerea.

CHRONIC GASTRALGIA REMOVED AFTER AN ATTACK OF ERYSIPELAS OF THE FACE.

A female, employed as an unholsterer, had been affected for many years with a most intense gastralgia, which had resisted every kind of treatment. At length, she consulted M. Sandras. Her sufferings had now produced great irritability of temper, and she had become greatly emaciated, and was incapable of following her employment. For two days she took the nux vomica, when erysipelas appeared in the face, spreading over the scalp, to the posterior part of the head, and passing downwards to the dorsal region. Smearing the part with lard, and administering, internally, seidlitz-water made cold, were the means employed to subdue the inflammation. When the patient recovered she was agreeably surprised to find that she could eat almost anything without experiencing those excruciating pains which she had formerly felt. Two years have now elapsed since the patient was attacked with erysipelas, and she has had no indications of the return of the gastric affection.

ORCHITIS FROM METASTASIS.

A shoemaker, twenty-three years of age, tall, and of robust constitution, entered the hospital on the 27th of last November, in the ward of St. Lazarus, thought to be affected with orchitis blennorrhagia. The next day, when the surgeon visited him, he found the left side of the scrotum swollen, œdematous, more pale than red, the testicle painful on pressure, and double its usual size, from tumefaction of the epididymis, which appeared infiltrated, and from effusion into the tunica vaginalis. There was constant pain in the organ when not pressed. On questioning the patient, he asserted that he had had no blow on the part, neither was there on the skin any sign of contusion. He equally repelled the idea of a gonorrhœal affection. An examination of the urethra confirmed his declaration. The œdema and truly inflammatory appearance of the scrotum and testicle, led to the supposition that the parotid glands had been primarily affected, and the patient was questioned if he had not had swelling in those parts. He replied that, seven or eight days prior to his entering the hospital, he was seized with pains, and that then his neck (which we have denominated the parotid regions) and a part of his face became puffy. He kept his room, and, after some days, the swelling having subsided, the testicle became affected. This statement left no doubt as to the nature of the affection, and the treatment that should be adopted. The testicle was ordered to be enveloped with a cooling poultice, and to be supported; the patient to remain in bed, to drink lemonade, and to take a suitable diet. The next day the swelling had diminished. Continue the dressing, and let him have a bottle of seidlitz-water. On the fourth day the testicle was reduced to its normal condition, the appetite good, and the patient appeared perfectly well. On the 2nd of December he was ordered to wear a suspensory bandage by way of precaution.

Hamilton mentions cases of orchitis from metastisis as occurring in persons above thirty years of age; but it is in early life that this variety of orchitis is more frequently observed. The peculiar appearance of the scrotum and testicle is characteristic of the nature of the disease. The cure is, in general, easily accomplished.

IRELAND.

[From our Dublin Correspondent.]

ST. VINCENT'S HOSPITAL.

CHILDREN'S WARD.

Amongst the cases admitted, under the care of Dr. O'Ferrall, during the last week, were the following:—

Pericarditis.	Supernumerary Thumb.
Purulent Deposits.	Chorea.
Potts Carvature, with Lumbo-iliac Abcess.	Erysipelas of the Head.

The first of these cases, Anne Hayne, aged 11, was ill more than three weeks, with difficult breathing, which at first was little noticed, but latterly became so severe as to threaten suffocation on the slightest exertion. There was only slight cough. The child sat near the fire, still, and spiritless, and perceptibly lost flesh. A very short examination enabled Dr. O'Ferrall to announce the presence of Endo-pericarditis. There was double friction sound all over the cardiac region; and at the extreme left of this region a souffle sufficiently distinct, though not very audible, amidst the other sounds. The child had no rheumatic symptom whatever. She was very weak, and her favourite posture was sitting with her body slightly inclined forwards. The pulse was very small, frequent, and occasionally irregular. She complained of pain under the margin of the left ribs.

The treatment consisted in the application of six leeches, followed by a blister to the cardiac region, and the internal administration of hydrargyrum cum creta. Immediate relief to the pain and dyspnœa followed, but the friction sound persisted until the gums exhibited the effects of the medicine. This was on the fifth day after admission, and on this, the eighth day, it has disappeared altogether. The bellows murmur at the left of the cardiac region, now no longer masked, is loud and clear. The mercurial action is still maintained, and the young patient kept in a state of rest.

Doctor O'Ferrall said, the non-rheumatic pericarditis, very rare in adults, was occasionally met with in children. Within the last five years there had been more cases of this disease in the childrens' ward than in all the other wards, male and female, of the Institution. He remarked on the insidious nature of this affection, and said, he had known the little patients treated for worm fever (so called) and other gastro-enteric affections, in consequence of the irritability of stomach by which it is occasionally accompanied. The child is observed to be chilly, and to sit motionless near the fire, avoiding every movement, and indifferent to the usual recreations. This state is often allowed to proceed until the circulation is so much impeded as to produce dropsical infiltrations. In every case of dyspnœa in children, he said the condition of the heart, as well as that of the lungs, should be carefully explored. The result of treatment is much more satisfactory, if the case is detected before liquid effusion has taken place, and he had also remarked, that the endocardium is slower to yield to remedies than the pericardial serous membrane. The effect of inflammation in the latter is the exudation of lymph upon and beneath the membrane; while, in the endocardium, are superadded to these the depositions from the blood itself. There should be a careful distinction made in those diseases, between exudations, properly so called, and depositions on the inflamed surfaces, the latter being peculiar to parts in contact with the blood.

PURULENT DEPOSITS.

This was a case of the rapid formation of large abcesses in a boy, who was, three weeks previous to admission, in good health. One large deposit occupied the right leg from the ancle to the knee—the other was situated deeply in the thigh of the left side. Both seemed to originate in periostitis, the pain of which was so severe as to prevent sleep. Dr. O'Ferrall laid open those deposits, having put the patient under the influence of chloroform. The case is doing well; pain and fever have altogether disappeared.

I may mention, in connexion with the foregoing case, that latterly, in Dublin, there is a great tendency to purulent formation: the slightest injury is apt to originate diffuse inflammation, and diseases of very opposite natures are liable to eventuate in purulent depositions.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

ACADEMY OF MEDICINE.

Meeting of Dec. 26, 1848. M. VELPEAU in the Chair.

CHOLERA.

M. Bally forwarded from the city of Lille the history of a case of cholera which had recently

fallen under his observation. It referred to a young man aged twenty-three, who, having suffered for some days from gastric derangement, committed, on the 18th and 19th of December, a breach of his habitual temperance. He was seized the following day with the symptoms of Asiatic cholera, and died within thirty hours.

A letter was received from Mr. Carmichael, of Dublin, relative to the epidemic of cholera in Scotland. Mr. Carmichael was of opinion that the disease was of a contagious nature, and stated, that such is also the conviction of Professors Dickson and Graves. The indications of treatment, which should be always kept in view, were—the maintenance of heat on the surface of the body,—the exhibition of stimulants of the circulation,—and of medicines calculated to promote the secretion of bile.

Meeting adjourned at five o'clock.

PARACENTESIS THORACIS.

BY PROFESSOR TROUSSEAU.

In cases of pleurisy, in which a large quantity of secretion rapidly accumulates within the thorax, threatening suffocation, Professor Trousseau recommends the performance of paracentesis with a trocar, the aperture of which is furnished with a piece of gold-beater's skin, as a protection against the introduction of air; performed in this manner, the operation presents no danger, and affords immediate relief. In nine cases did the learned Professor meet with that form of pleuritic disease, in which the local disturbance rapidly acquired a formidable aspect, although the general symptoms of febrile excitement were very moderate: in three of these cases, paracentesis thoracis was not performed, and a fatal issue occurred. In the other six patients the morbid secretions were removed by puncture, and they all recovered. In five cases of chronic effusion, Professor Trousseau operated in a similar manner, and a favourable result was obtained only in one. Thus, it is in acute, and not in chronic pleuritis, that the operation is most advantageous, and the removal of the fluid is followed by the immediate return of the lung and heart to their place. We will now give a rapid account of two cases in which the operation was performed:—

Case 1.—D., a child, aged 7 years; had been affected with a white swelling of the right knee, which had been much improved by saline baths. On Nov. 11, 1847, he complained of headache and feverishness. A slight pain existed in the chest. On the 13th, the skin was cool, and the child was well enough to go out and play with his companions. On the 21st, a physician was accidentally consulted. The child was pale, but had neither heat of skin nor fever; on percussion of the chest, the left side presented complete dulness up to the spine of the scapula. The respiratory murmur was quite absent in the same region. Notwithstanding the application of a blister, and the exhibition of medicine, the effusion increased in abundance during the two following days, and to that degree that the heart was displaced, and its pulsations were distinctly felt to the right of the sternum. On the 24th, M. Trousseau performed paracentesis, and a very large quantity of a yellowish, albuminous fluid was removed; the wound being closed with a small piece of diachylon. The condition of the lung was examined, and the respiratory murmur was heard throughout the chest. No feverishness followed. On the fifth day after operation, the recovery was complete, and no relapse has since taken place.

Case 2.—F. C., aged 19, was confined on the 19th of January; on the third day after her confinement she got up, and since that period complained of a slight pain in the left side. On the 1st of May she caught cold, and on the 4th was conducted to the hospital, where considerable dilatation of the left side of the chest, accompanied with dulness, on percussion, and fever (pulse 100) were observed. The pulsations of the heart were distinctly recognised beneath the right breast. The spleen was hypertrophied, and descended as low as the spine of the ilium. Infusion of digitalis, and small doses of calomel, repeated every hour, were prescribed, and were continued for two days, during which the pleuritic affection increased in abundance. Paracentesis was then performed in the seventh intercostal space, close behind the mamma; 2,400 grammes (5lb.) of fluid escaped from the trocar, and coagulated spontaneously a short time after the operation. The heart immediately returned to its place, and the resonance of the chest was restored in all but the most inferior part of the posterior region. The signs of the persistency of a small quantity of effusion were still perceptible, during a few days, and the patient left the hospital a week after the performance of the operation completely cured.

The instrument employed by Professor Trousseau is nearly the same as that adopted by M. Reybard, of Lyons, and consists in a trocar somewhat shorter than that used for hydrocele; the tube is attached to the outer ring of the canula, and, being previously moistened with water, applies closely to the orifice after the removal of the blade, so as to prevent altogether the possibility of the entrance of a single particle of air into the chest without interfering in the least with the escape of the fluid. Professor Trousseau states that, in the cases of chronic pleurisy in which he has thought himself justified in employing this method, the patients complained of extreme pain due to the sudden distension of the lung, and the laceration of the tough false membranes which surrounded it, after the removal of the fluid. We have already reported these facts in the *Medical Times*,—but the great practical importance of the subject must stand as an excuse for their repetition.

MELÆNA NEO-NATORUM.

BY DR. BILLIET (OF GENEVA.)

(Gaz. Médical.)

The new circumstances in which is placed the infant, the delicacy of its organs, the novelty of the functions they are suddenly called upon to perform, pre-dispose it to certain forms of hæmorrhage, more special in their causes than in their symptoms or results. The most frequent are those which occupy the brain or spinal chord; the former bears the name of apoplexy, the latter of tetanus. A more uncommon variety is hæmorrhage from the stomach or bowels, and is known under the denomination of melæna neo-natorum. Hesse (in 1825), Rahn Escher, of Zurich (1835), Kivish, and Hoffman, have published isolated instances of the disease; Billard and Barrier, in France, also speak of the complaint; and two cases were published in England by Dorington and Gairdner.

In referring to the cases hitherto published, children of the male sex seem, more than female infants, predisposed to the malady, and it usually occurs during the first four days of extra-uterine life. The predisposing causes should be sought for in the naturally congested state of the gastro-intestinal mucous membrane of infants—a circumstance which may be increased by enlargement of the liver or spleen, or any other cause of obstruction within the abdomen sufficiently to occasion hæmorrhage; and, secondly, in the difficult establishment of respiration. The lung not admitting readily the blood, that fluid distends the other organs, and specially the already congested intestines.

The disease more frequently makes its appearance after the evacuation of meconium; the discharge of blood from the anus is usually the first symptom, and in more than one-half of the cases precedes hæmatemesis. The hæmorrhage is generally considerable, and in most cases attains its height during the first twenty-four hours. The general symptoms are those habitually concomitant with loss of blood, viz., paleness of the face, refrigeration of the surface and extremities, extreme feebleness of the pulse, irregularity of respiration, and (seldom) convulsions. The local symptoms are all negative; the infants are too weak to suck, the abdomen is not tender or distended. M. Rahnescher specially insists upon the consequences of the loss of blood upon the constitution of the child. The patient remains pale, thin, and subject to diarrhœa and convulsions.

With regard to the prognosis of the malady, Dr. Rilliott observes, that of twenty-three cases on record, the issue was fatal in eleven cases; in nine of the remaining instances, the recovery was rapid and complete; but in the three others the constitution remained a long time much deteriorated by the illness. The treatment recommended by M. Rilliott consists in cold applications to the abdomen, whilst heat is carefully applied to the extremities. Enemata he rejects as useless, because their action is confined to the large intestine, which is not the seat of the disease. The nurse's milk should be given in a spoon until the child has recovered sufficient strength to take the breast, and a gentle cordial should be exhibited in cases of alarming weakness.—D. McCarthy, M.D., Physician to the British Embassy.

P.S.—M. Berard has been appointed Dean of the Faculty of Medicine, in lieu of M. Bouillard.

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THE MEDICAL TIMES.

SATURDAY, JANUARY 6, 1849.

THE NEW PRESIDENT OF THE POOR-LAW BOARD.

The *Gazette* of Tuesday announces the appointment of Mr. Baines, Q.C., the Member for Hull, to be the successor of Mr. Buller as the Head of the Poor-law Department. We have only waited for this official notification to congratulate the members of the Medical Profession on the judicious choice by Her Majesty's Ministers of a gentleman so eminently qualified to fill a post of such heavy responsibility. We look upon the appointment with the highest satisfaction. Offered *spontaneously*, and frankly accepted, it reflects honour on all parties concerned; and, from what we know of the high attainments, integrity of purpose, and thorough conscientiousness of Mr. Baines, we cannot but anticipate such a course of wise and just administration in the details of this Department as we have long and anxiously demanded. Mr. Baines comes to the Board with no crotchets of his own; he brings an unbiased judgment and considerable experience; and fully comprehending the practical difficulties with which he will have to contend, we are convinced that he will be prepared to take into consideration the claims of all parties, and of none more readily than those of the numerous members of our own profession.

THE CONVENTION AND POOR-LAW MEDICAL RELIEF.—NECESSITY OF APPEAL TO THE BRITISH LEGISLATURE.

The question of Poor-law Medical Relief cannot be too urgently pressed upon the notice of

the profession and the public. Although the system has been but little ameliorated, yet the question has for the last twelve months enlisted so much public sympathy, that, in its present shape, it presents ground for hope and encouragement to increased exertion, on the part of those most interested in its final adjustment. The Committee of Poor-law Medical Officers have had a difficult task to perform. All of them much occupied with other affairs which demand their first attention—having to bring before the authorities of the profession and of the country a subject presenting no agreeable features, and often repulsive in its details—receiving, too, it must be said, as regards the sinews of war, a very scanty support from the constituency which confided the task to them—they have yet succeeded in enlisting for the cause of improved Medical Relief a large amount of sympathy in the Medical Corporations, in the Public Press, and, it is believed, among a large portion of the public themselves. Even those official circles, which are ever slow to recognise the claims of the Medical Officers of Unions, have somewhat relented of that iron rigour with which they were wont to enforce their mandates, and have shown an improved tone of feeling towards those gentlemen, as may be gathered from the Correspondence we published last week between the Committee and the Boards of Health and Poor-laws. Both these public bodies express a lively sympathy with the Medical Officers in the additional wrong attempted to be inflicted on them; but both bodies declare themselves incompetent to remedy the evil complained of. If this incompetence be real, which we do not believe, the Poor-law Board and the Board of Health would have done well, instead of expressing empty wishes for the better payment of medical services, to have stated their intention of immediately laying the case before Government and the Parliament, with a view to the removal of this crying grievance. They have done no such thing. On this, as on other occasions, it is to their own exertions that Medical Officers of Unions must look for improvement in their condition. In the state to which the question has been brought, we firmly believe that the greatest good may be done by a Parliamentary agitation of the question, and we are glad to perceive that the Committee have resolved upon calling another general meeting of the profession. The plan proposed by the Committee for an improved system of relief has now been some months before the profession, and, we believe, has met with general acceptance. We trust that the support of a well-attended meeting will enable the Committee to press this plan with renewed energy upon the attention of Government, and to bring it under the consideration of Parliament, with an effect proportioned to the influence which may be exerted by medical men among the legislative class. In the meantime, we tell the humane, both professional and non-professional, that, for the sake of the poor as much as of the medical officer, instant improvement is demanded. Will it be believed, that, in one of our southern counties, not more than twenty miles from London, such an incident as the following has occurred within the last fortnight?—On one of the frosty nights preceding Christmas, a poor man fell down, and sustained a compound fracture of the leg, the bones protruding through the skin. The accident occurred within *one* mile of the residence of the medical officer, but more than *eight* miles from the Union Workhouse. Will it be believed, that, without a medical opinion,—without even allowing him to be seen by the surgeon, living close at hand, the *authorities* placed this poor fellow in a cart, on straw, and jolted his shattered bones over eight miles of road, to the workhouse, where he was received and attended to about midnight. And all this cruelty to save the fee which would have been due to the surgeon, who would naturally have been called in, but which is, from some inexplicable cause, denied to the medical attendant on the workhouse! Will not such a fact as this cause the public to join with the medical profession in demanding such a change of system, as will put a stop to such an outrage?

THE NECESSITY OF A MEDICAL BOARD OF HEALTH.

That medical science is gradually occupying a more influential position, in relation to social questions, is undoubted; but the advancement of its teachers and cultivators to that station and authority in which their science might be made practically available, is more slow, and suggests matter for lively regret. A dead oracle shall be more respected than a live prophet. The competency of the latter every novice will be prompt to dispute, whilst the wisdom of the former shall be the subject of general panegyric. Science makes no enemies, she displaces no ambitious expectants, she takes no fees, hungers after no annual salary; she has no needy cousins to recommend, nor promising sons to provide for,—she is entirely unselfish, confers benefits without imposing an obligation, and flatters ignorance by conveying knowledge without claiming superiority. She is every man's friend, for she has garments of every hue and texture,—of a warm nap or threadbare, wherewith to cover intellectual nakedness. She has a dialect, too, which all may learn for the mere trouble of it,—some to acquire its deepest mysteries, and others to speak without understanding; but, to the ear of the stranger, they are all one people.

It is not thus with the living professor. He must live like other men, and ought to live by his science; but here he finds many rivals. Not only is he opposed by men like himself,—proficient, learned, practical; but every incumbent of office,—every aspirant for place,—every creeping sycophant, with large wants and small means,—every hanger-on upon men in power, who has been taught that places are made for men, and not men for places, find in him a hated antagonist. His very science is his worst recommendation, and a thousand reasons are coined for depriving him of the advantage which his knowledge ought to confer. He may be learned, but he is not practical; he undoubtedly has knowledge, but he knows not how to use it; he can collect facts, but he cannot generalise, or he can generalise in forgetfulness of the facts; he can write well, but he is not prompt in action; he is good in the closet, but he is inapt at administration; or he may have all the necessary qualifications save one—that of being the nominee of a Minister, to which, of course, every other consideration must give place.

Now, this separation of the man and the science is an indecency and an injustice, arising out of the system of patronage that has long existed in this country. We do not intend to write a fiery denunciation against the established privileges of a particular class of the community, or to cast wild reproaches upon the precedents of office or the abuses of power; but we feel it our duty, in vindication of the interests of our profession and the cause of science and justice, to stigmatise the injurious custom, whereby incompetent men are placed in offices of responsibility for the sake of the emolument, and the really useful and accomplished labourer is robbed of his reward. An individual wrong is thus done, while the public interests are badly served. If a medical man be a candidate for a public medical office, the cry is immediately raised, that it is a medical job; and a non-professional person is forthwith appointed to perform the duty. Is not John Bull shrewd enough to see, that after all the job is that of his own making, and that he is the dupe of his own jealousy and other men's craft?

We have had occasion to refer, at various times, to the General Board of Health; and we refer to it again as an illustration of the practice we have been condemning. We do not desire to disparage, in the slightest degree, the intellectual attainments, or the industry of the present members of that Board. No man, who is able to appreciate intellectual exertion, can, for a moment, doubt the importance of the labours which, for example, Mr. Chadwick has executed in the service of the public; and we are glad when the Government suitably rewards such pre-eminent labours. We object only to the abuse of this prerogative; and we think it hard that many men, of equal talent and peculiar adaptitude, should have been overlooked and sacrificed, that one man should be personally benefited. The country could not be better served than by the exercise of the powers and experience of a man like Mr. Chadwick; but, let the situation suit the man, so that the highest amount of good and the least amount of evil may be attained at the same time. If we say so much of the appointment of Mr. Chadwick, what shall we say of those of the noble Lords who, with him, constitute the Board? These appointments appear to be a mere job, to introduce certain noblemen to the mysteries of office,—neophytes in the school of Government. It seems a part of the system of the Government of this country. That system cannot last. No injustice can be long continued, after the enlightenment of public intelligence has shone full upon it, and exposed it to reproach. It becomes us to perform this duty.

It is easy to show that the Board of Health, as at present constituted, is not only an insult to the medical profession, but also that it is inadequate to carry out the great public uses which it will be required to fulfil. No science is in so rapid a state of progression as medicine; none is so fruitful of principles applicable to the social well-being; and all that is wanted to

realise the public advantages which it is calculated to afford, is an intelligent central authority, qualified to direct and apply its laws to their proper end. These are the true functions of a Board of Health. We may go further, and say, that such a Board should be capable of suggesting subjects of inquiry; of organising the means; and of developing laws which may be beyond the command of private individuals. The reports of Mr. Farr, at the Registrar-General's office, give us an example of the great public uses to which a scientific, well-constituted Medical Board of Health might be applied. We can expect nothing of the kind from the existing Board. They know nothing of medicine, further than the wretched smattering they have learned from the voluntary instructions of men whose services they now pretend to despise: for they have had the hardihood to intimate that all further inquiries will be mere supererogation; that they are already in possession of all the information upon sanitary subjects which they require or that can be afforded; and that their duties being merely administrative, the services of a Medical Commissioner would be superfluous.

This is a great error. There is a vast amount of information relative to the science of medicine; such as, for example, the influence of particular trades on health, the origin and spread of endemic and epidemic diseases, &c., which might be collected under the auspices of a Medical Board, and made auxiliary to the enhancement of the health and comforts of the community. The medical profession would act in cordial concert with such a Board, and assist in every reasonable way the realization of the desired objects; but it will not co-operate with a Board which, it knows, is utterly ignorant of the subject over which it is called upon to preside. It can have no confidence in the use to which information, acquired, perhaps, with difficulty and at great peril, might be put, and would be unwilling to engage in probable fruitless labours. It can regard a non-Medical Board as nothing else than a mere King Log, unintelligent, inert, and incompetent.

We had earnest expectations that any Board of Health that might be appointed, would inaugurate a new era in the profession, and would exhibit an organization capable of carrying out the comprehensive objects we have adverted to; but, although disappointed, we are not hopeless, and still trust that we shall yet see a Medical Board established competent to fulfil all the wants which the present advanced state of science and civilization has generated.

LEFT HANDED LIBERALITY OF THE POOR-LAW COMMISSIONERS TO THE DUBLIN SANITARY ASSOCIATION.

When the Nuisances Removal and Epidemic Diseases Prevention Act received the Royal assent, the Dublin Sanitary Association directed its attention to the best means of carrying into effect those provisions which were calculated to promote the cleansing of the Metropolis. For this purpose, it got the necessary forms of complaint, summons, &c., printed; and, inasmuch as the ordinary Police Courts were already sufficiently overcharged with business, it recommended the Justices of Peace of the Borough, who had previously nothing to do, to establish a court in which they might especially adjudicate on questions of alleged nuisance. The Town-Council adopted the suggestion, and, accordingly, a new court became established at the City Assembly-house, at which the complaints of the resident householders were received and acted upon, according to the statute. The Magistrates attending this Court, being zealous and in earnest, it need not be said that much good has been effected. Since the 16th of October, 1,089 complaints of nuisances have been brought before the Court, and not more than fifty of them have proved ineffectual. But the collateral advantages have been much greater than any one would suppose, even from this large number. The owners of houses have been frightened into the building of suitable accommodations, necessary for health and decency, for the holders of tenements, to an extent that can scarcely be imagined; and many of the most disgraceful and shameless brothels have been suppressed. Of course, some trifling expenses were necessarily incurred in obtaining these advantages; the fines incurred under the Act must go in aid of the funds for the relief of the poor; and, as all necessary outlays for carrying out the provisions are, in the Act, chargeable upon the Unions, the Magistrates civilly informed the Guardians, that they had been at an expense of about ten pounds sterling, for the great benefits which they had conferred upon the community, with a request that this claim might shortly be liquidated. The Guardians, perfectly aware of the vast benefits conferred upon society by this Borough Sanitary Court, were most anxious to accede to this request, and wrote to the Poor-law Commissioners to that effect. In doing so, however, they made a trivial legal error; they stated, they were empowered to do so, by the 14th Clause: whereupon the Commissioners returned a long and technical reply, showing that the 14th Section only could come into operation subsequent to the publication of directions from the Central Board of Health; and, inasmuch as the service done had been prior to this publication, the Guardians could not make any such disbursements on the authority of the 14th Clause.

Now, at the time the Poor-law Commissioners wrote this, they were perfectly aware that the Guardians had committed an error in quoting the 14th Section. They well knew that, according to the 4th clause, any necessary expenses incurred in the removal of nuisances, and not recoverable from owners or occupiers, are, upon the order of any two justices, recoverable from the Treasurer of the Poor-law Union. Why not say—"Gentlemen, you are in error as to the 14th Section, but the 4th gives you the powers you require"? But, no; they have not only suppressed this information, but have gone to the expense of printing and circulating the letter, which, while it expresses a portion of the truth, is, as regards the whole, not the less a *suppressio veri*.

But, with regard to this transaction, as with everything Irish, there is an under-current which it might not be safe to expose. Enough it is to say, that the objects of the Commissioners will be defeated. The Lord Mayor and Sir Edward Borough, Bart., have served a legal order on the Bank of Ireland, as Treasurer to the Board of Guardians, for the expenses incurred; and, if it be not honoured within twenty-one days, from what is known of the energy and determination of those gentlemen, a distress will be levied for the amount. The question of right will thus become narrowed to a point of which a Court of Law will be capable of taking cognizance.

THE QUEEN'S COLLEGES AND THE IRISH MEDICAL CORPORATIONS.

A fortnight ago we referred to the establishment of a Nineteenth Faculty of Medicine, in Great Britain, in connexion with the Queen's Colleges in Ireland. These Colleges will, next to a certainty, succeed; and the Medical Faculty of the Queen's University will, in all human probability, absorb a majority of those fees now paid into the exchequers of the Scotch and London Universities. The only means of preventing this revolution are not likely to be adopted. Trinity College, the Dublin Medical Schools, the Royal Dublin Society, the bodies principally interested, those whose extinction may be looked upon as the inevitable consequence of the success of the measures now in progress under the patronage of the Government, are, in this contingency, either willing to wait upon Providence, or are so influenced by prejudice or fright, that they will do nothing connectedly or sensibly. Trinity College imagines that any one who points out the danger to be apprehended from the establishment of the Queen's College, is in league with the ultra-priests' party, and that the whole object is to throw open the virgin University of Queen Bess. The College of Surgeons is in a condition of imbecile trepidation; has it in contemplation to send a Deputation to the Lord-Lieutenant; and is engaged laboriously in ransacking the public offices, for the charters of the Queen's Colleges, which cannot be found, but which, with a powerful executive, are of very little consequence. The Royal Dublin Society, though it has some inkling that a mine has been sapped beneath it; that the Irish Industrial Museum, under the control of the Woods and Forests, has supplanted all its functions, still imagines that the system of *laissez faire* will extricate it from its present difficulties, and that the good times will come again. In the interim, the knowing ones are endeavouring to promote a little jobbing. It is represented to the College of Surgeons, that the only thing to save the interests of its Fellows and Licentiates, is to promote a Bill for the appointment of certain Medical Commissioners, who will have the power of determining the qualifications of candidates for all medical appointments; and the College innocently muses on the propriety of supporting such a Bill, not considering, that the chief Commissioner would most probably, in such case, be neither a Fellow of the College, nor a Licentiate of the College of Physicians.

LECTURE ON SANITARY REFORM, AS IT IS CONNECTED WITH EPIDEMIC CHOLERA, BY R. D. GRAINGER, ESQ., F.R.S.

The interesting discourse delivered by R. D. Grainger, Esq., at St. Thomas's Hospital, on

Wednesday evening last, on Sanitary Reform as connected with Epidemic Cholera, has been reported expressly for the *Medical Times*, and will appear in our columns next week, with the corrections of the learned Lecturer.

IMPROVEMENTS AT THE MIDDLESEX HOSPITAL.

We are glad to find, that whilst some of our metropolitan hospitals are compelled to make a forcible appeal to the public for pecuniary assistance to enable the Governors to carry on their benevolent designs, that the Middlesex Hospital has re-opened its wards, after having undergone a complete alteration and improvement. These steps have been effected through the liberality of the Governors, the activity and good sense of the Weekly Board, the judgment of the architect, and, lastly, the munificent bequest of 10,000*l.* from Lady Murray. His Royal Highness the Duke of Cambridge, who has exhibited throughout a very great interest in the welfare and prospects of the Charity, took the chair at a Special Court, held on the New Year's Day, and formally announced the completion of the new wards, &c., and that the hospital was now ready to accommodate the sick, the lame, and the diseased amongst the suffering poor.

REVIEWS.

An Inquiry into the Nature of the Simple Bodies of Chemistry. By DAVID LOW, F.R.S.E., Professor of Agriculture in the University of Edinburgh. Second Edition. 8vo. London. 1848. Pp 344.

The object of the above work is to show, that those bodies which have hitherto resisted the usual agents of decomposition are not, on this account, to be regarded as simple or elementary; and that they cannot be separated from the bodies which we know to be compound, by any such distinction as the terms simple and compound imply; moreover, that is not necessary in our inquiries into the phenomena of chemical action, and the laws which determine them, to assume the existence of many elements, distinct in their corpuscular composition from one another, or from the bodies which experiment has determined to be composed of more than one element or member. This work must, therefore, be regarded as an open attack upon the atomic theory of Dalton—a theory which is based upon the supposition, that matter is composed of atoms, or particles, which are incapable of further division, and that these particles, possessing the properties of the mass, are in simple or elementary bodies, endowed with distinct chemical, as well as physical attributes. In the time of Dalton, this supposition was considered to be essential to the support of his theory, and to the interpretation of the laws of combining proportions; but since that time the advances which have been made both in Chemistry and in Physics, have tended to throw a doubt over the truth of his proposition, by showing, that the atom of Dalton is in all probability *an assemblage* of particles, —a molecular group; and that these assemblages or groups may not only owe many of their properties to the manner in which the particles are arranged, but also that out of one and the same kind of matter, or particles, there may be produced a variety of groups, each of which shall be endowed with a set of special and truly characteristic attributes. Mr. Low, in fact, goes even further than this. He endeavours to show that *all* matter may be derived from the like particles, corpuscles, or atoms, and that the differences which are observed in the properties or manifestations of the various substances in nature, may be but modifications of a common principle or mode of existence. The arguments which the Author advances with the view of supporting this opinion, are chiefly derived from the following considerations.

1st. That many of the elementary bodies, as they are called, pass by insensible gradations into each other, and even into such as are known to be compound; so that a line of natural division cannot be drawn between these two classes of bodies, and "if, therefore," says Mr. Low, "the bodies which we term simple, present the same general physical properties, and exert the same chemical actions, as those which we term compound, and pass into the compound bodies in their characters and functions; the merely negative evidence, that we are unable to decompose them by overcoming their chemical affinities, should not invalidate the conclusion, that both kinds of bodies are to be placed in the same class of natural products, and cannot be separated the one from the other, by so wide a chasm as a distinct corpuscular constitution," (composition?) p. 2.

In support of this part of the argument the Author has given a brief description of the properties of the so-called elementary bodies, and of a few of their compounds; and he has endeavoured, thereby, to show that there is a near relation existing between them. We think, however, that his efforts have been eminently unsuccessful, and that he has created a vast amount of confusion, simply because he is, in our opinion, altogether deficient in that faculty, which is so necessary to the right interpretation of the facts which are presented to him, viz.: the faculty of recognising the true import of a chemical or physical property, and of estimating it at its proper value; and in addition to this he is totally without caution, and forms a hasty judgment upon the most insufficient premises. We will now give one or two instances in support of our opinion. Nitrogen, he says, is eminently irrespirable, so that no animal can live in it beyond the briefest period; it is an aeriform body which cannot be condensed by any cold or pressure; it has no odour, taste, or colour; its specific gravity is 0.9702; and it does not support combustion. Now these, he remarks, are the very characters of carbonic oxide, and the legitimate conclusion is, "*that nitrogen consists of carbon and oxygen.*" (P. 85.) It is in this way that our Author proceeds, in order to establish the truth of his proposition; viz., that the simple and compound bodies are closely related in all their chemical and physical characters; and that they are, therefore, to be considered as the members of one and the same class of natural products. But if he had examined the properties of nitrogen and carbonic oxide a little more closely, he would have observed that these bodies are not in any way related to each other, beyond the circumstance of their having the same specific gravity, and being two out of six substances which Professor Faraday has not succeeded in liquifying. True it is that an animal will not survive if it is immersed for any length of time in an atmosphere of pure nitrogen gas, and that, according to most physiologists, nitrogen does not contribute to the changes which are incidental to the act of respiration; but it is rather a bold thing to say that it is therefore eminently irrespirable, especially when we know that it constitutes four-fifths of the atmosphere, and that its presence therein neither hinders nor vitiates the results of the respiratory act. Compare it in this respect with carbonic oxide, and we shall perceive that the latter gas *is* eminently irrespirable; that it is, in fact, a positive and an energetic poison. Again, he says that nitrogen and carbonic oxide are related, inasmuch as they are both non-supporters of combustion; but if we examine the truth of this statement, we shall also soon discover that this is another instance of an inability to recognize the true import of an important chemical character; for, while nitrogen is, in every sense of the word, a non-supporter of combustion, the other gas is not in such a predicament, but will permit oxygen, potassium, and many other substances to take fire in it; and this again reminds us of another important distinction between the two gases in question. Nitrogen is not a combustible gas; it cannot be made to burn by any artificial contrivance. But such is not the case with carbonic oxide; for this gas will burn under circumstances when even hydrogen, the chief of combustibles, will not undergo combustion. How, therefore, can it be said, that the relations between the properties of nitrogen and carbonic oxide are so close, as to amount to a proof of their identity. But we must rest here; for if we were to enter more fully into this matter, and were to undertake the discussion of all the discrepancies which occur in this part of our Author's argument, we should be likely to engage ourselves in an almost endless controversy. Let us, therefore, merely say, that in our opinion the Author's data are very incomplete, and that his conclusions are both hasty and unsound.

The second consideration upon which Mr. Low has relied, in order to give a colouring to the view which he has presented to us, is, that as we naturally endeavour to resolve one body into another which is simpler than itself, and that, as the science of chemistry has advanced, we have been more and more successful in these endeavours, it is fair to conclude that we may yet, by some superior means of analysis, or by a better use of the means which we already possess, be enabled to prove many bodies to be compound which we now hold to be simple. Now, although no one can deny the possibility of this supposition, yet, we think that it is right-down rashness to found, as the Author does, such a startling conclusion upon it; and to say, that the so-called elementary bodies are, therefore, compounds, is to take for granted the very thing which is to be proved. Nor can we accede to the terms of another statement of Mr. Low's, viz., that, instead of acquiescing in the maxim, that a body is to be regarded as simple when it cannot be decomposed, it would be juster to say, that a body is to be regarded as a compound when we are not able to prove it to be simple.

But let us go on to the consideration of the third point upon which our Author has founded his opinions, viz., that in order to explain the varieties of material substances, as produced by combination one with another, we resort to the supposition of the existence of sixty or more distinct elementary bodies; but, says Mr. Low, we can, upon the supposition of only two distinct bodies, equally solve the problem, by supposing that these two bodies unite in different manners and proportions, and thus give rise to the formation of every variety of substance; nay, he says, that our generalizations need not even stop here, for we may admit the possibility of the production of all material bodies from the same order of corpuscles,—that is, from the elements of a single body, the corpuscles of which are combined in a different manner or quantity. Truly this is possible; nay more, we would even go so far as to admit, that the opinion is, in some measure, supported by the many evidences which are derived from the allotropic states of bodies,—from the fact, that the same body will often assume different forms, and be endowed with different functions; and from the fact, also, that in compounds, we frequently find that there are the same elements united in exactly the same proportions, notwithstanding that there is a manifest difference, both in the physical and chemical characters of the resulting isomeric substances. Had Mr. Low contemplated the subject in this way, we think that he might have brought forward a great and a powerful array of facts in support of his opinion; but, strange enough, we cannot discover that the Author has even alluded to to them. He has, however, endeavoured to illustrate his argument by means of an hypothesis, which cannot stand either the test of acknowledged facts, or the scrutiny of a fair criticism. The hypothesis to which we refer is, that the elementary bodies may be built up of molecules of carbon and hydrogen; that these, in fact, are the two distinct bodies to which he alludes in the preceding part of his argument; and he affirms, moreover, that these also may be constructed out of some common principle. Assuming, then, the existence of these two, as primary bodies, he proceeds to illustrate, by means of Tables, &c., how they may enter into the construction of the so-called elements. "Oxygen," he says, "May be derived from $HC+H$; nitrogen from $2HC$; sulphur and phosphorus from $2HC+H_2$; iodine from $17HC+H^7$; potassium from $5HC+H_4$; gold from $14HC$; and so on. The rule which he has framed for the

determination of these proportions being founded on the assumption, that all bodies may be derived from a common radix H C; and the number of times in which this radix is held to exist in any body is determined by dividing it by 7, which is the equivalent of H C (1+6), and the residue is supposed to be made up of hydrogen. It will naturally be asked, why Mr. Low has chosen H C as the radix? The answer is, 1st., because carbon and hydrogen have the lowest combining proportions of all bodies; and, 2ndly, because they exhibit a disposition to combine in an infinite variety of proportions. We have already alluded to the imperfection which exists in one part of his scheme, and have said that it would be an arduous task to discuss it fully; so would it be an endless task to discuss all the fallacies which exist in this part of it. We can, indeed only find time to allude to one or two of them Thus, for example, after speaking of the relations o chlorine with sulphur, and of the probable existence of the same principles in both of these bodies, Mr. Low says, "There is, however, another body which, even more than sulphur, strikes us by the analogies which connect it with chlorine; but which, happily for the discovery of chemical laws, we have been enabled to resolve into simple elements," (p. 116). This body is cyanogen; and then, after alluding to the fact, that it unites with hydrogen, the metals, and with ammonium, in exactly the same way as chlorine does, the author asks the following questions:—"Now, to what are we to attribute this remarkable parallelism between chlorine and cyanogen,—the one a body which we assume to be simple, the other a body which we know to be compound? Is it possible to believe that these substances, so much alike, are yet dissimilar in their corpuscular constitution, and that the one is compounded and derived from known elements, and the other simple and not derived from other elements? Are we not absolutely compelled to believe that substances so much alike in their chemical actions are of a similar nature, and that what is true of the one, with respect to its essential constitution, must be true of the other?"—(P. 118). From this, it is evident that Mr. Low believes that chlorine and cyanogen have the same *constitution*, and as, *ex hypothesi*, all matter is made up of carbon and hydrogen, they must also have the same *composition*. Now, he tells us that chlorine is composed of 5HC+H, and this, therefore, must also be the composition of cyanogen. But if we proceed according to the rule which he has given for the determination of the composition of bodies, cyanogen=26 should be derived from $3HC+H_5$, and $3HC+H_5$ ought, therefore according to his theory, to be equal to 5HC+H. We may, however, go still further, in order to illustrate the unsoundness of his hypothesis. For instance, the chemist is accustomed to regard cyanogen as a compound of C_2N, and this, in fact, Mr. Low also admits, so that here we have another constitution for this body; and thus, upon reviewing these several points, we find that cyanogen (to reason analogically) is composed of 5HC+H; but (reasoning hypothetically) it is also composed of $3HC+H_5$; and (reasoning chemically) it is also composed of C_2N, or, as Mr. Low says, that nitrogen is constituted of 2HC,—it is composed of C_2+2HC, and thus the composition of cyanogen may be represented by three or four formulæ or sets of terms, no two of which are either equal or reconcileable.

We have already said that the Author has a hasty way of coming to a conclusion, and we have given one or two instances of it; let us now, in conclusion, add a few more.

"The analogies between chlorine and sulphur have been referred to, as conducting us to the conclusion that chlorine contains sulphur."—P. 118.

"Phosphorus," he says, "is associated by many characters with sulphur; and it is alike connected with ammonia. The analogy between phosphuretted hydrogen and ammonia, both of which are produced by the putrifaction of animal matter, has again and again excited the attention of chemists. But ammonia contains nitrogen, and it is, therefore, reasonable to infer that phosphorus contains nitrogen. . . . . "The conclusion is irresistible, that phosphorus consists of equivalents of H_2N, and that phosphuretted hydrogen is isomeric with ammonia—that is, it contains the same elements in the same proportions."—P. 127.

"Seeing that it (ammonium) is not only isodynamic with these (alkaline) metals, but, that in combination with the same body, it forms a compound characterized by the very same properties, which are distinctive of the alkalies proper, we are conducted by the strongest analogies to the conclusion, that the same kind of matter is common to these different bodies."—P. 183.

"But if nitrogen, or the matter of nitrogen, exists in the alkaline metals, it must exist in the alkaline earths, viz.: the common metallic oxides."—P. 184.

Again, the Author endeavours to trace analogy between the properties of phosphorus and those of copper, and he says, "but phosphorus, beyond question, falls, with respect to its chemical constitution, under the same category with ammonia; and ammonia contains nitrogen as an integral element, it is an inevitable conclusion, that nitrogen, or the matter of nitrogen, exists in copper."

And thus we might go on accumulating instances of unsound chemical knowledge of an inaptitude to judge of the properties of bodies, and of a disposition to form conclusions upon unsound premises. In fact, Mr. Low's book on the simple bodies is, in our opinion, a huge fallacy; and were it not, that it is stamped with the authority of a Professor's name, and with the announcement of its being a second edition, we should not have bestowed any of this consideration upon it, or have troubled our readers with a single word of comment. We do not, however, say this with the view of disparaging the acknowledged talent of Mr. Low, but merely to show that Pliny was right when he said "*nemo mortalium omnibus horis sapit.*"

The Great London Drainage Plan. By J. J. Morewood. London: Effingham Wilson. 1848.

This is a pamphlet of only six pages, and the object of the Author is to show, that the Thames being far too high for the metropolis to be drained into it, the main sewers should be made by boring or tunnelling on each side of the river, and at such a depth as to insure a perfect drainage. At the east end a deep receptable is proposed to be made, into which the refuse of the town shall flow, and then to be pumped out, (having been deodorised,) and sold in the moist or dry state, as manure.

House Drainage Considered as to its Effects and Capabilities of Improvement. By T. W. M. Marriott, Barrister-at-Law. London: John Ollivier. 1849. Pp. 15.

This pamphlet contains some hints which may be of use to Sanitary Reformers.

On the Use of Chloroform in Dental Surgery. By J. Chitty Clendon, M.R.C.S., &c. London: S. Highley and H. Baillière. 1848. Pp. 20.

Mr. Clendon has evidently had much to do with chloroform in dental surgery, as he writes like a man of experience. The uses, inconveniences, and dangers of this anæsthetic agent are clearly stated in the essay, and they are worthy the attention of all those who are called to operate on the teeth. The Author gives the following statements of the effects of chloroform on a hundred persons, taken consecutively as they presented themselves, without selection or rejection in any instance. Excitement only, 1; consciousness, sensibility, with loss of motor power, 5; struggling during inhalation, and during operation, with insensibility to pain, 12; tetanic contraction of muscles during inhalation, with insensibility, 7; insensible to pain, consciousness retained, 9; unconsciousness, insensibility, with loss of motor power, gradually and quietly induced, 64. Three-fourths of these were females of the educated classes, of ages varying from ten to fifty-five years. Sickness, on the return of consciousness, occurred in 26 instances; and prostration or debility, rendering it necessary for the patient to lie down on the sofa in 38, including the 26 who suffered from sickness. The debility lasted from ten minutes to three quarters of an hour. The sickness was generally attributed to a recent undigested meal, but not invariably.

Remarks on the Forceps, &c., with Illustrative Cases. By Alexander Tyler, M.D. Re-printed from the "British Record of Obstetric Medicine and Surgery."

The forceps is a most useful instrument in midwifery when judiciously employed; and Dr. Tyler, in this essay, offers some valuable observations on its employment. He is opposed to the use of forceps exceeding thirteen inches in length, as a general rule, from the injury which it is calculated to inflict on the soft structures of the mother, and from its compromising the life of the child. He says:—

"I think it ought to be laid down as a law amongst obstetric practitioners, not to have recourse to the use of forceps exceeding thirteen inches in length; but, rather to use the deadly perforator, for the sake of the mother, without reference to the life of the child, in those cases requiring a longer instrument. Until some definite decision has been come to in reference to the limited length of the forceps, it can never be considered as a safe instrument; for, inasmuch as every additional inch adds to its leverage power, by so much is the danger increased of using it. In many cases of slight deformity at the brim, where the head is arrested, and where the advocates of the long forceps would recommend their introduction, I should much prefer the operation of turning, as affording nearly as good a chance of saving the child, without putting the mother to such risks as I maintain she always incurs by the introduction and use of forceps of such great leverage power, and the iron points of which are far out of our reach and guidance. Or if we can be certain that the contracted brim is wide enough to allow the passage of the child's head, when compressed under the influence of powerful uterine action, I think, in such a case, we are justified in administering the ergot of rye, the action of which upon the uterus, if the impediment exist only at the brim, will effect delivery safely and securely, and even if the cavity and outlet are also contracted, will at least drive down the head of the child within reach of such forceps as we are in any instance justified in using. Several of the cases which I am about to detail, illustrate, in a striking manner, the great advantages to be derived from the effects of this valuable drug, before having recourse to the forceps. In more than one instance, the head was quite out of the reach of the instruments I am in the habit of using, and only for the considerable advance obtained by the timely administration of this medicine, we might have been compelled to deliver with the perforator and crotchet, certain destruction to the infants, saved by the practice recommended and adopted in these instances.

Odd Fellowship, as it is and as it ought to be. A Lecture delivered in the Exchange Hall, Nottingham. By J. C. Hall, M.D., &c. Nottingham: O. Shaw and Sons. London: A. Hall and Co. 1848.

Dr. Hall is a warm friend of the Nottingham Ancient Imperial Order of Odd Fellows, and the object of his lecture is to secure public attention and support on behalf of the Societies belonging to this order. The principles advocated in this Lecture are calculated, if carried out, to permanently benefit the labouring-classes; and we think that if the order possess only a few advocates, with the talents and spirit of Dr. Hall, that it will become one of the most important self-supporting benevolent Institutions in Great Britain.

MR. G. B. CHILDS, THE "MEDICAL GAZETTE," AND MR. MOYLE.

[To the Editor of the Medical Times.]

Sir,—Doubtless ere this you have seen some severe remarks from the Editor of the *Medical Gazette*, respecting my Paper on the "Epidemic of Penzance." I need not say that this attack on my professional character is most unjust, and the charges untrue.

Without adopting the course that every right-minded person would have done, of hearing both sides, the Editor has thought fit to condemn me unheard, and I am at a loss to comprehend the motive for such illiberal conduct.

At the time I forwarded my communication to you, I was quite ignorant of the existence of Mr.

Moyle's Paper, and, therefore, could not have willingly intended any breach of professional confidence. For your satisfaction I have taken the liberty of forwarding the copy of a letter which I have addressed to the Editor of the *Medical Gazette*, in which you will perceive, from a gathering of facts, that I have been enabled to contradict most fully the nefarious charge made against my reputation.

Should you require it, I am most willing to forward you my correspondence with Mr. Moyle. I deny that Mr. Moyle requested me to suppress my paper, or that he even hinted at my doing so; on the contrary, his son, with whom my correspondence chiefly lay, expressed a hope that his father's paper "would not clash with mine." Apprehensive of this, and wishing to observe the greatest courtesy to Mr. Moyle, I wrote, on the same day that I received an intimation of Mr. Moyle's intention to publish a Paper, and stated that I had forwarded my communication to your Journal. I had no reply to this, and, therefore, naturally concluded that Mr. Moyle had either relinquished his intention of publishing a Paper on the subject, or, feeling satisfied that our papers were sent to different journals, and, consequently, would not "clash," he did not consider the subject worthy of further notice.

Had I received the slightest intimation that it was not Mr. Moyle's wish my Paper should appear, it would never have been printed.

I have the honour, Sir, to be your obedient servant,

GEO. BORLASE CHILDS.

Dec. 30, 1848.

[We feel deep regret that a misunderstanding should have arisen in reference to the paper furnished to our columns by our Correspondent Mr. Childs; and we feel confident that our respected contemporary will be ready to do justice to both parties. Mr. Childs's paper was in type a fortnight before it was published, and we believe that we announced the fact in our "Notices to Correspondents."—ED. *Medical Times.*]

MR. KAY'S CASE OF UTERINE TUMOR.

[To the Editor of the Medical Times.]

SIR,—In reply to Mr. Pearson's letter of last week, I beg to state that the woman Emma P—— had milk fever on the third day, terminating by a crisis of sweating, and that the flow of milk was very copious, but the woman Maria R—— had not the least symptom of it.

There was a typographical error in your report of the case, which no doubt led Mr. Pearson to inquire. In page 180, column 3, line 28, it should have been "lochia moderate, *milk* fever on the third day."

I have the honour to be, Sir, your obedient servant,

WM. T. KAY.

Royal Marine Barracks, Plymouth,
January 2, 1849.

REPLY TO DR. DICKSON.

[To the Editor of the Medical Times.]

Sir,—Dr. Dickson has assailed me with a charge of misrepresentation, in reference to a Review recently published in your Journal of various pamphlets on Cholera, among which, was one written by this aggrieved physician. The Doctor, I would presume, has been prompted to make this allegation, by the fact, that I passed over, in silence, his new "Book of the Revelations," and confined myself to a notice of his old Report,—a production which he now appears to be particularly desirous to disown. It is rather shabby of the Doctor to attempt to repudiate the first-born pledge of his literary amours.

I am also charged with reviewing his new book on "hearsay," and at "second hand,"—accusations as fabulous as they are flippant. I *could* not review his book of the "Revelations" at second-hand, for it is not within my knowledge, and, I apprehend, not even within the Doctor's own, that it has been considered worth quoting by any subsequent writer; and certainly not by "hearsay;" because I have had full ocular demonstration of its publication, not only by the evidence of its "title-page," but also by the modest testimony of a *leviathan advertising van!* But, in point of fact, Sir, I did not review this book at all; hence all this childish clamour. The Doctor is piqued at not being esteemed worthy of an elaborate criticism. Noticed he will be, for better or worse, and therefore challenges his reviewer.

Now, Sir, permit me to tell Dr. Dickson, that the only charge to which I can plead guilty is, that through a fastidious disinclination to hunt down stale game, I have shown too much courtesy and forbearance towards his theoretical foibles. Not feeling justified in approving, I resolved not to censure; and if I have anything to regret, and Dr. Dickson anything to be thankful for, it is that I did not review his late apocalyptic visions with that rigour which they merited, and which would have gratified every reader of the *Medical Times*, excepting, perhaps, Dr. Dickson himself. Dr. Dickson, therefore, may fairly enough complain that he has not received his deserts.

Dr. Dickson also charges me with misrepresenting his practice, because I reviewed a Report of his, published in a compilation by Mr. Rogers, in which *bleed letting* was urgently recommended as a cure for cholera, and because I contrasted his past with his present opinions upon this remedial measure. The Doctor says, that the reviewer "actually places under inverted commas, as a quotation from him (Dr. Dickson) a passage which is notoriously contradicted by everything Dr. Dickson, *for the last seventeen or eighteen years*, has penned, printed, or published on the subject of cholera." This sentence is intended to mystify the reader into the belief, that either Mr. Rogers has published a false statement in the name of Dr. Dickson, or that I have garbled the quotation for the purpose of misrepresentation,—an insinuation utterly at variance with the fact. The Doctor says, that *blood letting*, the practice recommended in the Report, is "notoriously contradicted by everything Dr. Dickson, for the last seventeen or eighteen years, has penned, printed,—or published," &c., and therefore, of course, the quotation must be false! Did it not occur to Dr. Dickson that he might be fallible? Might he not have employed the universal privilege of changing his mind and repenting him of his folly? But Dr. Dickson is quite right to interpose "for the last *seventeen or eighteen years*," because, in truth, the latter number brings us back to within two years of the exact date of the Report! The Report may be true, then, after all, and the Reviewer innocent of any error or misrepresentation. Let Dr. Dickson be honest and straightforward. Is he, or not, the author of that Report? Is he not as much the author of it, though published by another person, as he is of his new book of the "Revelations"? He is; he knows it, and will not deny it.

I am next accused of not having read this new book of "Revelations," notwithstanding the allurements of its taking title. Now, Sir, I can assure Dr. Dickson that I did read it, and read it, too, as carefully as men generally do read books that are not worth the trouble. I will flatter him, also, by telling him that I was induced to read it by the remembrance of the diversion I enjoyed at his right-and-left abuse of all established practice and regular practitioners, in his "Fallacies of the Faculty," and I expected to be regaled with a little of the same racy vituperation in his new volume. I was disappointed; nothing could be more "weary, stale, flat, and unprofitable," than the mysticism of the new Apocalypse, and I laid it aside as unworthy of comment. It appears that I committed a grave error.

Dr. Dickson has, however, saved me the trouble of again reading his book to discover any enigmatical truths it may contain, by revealing them himself. He plays the two parts of Œdipus and the Sphynx in his own person. He is right; who can so readily solve riddles as the man that makes them? I offered a kindly and generous reception, as he truly says, to any one who would present the profession with "one new fact and two new ideas;" now, the Doctor has strong claims on my benevolence, for he presents me with *one* new *idea* and *two* new *facts*, which is far better. His new idea is that cholera depends upon "a loss of the brain's influence over the pneumo-gastric nerves,"—a proposition that threatens to break Galen's head.

Let us now, Sir, examine the two facts, which in the Doctor's opinion demonstrate his principle. The first is, that "the blood of a cholera patient can be, and has been changed from black to red by the inflation of the lungs with atmospheric air!" A new fact! Verily, Dr. Dickson, thou art a prophet—and more than a prophet! Is not the blood of every patient that recovers from cholera thus reddened by atmospheric air? If not, pray Dr. Dickson how is it reddened? The second fact is, that the same change may be effected "by the same process, on the blood of an animal whose pneumo-gastric nerves have been artificially paralysed by their division!"—Brave Dr. Dickson! Thus stands the syllogism:—

The blood may be reddened by atmospheric air after division of the pneumo-gastric nerves.

The blood of a cholera patient may be reddened by atmospheric air.

Ergo: Cholera is caused by a paralysis of the pneumo-gastric nerves.

Thus the question is solved which Dr. Dickson vauntingly says Mr. Ross could not answer!

There is a vulgar syllogism like unto the former, which may serve to confirm the philosophy of the Doctor's proposition:—

Softness is a sure sign of a ripe pumpkin.

An author's head is sometimes soft.

Ergo: An author's head is sometimes a ripe pumpkin! Very likely.

I must apologise to Mr. Ross and Mr. Rogers for having unwittingly made them the subjects of criticism; for, Dr. Dickson, like an Irishman in a row at Donnybrook fair, flourishes his shillaleigh in all directions, and gives a knock on the head to everybody within arm's reach. If notoriety is his object, he has certainly been gratified, though, I fancy, without much advantage to his case or his credit. I should not, Sir, have occupied your columns at such length, but that I desire to vindicate the impartiality of the reviews in the *Medical Times*, and to defend the dignity of legitimate medicine.

I am, Sir, your most obedient Servant,

THE REVIEWER.

THE BOARD OF GUARDIANS OF THE WHITECHAPEL UNION AND MR. LIDDLE.

[To the Editor of the Medical Times.]

Sir,—It is well known, to that portion of the public who have paid any attention to the science of public health, that I have, for many years past, devoted a good deal of my time to the study of that important question; and having witnessed a large amount of distress and physical suffering among the poor, I have repeatedly raised my voice in their behalf, and have consequently incurred the ill-will of many individuals who are interested in keeping things as they are.

No fault, however, was publicly found with me for endeavouring to ameliorate the condition of the poor inhabitants of the wretched localities which abound in the Whitechapel Union; but the Chairman of the Board of Guardians, who attended to watch the proceedings at an inquest which was recently held on the bodies of four persons who died of cholera, whose deaths were said to have been occasioned by the filthy state of the district, threw upon me the blame of causing such a catastrophe, in consequence of my neglect in not having informed the Board of all those places where disease was prevalent; when it appeared, from the minutes of the Board, that it was only three weeks before the inquests were held that I had, in writing, informed the Guardians of the unhealthy condition of those very places. The Chairman stoutly denied that I had made a report, and it was in consequence of such ungenerous conduct, that I demanded an apology from the Board. My letter was laid aside, and no notice taken of my demand.

4, Alie-place, Goodman's-fields,
December 22, 1848.

Gentlemen,—In consequence of the contemptuous manner with which my letter to the Board, bearing date 19th December, 1848, was treated by you, I beg to resign my office as one of your district medical officers.

The following is a copy of that letter:—

(Copy.)

"4, Alie-place, Goodman's-fields,
December 19, 1848.

"Gentlemen,—I have to demand an apology from Mr. Brushfield, as the Chairman of your Board, for the unfounded assertions he made at the inquest which was held yesterday, at the Windmill public-house, respecting my conduct in not reporting to you the state of the courts in Blue Anchor-yard, and thereby throwing upon me that blame which the jury thought was attached to some party.

"I could readily have forgiven the remarks Mr. Brushfield made during my presence, by supposing they were made in ignorance of the fact; but, after I had corrected his error, it was most unjustifiable on his part to have reiterated the same observations after I had left the inquest-room.

"I assure you, Gentlemen, I would most willingly have borne my proportion of any blame which might, either justly or unjustly, be attributed to all who are concerned in the onerous and unpleasant duty of administering the Poor-laws; but it was neither just nor generous to endeavour to fix the alleged blame upon me, more especially as Mr. Brushfield, who, as the Chairman of your Board, ought to have known that it was only about three weeks ago since I reported to the Board, that epidemic, endemic, and

contagious diseases prevailed in every court in Blue Anchor-yard, and after I had still more recently stated (*viva voce*) to the Board, that I had, within the last few days attended several cases of malignant cholera.

"I have the honour to be,
"Gentlemen,
"Your obedient Servant,
"JOHN LIDDLE.

"To the Board of Guardians of the Whitechapel Union."

I have held the appointment which I now resign nearly sixteen years, and it is with no small feeling of regret that I am compelled to take the present step. With many members of the Board I have found a friendship which I hope to entertain to the latest period of my existence, and I have reason to believe that some of the Guardians will very reluctantly accept of my resignation. It is, however, impossible for me to hold office when confidence between the employers and the employed is broken, which I now feel to be the case between the Board and myself, and I have no hope that a reciprocal feeling of esteem will ever be re-established. It appeared to me that all the recommendations I made during my interview with you on Thursday, the 14th instant, were received in a very uncourteous manner; they were sneered at by some, and at length rejected. The recommendations contained in the joint letter of the medical officers to the Board, respecting the supply of drugs and appliances for cholera patients, (although we hold the power of enforcing the adoption of them,) were treated with something worse than contempt. When I proposed that a supply of ether and chloroform for inhalation should be provided at the Workhouse, I was told, that, by "my contract, I was bound *to supply all necessary drugs and appliances;*" and when I further stated that the medical officers might not deem such remedies to be absolutely "*necessary*," a feeling of indignation was expressed by some members of the Board, as though I would withhold what was truly requisite, in any case, they appeared to think that, as I received the liberal pay of about 1s. per case, I was expected to expend about 4s. for the treatment of each cholera patient. Moreover, the Board, so far from affording to the medical officers the assistance which they (in their letter) desired in the discharge of the arduous duties entailed on them by the present epidemic, ordered a placard to be printed and circulated in the Union, which will have the effect of increasing those duties fourfold. I also informed the Board that extra medical assistance was required in my district, not because I had more than an average number of cases of illness to attend, but because there was prevailing at the present time a disease, which was of so serious a nature as to demand the almost constant attention of the medical officers. The recommendations of your medical officers, which would have incurred expense, were set aside, while those which cost you nothing were adopted.

In taking leave of you, gentlemen, I have the heartfelt satisfaction of having most conscientiously done my duty, both towards the poor and towards you, and of being able to say that many of the localities, where the class of patients I have been called upon to attend reside, are now in a better condition than they were a few years ago; nor can it be denied, that the improvement which has taken place has been almost entirely caused by my own exertions. I daily receive the thanks of the poor for the improved condition of their neighbourhoods.

I have only, in conclusion, to add, that I hope you will lose no time in filling up the vacancy which my resignation occasions.

I have the honour to be,
Gentlemen,
Your obedient servant,
JOHN LIDDLE.

To the Board of Guardians of the Whitechapel Union.

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

[To the Editor of the Medical Times.]

SIR,—By the deaths of Mr. Samuel Cooper and Mr. Calloway two vacancies have occurred in the Council of the College of Surgeons, and as they must be filled up in July next, it is most important to make a timely inquiry, whether the results of the present system of election are so satisfactory, that any change in that system is uncalled for.

Up to 1840 the affairs of the College were managed by a Council consisting of twenty-one persons, and comprising the most distinguished surgeons in London. When vacancies occurred, the election of new members into the Council was vested in that body, and, with only two exceptions, (of members now dead, and elected under circumstances too well known to require explanation here,) in a period of about forty years, the men who were best entitled to the distinction were selected.

In 1841, I think, a majority of the Council accepted a new Charter, which was understood to have been forced upon the College against the wishes of the majority of the Council, and certainly without any solicitation on the part of the bulk of the members, by the then Home Secretary; and by this Charter the election of the members of Council (which was enlarged to twenty-four) was transferred to certain members of the College, then for the first time distinguished by the name of Fellows, and whose separation into a distinct class, with privileges denied to the ordinary members, created much dissatisfaction in the profession.

Under the new system, I believe, five elections have taken place, and new members have been added to the Council; and I believe I express the opinions of the best men in the profession when I say, that several of the new members of Council ought not, and if the old system had continued, would not, have been elected upon that Board.

There is obviously something wrong in a system which has produced such injurious results in so short a time, and for that wrong we should surely lose no time in seeking to provide a remedy. The College depends for its influence and its position upon the reputation of the members of Council; and that influence and that position must be impaired, and may be ultimately destroyed if the present system of election be continued, with similar results.

No one is compelled to become a member of the College; every man may practice without the diploma. Most of the persons who present themselves for admission do so because, to be a member of that body has been regarded as a distinction, and because their qualifications are vouched for, and their diplomas are signed, by men of widely-spread reputation; and unless a succession of such men be provided, the decline of the College is inevitable. That decline has, in the opinion of many, already commenced; and the writer of this letter would earnestly urge upon the Fellows the duty of considering, without delay, the position in which they stand, and the necessity which exists for arresting the further progress of a serious evil.

Under the old system the electors were intimately acquainted with the qualifications of every one who was a candidate for a place at the Council Board, and sincerely desirous of maintaining the high character of the body to which they belonged; and there was in this much security for the good working of the system.

Under the new system, there may be, and probably is, an equal desire to uphold the character of the Council, but the bulk of the Fellows are not well acquainted with the qualifications of the men from whom they are required to make a wholesome selection; and, unless some decided course be taken, the chances are, that ill-qualified men will find admission into the Council.

Every Fellow, when his name is called over, and this is done according to seniority, may be nominated by three Fellows, and he is then balloted for, and there are few men so friendless as not to find three members of a numerous body willing to vouch for their competency. When the ballot is taken, the Fellows may be very imperfectly acquainted with the professional acquirements and merits of the person named, and an objectionable person may thus have as good a chance of election as the most highly qualified.

If the present plan, then, be followed out for a few years, there is reason to fear that a large portion of ill-qualified persons will be infused into the Council, and that it will no longer possess the respect of the profession. Should this result be brought about, it will be mainly owing to the fact, that the bulk of the electors have not such a knowledge of the candidates as is necessary to enable them to make a proper selection; and unless some plan can be devised for diffusing among the Fellows a proper knowledge of candidates, the character of the Council will, at the next election, be probably still further lowered.

I assume and believe that the Council and Fellows at large, whether living in town or in the provinces, are all equally desirous of upholding the dignity of their College, and are all equally anxious to support any plan by which that object may be secured. I believe there is only one way by which this may be accomplished, and that is by electing into the Council men whose characters and positions will be a guarantee that they will maintain that dignity. And this cannot be done unless the Fellows are made acquainted with the merits of candidates in some suitable manner; and I maintain that this can be properly done by the Council only, and that it can be very simply accomplished.

If there be three vacancies, by resignation or by death, to be filled up, let the Council go through the list, as they would have done under the whole *régime*, and let them have a house list of three, six, or any other number of names of eligible persons, and let the Fellows adopt that list, or, if it pleases them better, reject it. In this way there need be no interference with the provisions of the Charter, which will be, in fact, complied with.

When I look at previous proceedings of the Council, however, I almost despair of their taking a decided course; they have generally been timid when energetic action is necessary. Still I hope that they are now so sensible of the mischief with which the present system is fraught, that they will do what is best boldly, regardless of present obloquy; and they may rely upon it, that, if they once show that they are earnest and honest, they will obtain the support of every well-wisher of the College.

A FELLOW.

[In publishing the above letter, we must not be considered as advocating the views of our Correspondent.—ED. *Medical Times.*]

BRIEF MEMOIR OF THE LATE DR. PRICHARD.

We have to announce the death of Dr. Jas. Cowles Prichard, which took place last week, at his residence, in London. Dr. Prichard, who was born at Ross, in Herefordshire, settled as a physician in Bristol, in the year 1810, and was, a few years after, appointed physician to the Clifton Dispensary and St. Peter's Hospital. In addition to his professional avocations, he occupied himself, at this period, in writing the first edition of his "Researches into the Physical History of Man," which appeared in 1813, and his work upon "Egyptian Mythology." In the year 1816, he was elected Physician to the Bristol Infirmary, which appointment he filled in conjunction with that of Physician to St. Peter's Hospital; and, in the year 1822, he published a work on the "Diseases of the Nervous System." In 1829, he wrote a small octavo work, entitled, "An Essay on the Vital Principle," dedicated to the patrons of the Bristol Philosophical Institution, of which he was one of the founders, and where he frequently gave lectures, and read papers on various subjects. He also took an active part in founding the Bristol College, and was, for many years, one of the members of its council. The degree of Doctor of Medicine of the University of Oxford was conferred upon him, by diploma, upon the occasion of the installation of the Duke of Wellington as Chancellor of that University. He was one of the Visiting Physicians of the Gloucestershire Lunatic Asylum, and a Metropolitan Commissioner in Lunacy before his appointment under the recent Act. About this time, he wrote his work on "Insanity," a book upon the "Eastern Origin of the Celtic Language," and a little volume on insanity, as connected with jurisprudence, and contributed various articles to the "Cyclopædia of Practical Medicine and the Library of Medicine." In the year 1845, he was appointed one of Her Majesty's Commissioners in Lunacy, and removed to London, where, besides the active duties of the commission, he completed the third edition of his "Physical History of Man," in five volumes, as well as his popular work on "The Natural History of Man." He was a Fellow of the Royal, and a great number of British and Foreign Societies, and at the time of his death was President of the Ethnological Society of London. In his intercourse with his professional brethren and colleagues, Dr. Prichard's conduct was straightforward, honourable, and generous; to his patients he was gentle, attentive, and kind. High moral and religious principle, an affectionate disposition, an instinctive sentiment of delicacy, propriety, and consideration for the feelings of others, and a retiring modesty and simplicity of deportment, as much distinguished and endeared him in the domestic and social relations of life as his literary and

scientific attainments have elevated him to the eminence he held in public estimation. He furnished, indeed, a bright example of the scholar, the gentleman, and the Christian.

LIST OF BOOKS RECEIVED DURING THE MONTH.

The Serpentine as it Is, and as it Ought to Be. By Edward J. Tilt, M.D., &c. London: John Churchill. 1848.
Odd Fellowship as it Is, and as it Ought to Be. By J. C. Hall, M.D., &c.
House Drainage, &c. By T. W. M. Marriott, Barrister-at-Law. London: J. Ollivier. 1848.
The Great London Drainage Plan. By J. J. Morewood. London: Effingham Wilson. 1848.
Remarks on the Forceps, &c. By A. Tyler, M.D. (Reprint from the "Obstetric Record.")
On the Use of Chloroform in Dental Surgery. By J. Chitty Clendon, M.R.C.S. London: S. Highley and H. Baillière. 1849.
Homœopathy Disclosed. By a Non-Professional.
A Treatise on the Cause, Nature, Seat, and Treatment of Cholera. By James Shaw, C.E.L.L. London: Simpkin, Marshall, and Co.
Practical Observations on a Successful Method of Treating Cholera. By C. Patterson, M.D. Dublin: Hodges and Smith. 1848.
Second Letter to Professor Simpson. By Robert Collins, M.D., &c. Dublin: Hodges and Smith. 1848.
Obstetrical Statistics. A Second Letter in Reply to Dr. Collins. By J. Y. Simpson, M.D. Edinburgh: Sutherland and Knox. 1848.
Medical Reporting; or, Case-taking. By Samuel Crompton, Surgeon to Henshaw's Blind Asylum. London: J. Pitman.
A Critical Treatise on the General Paralysis of the Insane. Originally published in the "Journal of Psychological Medicine." By J. M. Winn, M.D., &c. London: J. Churchill. 1848.
Cuvier's Animal Kingdom. Part XI. London: W. S. Orr and Co.
London Journal of Medicine.
Half-yearly Abstract of Medical Sciences. By Dr. Rankin.
Anglo-Jewish Magazine.
Provincial Medical and Surgical Journal.
British Record of Obstetric Medicine, &c.
Cock's Musical Almanack, 1849.
The Veterinary Record.
The Monthly Journal of Medical Sciences.
Monthly Retrospect of the Medical Sciences,
Journal of Public Health.
The Pharmaceutical Journal.
The National Temperance Chronicle.
Dissertation on Scientific Nomenclature, Medical and General. By R. G. Mayne, M.D., &c. London: John Churchill. 1849.
Report of the Proceedings of the Special General Meeting of the Directors of the Medical Annuity Fund.

GOSSIP OF THE WEEK.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practice, on Thursday, 28th Dec., 1848:—John William Leacroft, Derby; David Hope, Deptford Bridge.

OBITUARY.—On the 29th ult., at No. 24, Artillery-place, Finsbury-square, Mr. William Martin, surgeon, R.N., in the 69th year of his age, much respected.

DEATH OF A MEDICAL GENTLEMAN FROM CHOLERA.—It is very affecting to have to record the death of Dr. Templeton, one of our helpers. He came up from Annan, where he had acted as surgeon on the railway—a fine-looking young man, in the prime of health and of usefulness. He was soon stricken by the pestilence. His natural strength carried him through the first violent stages of a severe attack. What is very touching is, he sunk without being able to tell who his relatives are, and where they dwell; and we believe it is not yet known. His body was followed to St. Mary's Churchyard on Wednesday with a peculiar sorrow. —*Dumfries Herald.*

DEATH OF DR. ZAGORSKI.—The Memoirs of the Academy of Sciences of St. Petersburg announce the death of Dr. Zagorski, celebrated for his attainments in anatomy and physiology. He was member of the Academy of St. Petersburg, and Professor of the Medico-Chirurgical Society. He was born on the 9th of August, 1756, in the government of Tscheraigow. He was named Prosector of Anatomy in 1787; he obtained in 1797 the chair of Professor of Anatomy and Physiology in the School of Medicine at Moscow, then to that at St. Petersburg. M. Zagorski has published some works on anatomy and surgery.

SUDDEN DEATH OF DR. GRAY, OF GLASGOW.—This gentleman had been actively engaged in affording his professional aid to those attacked with cholera, when, becoming suddenly ill in his dispensary, he fell down, and almost immediately expired.

WAR OFFICE, Dec. 29.—17th Foot.—Surgeon William Smith from the 64th Foot, to be Surgeon, vice Archer, who exchanges. 64th Foot.—Surgeon George Archer, M.D., from the 17th Foot, to be Surgeon, vice Smith, who exchanges.

POOR-LAW MEDICAL REMUNERATION.—The Board of Guardians of the Huddersfield Union have just inserted an advertisement, requiring a properly-qualified medical gentleman to take charge of the Marsden district of the said Union, comprising the townships of Marsden in Huddersfield, and Marsden in Almondbury, with an aggregate population of 2,402, at the liberal remuneration of £12 per annum—*i.e.*, £1 per month, 4s. 7¼d. per week, or 8d. per day. For this sum the "*legally qualified medical officer*" has to supply all necessary medicines and appliances; and, should he be so indiscreet as to order leeches in any case, he must pay for them out of his own pocket. If the Board of Guardians were to advertise for a sweep to sweep the Workhouse chimneys, could they possibly offer less than £12 per annum?

ANNUAL REPORT OF THE EDINBURGH ROYAL INFIRMARY.—The Annual Meeting of the contributors to the Royal Infirmary took place on Monday, in the Council Chamber, the Lord Provost presiding. Mr. Bell, clerk to the Institution, read the report by the Managers, from the 1st October, 1848. The total number of patients under treatment during the year were 7,763; of these there were dismissed cured, 5,562; relieved, 452; with advice or at their own desire, 130; as irregular or improper, 71; having received no benefit, 56; died in hospital, 1,174; total, 7,445; leaving in the hospital at 1st October, 1848, 318. The number under treatment exceed those treated in the year 1847 by the number of 58. The greatest number of fever cases in the hospital at one time has been 512; the smallest number, (on 2nd September,) 86; the average number, 327; and the average number of cases of every description, 535. The average number of cases of every description in the preceding year was 488, thus showing an average of 47 sick inmates per day less than during the present year. The Managers are quite satisfied that the great proportion which the deaths bear to the number of patients admitted, is owing partly to the system of free admission of all classes, and partly to the fact, that, when the fever was so general, the worst class of cases were brought to the Infirmary, while many were brought, especially from the country, in so advanced a state of disease, that recovery was hopeless. A great majority of the patients here, as well as in Glasgow, were the wandering Irish, among whom the disease was much more prevalent and fatal than among the people of this country. The receipts, from all sources of annual revenue, amount to 9,320*l.* 14s. 2½d., while the expenditure for the same period has been 10,980*l.* 7s. 8½d., leaving a deficiency of 1,656*l.* 12s. 6d., and, even after applying as against this excess of expenditure over income, the whole receipts from legacies and donations, there is a deficiency of 94*l.* 12s. The Report then details the measures adopted by the managers on the appearance of the cholera, and concluded by stating, that the managers and the community at large are deeply indebted to the medical officers of the Institution and their assistants, for their constant and unremitting exertions in their various departments.

MANCHESTER ROYAL INFIRMARY.—The funds of this hospital have just been increased by them unificent donation of 100 guineas from Alexander Glendinning, Esq., of Ashgrove, Kent.

RADCLIFFE INFIRMARY, OXFORD.—In consequence of the lamented death of Mr. Charles Lewis Parker, there is a vacancy in the surgical staff of this Institution. Messrs. Hansard, Hester, and Tyerman are candidates for the appointment. The election will take place on the 1st of February next.

LONDON.—OFFICIAL RETURNS.—The cases reported in London and vicinity, on Monday, were only 4; in Leamington, 7; in Chesham, 42; and the total numbers reported, previous to the 1st of January, to the Board of Health, were 4,514 cases, 2,154 deaths, and 772 recoveries.

CHOLERA AT THE INFANT PAUPER ASYLUM, TOOTING.—Considerable alarm has been occasioned by information forwarded to the Boards of Guardians of the Unions of the outbreak of cholera at Mr. Dronet's Infant Poor Establishment, at Tooting. Up to Friday last, the children, upwards of 1,400 in number, exhibited a healthy appearance, when some of them were attacked with diarrhœa; several of the cases assumed the appearance of Asiatic cholera, and in a few cases death ensued in the space of three hours. Fifty-seven cases, of which twelve proved fatal, have occurred. The patients were examined with the greatest attention; and although each individual case did not exhibit all the appearances and forms of Asiatic cholera, still, taking the cases collectively, the medical gentlemen agreed in opinion, that there was every symptom belonging to the malignant form of the disease. The bodies of the children turned perfectly blue after, and in some instances before death. An inspection took place of the establishment, and an inquiry into the nature of the food, water, &c., given to the children was gone into. The opinion of the medical gentlemen was, that the disease arose from atmospheric poison.

THE CHOLERA IN SCOTLAND.—EDINBURGH AND VICINITY.—The cases reported during the week have been 26. The total numbers are:—Cases, 744; deaths, 471; and recoveries, 181. In Dalkeith, on Monday, 3 new cases were reported; and in the Portobello district there was 1 new case on Saturday, and another on Sunday. In Inveresk, on Tuesday, there were 3 new cases, and 1 death. In Haddington, there have been in all 30 cases and 10 deaths since the commencement of the disease.

GLASGOW.—Up to Monday night, no less than 646 cases, and 316 deaths; making a total, since November 11th, of 1,642 cases, 766 deaths, and 265 recoveries, with 611 cases remaining under treatment.

IN RUTHERGLEN, there have been, since the 12th December, 59 deaths, with 47 recoveries; but the disease is now abating there. Several cases have occurred in Airdrie and Holytown, 1 in Barrhead, and 16 in Dumbarton, with 7 deaths. In Coatbridge, 86 cases have been reported since our last. In Kelso, the total number of cases now amounts to 61, and the deaths to 31. 13 cases have occurred at Cumnock, 1 at Rothesay, and 1 at Hamilton. In Jedburgh, many cases have occurred, but were arrested in the first stages. 7 cases have occurred at Enterkinfoot, a village some miles north of Thornhill. In Dumfries, the total number now amounts to 428 cases, 148 deaths. There were reported to the Board of Health in London, on the 1st of January, from Dumfries and Maxwelltown, 9 cases; Bo'ness, 1; Greenock, 3; Larkhall, 2; Dumbarton, 1; Old Monkland, 21; Rothesay, 10; and Neilston, 1.

CHOLERA IN AMERICA.—According to the medical report of the Office of Health at Staten Island, the cholera was on the increase, but it was of a mild type. A vessel had arrived at Baltimore, from Rotterdam, with several cases on board.

CHOLERA IN THE EAST.—The cholera still prevailed in St. Jean d'Acre, Alexandretta, Latakia, and Tripoli, but with less intensity.

MIDDLESEX HOSPITAL.—The ventilation of the wards is effected by dividing each window into three parts, which turn downwards and inwards by means of a horizontal handle, working upon a semi-circular plate and upright iron rod, so that from half an inch to six inches of the three divisions of each window can be opened, and thus the cold air passes upward, and does not beat down upon the sick-bed. Any effluvia from sinks, &c., is precluded from the wards by means of double windows, arranged so that, when the inner one is shut down, the outer one opens itself, and exposes the sink to the

external air. Each floor is supplied with a sister's room, bath-room, scullery, &c., and the baths can be administered, to the number of 100 per diem, at any temperature. The serious effect of incrustation in boilers, pipes, &c., and the very great increase in the consumption of fuel which arises therefrom, has been long known to those who use the London water, and it has been felt also in this Institution. In order to remedy this expensive inconvenience, the incrustation is made to take place, if it should occur at all, outside the pipes and boilers, and not inside, by the following simple process :—A wrought iron steam-boiler, of an improved description, in the basement, performs the following operations with a consumption of about 4 cwt. of coal per diem, worked at a pressure of ten pounds to the square inch. First.—It throws its steam to the highest floor, and becomes condensed in a coil of iron pipe, which is fixed in a cold-water tank containing one thousand gallons of water, and the earthy deposit, if any, takes place on the outer side of the heating surface, and is from thence easily removed. The condensed water then returns to the steam-boiler, and thereby prevents that incrustation which always arises from a boiler being fed with new or fresh water. Secondly.—This boiler supplies the steam cooking apparatus, and the various apparatus in the laboratory for distilled waters, decoctions, &c. It further supplies an apparatus for warming the out-patients' rooms and passages, and it furnishes hot water, by means of its steam, for these rooms. Thirdly.—The same boiler furnishes the entire supply for the washhouses and laundry, including the coppers for boiling the linen ; and the same apparatus is employed in the ventilation of the wards, as well as to supply hot air to the drying closet. There are two ventilating apparatus, one attached to each wing. These are capable of extracting ten thousand feet of impure air per minute from the wards, &c., to which they are attached. The drying of the linen of the hospital is effected in a closet maintained at a temperature of 200° Fahrenheit, through which, by means of the ventilating apparatus, a strong and continuous current of air is passed. The operating theatre and passages thereto are maintained at a uniform temperature of 60° by means of a heating apparatus, attached to one of the ordinary fire-places, in an adjoining ward. A fumigating oven is fixed in the basement, for the destruction of vermin ; and it is so arranged, that the waste heat passing therefrom heats an adjoining room, intended for drying the mattresses, at a temperature of upwards of 100°. The ward floors are boarded with desiccated wood, and some of the walls have been finished with parian cement—a most admirable improvement upon the absorbing surface of the common plaster walls, as it must tend to prevent the spread of epidemics, as erysipelas, &c., since the surface is as glossy and smooth as a piece of marble. The composition of this solid and quasi-petrified wall is gypsum and boracic acid, and, with the exception of the basement of the new House of Commons, it is the first time that it has been introduced into our public buildings. Many other valuable alterations and improvements have been adopted, which it is hoped will render this Charity as efficient in its workings for the alleviation of the sufferings of its poor inmates, as the liberality of the Governors desire it should be the means, under Providence, of accomplishing.

Medical Profession in Paris.—There are 1,389 medical practitioners in Paris, being 53 less than in 1847. Of the 1,442 practitioners mentioned in the general list for 1847, 56 have died, and 112 have left Paris. In the list for 1849, there are 114 new names. Nine medical men in Paris have been elected Representatives of the people. 398 are members of the Legion of Honour: viz., 7 commanders, 50 officers, and 341 chevaliers.

The Hospitals of Paris.—The General Administration of the civil hospitals in Paris has published an account of its receipts and expenditure in 1847. Those establishments, sixteen in number, contain 17,583 beds. In the course of that year 88,493 patients were admitted into them ; namely, in the medical section, 66,048, of whom 27,264 were men, 27,562 women, 5,715 boys, and 5,507 girls ; and in the surgical section 23,292, of whom 14,951 were men, 7,083 women, 676 boys, and 582 girls. The number of sick attended in the hospitals was 5,800 daily, and the average duration of their sojourn in them was 23 73-100ths days in the medical section, and 31 81-100ths days in the surgical ection. The deaths were in the proportion of one to 10, namely, 8,317—in the medical section 7,190, of whom 3,004 were men, 2,769 women, 718 boys, and 699 girls ; and, in the surgical section, 1,127, of whom 658 were men, 319 women, 72 boys, and 78 girls. No less than 214,552 persons were attended or relieved in 1847, namely, 88,493 in the hospitals ; 9,253 old men and women, 3,437 insane, 27,903 foundlings and orphans ; of whom 6,157 in the *hospices*, and 21,746 out of doors, and 85,468 indigent poor, derived assistance from the *bureaux de bienfaisance*. The expenditures of the Administration amounted, in 1847, to 14,970,211 frs., or 1,451,987 frs. more than in 1846.

The Number of Medical Men in Lombardy.—In a population of 2,670,833 there are computed to be 1,455 doctors of medicine and surgery, 343 doctors of medicine, 85 doctors of surgery, 272 masters in surgery, petty surgeons, and phlebotomists, 954 pharmaciens, 1,781 accoucheurs, and 180 veterinary surgeons ; amounting in all to the large number of 5,070, which does not include the military physicians and surgeons. The number of medical men is not much less in the country than in the towns. Of the 1,455 doctors in medicine and surgery, 790 live in the country ; of the 343 doctors in medicine, 125 are provincials ; 33 doctors in surgery, 168 petty surgeons, 795 pharmaciens, 1,191 accoucheurs, and 57 veterinary surgeons.

Medical Statistics of the Camp of the Gironde.—M. Rollet has published an interesting work upon the sanitary condition of the camp which was established in the neighbourhood of Bordeaux in August, 1845. Of 8,881 soldiers, of which 6,684 were infantry, 1,557 cavalry, and 312 artillery, there were 1,182 on the sick list—391 affected with diarrhœa and dysentery, 283 with intermittent fevers of different types, 55 with bronchitis, and 36 with gastro-enteritis. The diseases occurred in a very large proportion amongst the older soldiers. The principal cases of dysentery occurred amongst the infantry.

Beneficence.—The concert given for raising the funds towards the erection of an additional wing to the Manchester Royal Infirmary produced, through the talents of Jenny Lind, the enormous sum of nearly £3,000. At Birmingham, also, she gave a concert in aid of the funds of the Queen's Hospital, founded by Sands Cox, Esq., which produced £1,300.

Medical Fees in Sardinia.—The fees of physicians and surgeons in this kingdom are fixed by a tariff of the 28th November, 1841, at the following :—A simple visit is 9d., increasing according to the time of day or night, distance and length of visit, to about 8s. In surgery the fees vary, according to the degree of the surgeon, as well as the time, distance, and operation, from 6d. to 8s. ; and in the Bassa Chirurgia degree (the phlebotomists and dentists) the extent of whose occupations are defined by law, petty distinctions in the fees are actually made between bleeding in the arm, hand, or foot, the prices being 2½d., 3d., and 4½d. respectively ; and it also costs 2½d. to have a tooth extracted, and 4½d. to have a root or fang of it removed, according to the imperial laws of the King of Sardinia.

Variola Ovis.—This disease has all the characteristics of the small-pox in man, and appears a variation of the disease which attacks the cow, very seldom the horse, sometimes the pig, and has been known among other animals ; it is found in animals with pustules of the same nature as in man. From the report of the experiments in France, those who have eaten mutton in this state of disease have not been attacked with any immediate illness. It is remarked, that, when this disease attacks a flock of sheep, it has sometimes three distinct attacks : the first usually benign, lasting twenty to thirty days ; the second shortly follows the first, is malignant, lasting about a month. When two-thirds of the flock will have been attacked, the third attack follows when the other third of the flock are subjected to the disease, but of the benignant kind ; these successive attacks last about three months.

Antediluvian Rhinoceros.—M. Brandt, a zoologist, has published some microscopical observations upon the remains of food found by him in the cavities of the teeth of an antediluvian rhinoceros, of which the museum of St. Petersburgh possesses an entire cranium covered with the skin. From these researches, it appears, that this species of animal feed upon the leaves and fruits of fir-trees ; and it must, in consequence, be supposed, that those great fossil species found in the arctic regions of the ancient continent, had never lived in a tropical climate. The tufted hair with which these were covered, and the examples of Mammoths found standing, lead us to think that these species really lived where their remains are now found,—and that all the geological hypotheses relative to the sudden changes of temperature in the districts inhabited formerly by these animals, and to the inundations by which their remains were transported from their primitive country, must be received with some caution.

MORTALITY TABLE.

For the Week ending Saturday, Dec. 30, 1848.

Causes of Death.	Total.	Average of Five Autumns.
All Causes	1,403	1,154
Specified Causes	1,398	1,149
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	368	270
Sporadic Diseases :		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	57	52
Tubercular Diseases	199	184
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.....	165	127
Diseases of the Heart and Blood-vessels.....	47	38
Diseases of the Lungs, and of the other Organs of Respiration	223	222
Diseases of the Stomach, Liver, and other Organs of Digestion	71	67
Diseases of the Kidneys, &c.	13	12
Childbirth, Diseases of the Uterus, &c.....	15	14
Rheumatism, Diseases of the Bones, Joints, &c.....	7	8
Diseases of the Skin, Cellular Tissue, &c.	1	2
Malformations	1	3
Premature Birth.....	20	23
Atrophy.....	24	19
Age.....	59	64
Sudden	37	13
Violence, Privation, Cold, and Intemperance	91	32
Causes not Specified	5	5

TO CORRESPONDENTS.

"Kaf" is thanked for his communication.

"Mr. William Price, Cardiff."—The request shall be complied with.

"Mr. W. H. Fitzpatrick, Liverpool," will see that we have not overlooked his communication.

The Report of the Meeting of the General Medical Annuity Fund shall appear next week.

"Dr. Kidd, Brussels."—Communication received.

"Dr. Bushnan" is thanked for his obliging letter.

"Alpha."—The diploma cannot be obtained without examination.

"Mr. Reid, Comrie, Perthshire."—We will endeavour to notice the communication next week.

"The Editor of the 'London Journal of Medicine.'"—The exchange is accepted.

"Chirurgus Rurls."—We know of no better work than Blackstone's Commentaries.

"Dr. J. Flynn, Clonmel," is thanked for his communication. A private letter shall be sent in the course of the week.

We are compelled, from press of matter, to postpone answering our other correspondents till next week.

ORIGINAL LECTURES.

LECTURES ON FEVER.

BEING AN ATTEMPT TO DEVELOPE MORE DEFINITE VIEWS OF ITS NATURE AND TREATMENT, BY THE CONSIDERATION OF THE PHENOMENA, AS OBSERVED IN THE PRACTICE OF MEDICINE AND SURGERY; BEING IN CONTINUATION OF "MEDICINE AND SURGERY ONE INDUCTIVE SCIENCE."

By GEO. MACILWAIN, F.R.C.S., Author of the above-mentioned Work, "Unity of the Body," "Tumors," &c., &c., &c.

LECTURE II.

OF CONTINUED FEVER.

Variety of Fevers Instructive.—Intermittent and Continued Fevers Contrasted.—Access of Continued Fever, different forms of.—Influence of Residence, Race, &c.—Relapse.—Yellow Fever, Dr. Bartlett's Definition.—Hectic.—Surgical Phenomena, as observed in Erysipelas, Compound Fractures, Carbuncle, Affections of Joints, Lumbar Abscess, &c.—Mr. Abernethy.

In proceeding with our collection of facts, we shall often have occasion to remark, how teachingly the various phenomena are set before us, and how essential (constituted as our minds are) that apparently puzzling variety in the operations of Nature is to a successful interpretation of her laws. The manner in which the most formal intermittents are graduated off, as it were, into the "continued" kinds of fever, through endless forms of a more remittent character,—the manner in which these varieties (however more abundant in certain climates, and certain ferms, as the yellow, jungle, and bilious fevers of certain parts of Asia, America, the West Indies, &c.,) are *everywhere* supplied, *obliges* those who really observe, to look at the subject in so many lights, as it were, that they must see many things which would otherwise escape notice. Nor are the circumstances which sometimes appear to *induce* many of these varieties less instructive than the varieties themselves, as we shall have to show in the proper place. Perhaps, there is no one form which connects, as it were in a chain, the intermittent with the continued varieties, more than the yellow fever, of which presently we will add a sketch. Practically, we can only distinguish remittent fever from intermittent on the one hand, and continued fever on the other, at a point where it may be said to be equidistant from both.

Continued fever is, indeed, instructively contrasted with intermittent. The sudden eruption, the frequent absence of all premonitory signs, the great violence, the threatening aspect—and, in hot climates, the rapid destructiveness—the striking and (abstractedly viewed) the wonderfully perfect manner in which the health is apparently restored at the conclusion of the paroxysm, in the intermittent; are all calculated to obscure and mystify that which it is very necessary clearly to discern. All this, therefore, is beautifully contrasted in continued fever, by the very general and varied ailments which precede the more gradual development of phenomena, which thus more slowly disclose to us the several functional disturbances which, in different cases, characterize that disease. It is admitted, of course, that the character of the access may be changed; that intermittent may occur very gradually, and continued fever all at once, as we shall see; nay, more, we shall have good reason to doubt *the really sudden* access of any form; but I speak conventionally of what is called the disease.

In continued fever, then, there is generally a very *distinctly ascertainable* disordered condition of the body previously to the occurrence of fever, and in some cases the two merge so gradually the one into the other, that it is impossible to say *when* the fever (conventionally so called) began. Every one must have heard inquiries on the commencement of fever answered in this way:—"Why, Sir, he has not been well for some time; he has complained that he has had a good deal of this or that; his mind has been easily fatigued; oh, sir, he has found his work very heavy; he has not seemed to relish his food, or his appetite has fallen off, or he has looked very ill lately." These, and a multitude of similar answers must be familiar to every one in connexion with the history of patients with continued fever. All this is often of great value, as frequently conducting us, by means hereafter to be more particularly described, to the really previous condition of the patient, on which the special treatment of the case so much depends. The immediate access of continued fever, like all other forms, varies; but there is almost always chilliness, succeeded by heat, and that followed by perspiration. In many cases, the chilliness may hardly have been observed, may have been very slight, or, so far as can be ascertained, may not have occurred. The occurrence of anything like marked perspiration is very irregular. A patient may be for days without any sensible perspiration, or with only very short and transient manifestations, if any. In other cases, again, a continued fever may commence with a paroxysm, as formal and well matured as a severe intermittent.

In some cases the chill is quickly succeeded by violent re action. There is great disturbance and excitement of the vascular system—the heart and arteries take the lead, as it were, of the other symptoms, to such a degree as to suggest, too successfully, it is to be feared, in many cases, the idea that all depend on vascular excitement. The pulse is full, strong—perhaps hard, the face flushed, the mind sensitive and vigilant, a state usually simulative of greater power than is actually present. This may *gradually* subside, leaving the pulse calm, the tongue moist and cleaning at its edges, with the subsidence of some secretion which had been in apparent excess, or more commonly with the recurrence of some one which had appeared deficient, sometimes with both, and these may be the steadily and daily progressive precursors of convalescence, as they were the first indications of it. On the other hand, the fever having been for a time characterized by an unwonted activity of the heart and arteries, so as in some cases to have appeared to justify copious abstractions of blood; in other cases more moderate depletion; and again, in cases where there had been no bleeding at all, shall gradually pass into the following state—with or without those indications of improvement just mentioned:—The tongue becomes more furred, the colour is darker, it is probably preternaturally red, and at the same time there is a marked diminution in the power of the pulse. Or the tongue, perhaps, having become partially moist, and even cleansed, especially at its edges, shall again become coated with white, brown, or yellow secretion, more or less dry, and sometimes of a darkish red colour. The condition of the nervous system, which had consisted only of a kind of vigilant excitability, with, perhaps, some pain in the head, shall become more disturbed. There is a disposition to wander, or talk incoherently, to give irrelevant answers to questions; in short, there is delirium. The tongue becoming still darker, the teeth are covered with sordes, the eye first glistening, then begins to assume a dull aspect; coincidently with these symptoms, the pulse becomes more frequent, excited, small, and feeble,—all signs of declining power. We here see two types of fever, as they are called; the one in which an excitement of the vascular system only, retires coincidently, as it were, with the subsidence of the disease; and another, in which that state of excitement does not so much subside as become changed into one which retains, indeed, sufficient evidence of excitement, with scarcely any evidence of power. The two more or less distinctly conjoined seem to constitute the most common form of continued fever throughout Europe and America; and usually designated, I believe, by the term, typhoid fever; but, as it appears to me, with as little regard for the requisitions of a scientific nomenclature as can be readily imagined. It has been already observed, that continued fever may occur as suddenly, and with as formal a paroxysm as an ordinary intermittent. It may occur also very suddenly, but in a very different manner. All at once a patient may feel very weak and ill; the very first symptom is a great prostration of strength. It seems like a person on whom some poison has acted; and this may happen when the previous circumstances shall have afforded nothing suggesting any source of such agent, and when so far as has been ascertained, he shall not have been exposed to any source of supposed contagion or infection. There may be no shivering, but faintness, weak and frequent pulse, perhaps a little nausea. On being put to bed, after a time however, re-action takes place, the pulse becomes frequent and excited; the skin at length acts; the tongue is furred, but moist; there may be some pain in the head or other part; the patient is disposed to lie on the back, and there is every appearance of debility. Now, if on re action taking place, or on the occurrence of some secretion, the patient does not begin to rally, he soon passes into that state indicative of declining power which I have already mentioned as supervening on a fever, which, in its commencement, was of a more excited, or, as it is called, inflammatory kind. Now, these appear to be the different kinds of febrile disturbance to which Cullen gave the names of synocha, sypochus, typhus, &c.; but names are very mischievous things in science. If, for example, they describe parts of things as wholes, or are expressive of *opinions* instead of facts, they are apt to obscure their real relations, to lull investigation, to misdirect it, or to paralyse effort, by inducing the mind to repose its conviction on the dicta of authority, which should be derived only from the study of nature. Cullen, for example, thus defines the inflammatory form, "*Calor, plurimum auctus; pulsus, frequens, validus, et durus; sensoris functiones parum turbatæ.*" Surely nothing can be more vague than this. I desire to speak of Cullen as I feel, that is, with the highest possible respect; but I must think that his desire to classify has, at one time or other, led a good many of us to entertain as truth that which experience has obliged us to dismiss as error.

There is an interesting fact in regard to many fevers, both of the continued as well as the remittent and intermittent forms, which requires to be noticed. It is very general, but not without exception. I mean, that persons newly arrived at the place are much more subject than natives, and that length of residence, and the occurrence of the fever, respectively, confer something approaching to an immunity from an attack, or diminish the probability of further danger. The next is a principle more extensively seen, viz., the so-called influence of race; we shall have some curious examples of this as we proceed. In yellow fever, for example, negroes appear, in many instances, to present remarkable exemptions. Many of the periodical fevers of warm climates, or the more continued yellow fever, may be extremely prevalent and fatal, and not a single negro attacked; or a smaller number may, in another case, become affected, but with scarcely anything approaching to the same severity or danger. As these are facts which we shall have occasion to consider, let us, for the present, simply note them down; and recollect that predisposition and idiosyncracy, &c., are mere words, unless we can show on what they depend. In all fevers it is observed that, occasionally, during a convalescence that shall have been, to all appearance, progressing in the most desirable manner, the patient shall be again indisposed, and the fever shall recur. These relapses, as they are termed, are always very serious, and, too frequently, fatal occurrences. They are preceded by various circumstances, but by none so frequently, perhaps, as indiscretions in diet.

I have said little concerning individual functions; for the chief fact that we gather is, that there are interminable differences in different fevers, and in different persons, in the fever which may be prevailing. There is always evidence of disturbed function, generally a marked tendency to deficient secretion, sometimes followed by excess. In other cases, excessive secretion is one of the first symptoms. So of the tongue and pulse, there is no state which is universal; you may have a tongue moist, dry, yellow, white, red, brownish, black, all sorts of colours, (never, strictly speaking, clear, I think); so the pulse may be, and generally is, frequent, but there are all sorts of degrees, down to the natural standard, or even below it. I had a patient myself, not long since, with a very singular condition of organs, where, with a curious state of febrile dis-

turbance, the pulse was only fifty; sometimes the respiratory organs are early and greatly disturbed, sometimes irritability of the stomach or bowels is a leading symptom; sometimes tenderness of the abdomen, simulative of inflammation; certain eruptive and other actions of the skin will be spoken of in connexion with the morbid anatomy; in fact, I know of no one disturbance of organs which may not be present or may not be absent.

This diversity of phenomena, when rightly viewed, becomes, as I shall endeavour to show, very instructive. We shall try, too, to do something with the difficult question as to the real points of difference in what are called different fevers. In the meantime, let us go on with the facts. Now, intermittents and remittents of the worst forms seem to occur chiefly in hot climates, as in the East and West Indies, the warmer parts of America, and so on; fevers of more or less of a continued form are most common in the British Islands, or the European continent, and, as I gather from Dr. Bartlett's excellent account, in the more temperate portions of the United States. Yellow fever seems to be something like a link between intermittents and more continued fevers; and as it is very much to our purpose to glance at fever wherever and however it occurs, let us take the sketch from the report of one who writes with a singular freedom from prejudice or preconceived opinion.

Dr. Bartlett, after giving very clear and interesting narratives of periodical fevers, as observed in various parts, especially in different districts of the Mississippi River, gives the following digest of his inquiry into the facts of the yellow fever. With a candour worthy of all imitation, he says that he has not observed yellow fever himself; but his report is drawn up with so much care and impartiality that I cannot do better than copy his statement *ipissimis verbis*. I may observe, that I am indebted for the perusal of Dr. Bartlett's work to the kindness of Dr. Dudley, of Lexington, whose zeal in the cause of science cannot but excite sentiments of high respect and esteem.

"The yellow fever," says Dr. Bartlett (a), "is an acute affection, occurring at all ages, but much more frequently during the middle and active period of life, than either earlier or later; attacking, in a large majority of instances, persons who are not permanent residents in the places where it prevails; sometimes extending, however, especially in localities where it is of rare occurrence, to such residents; rarely occurring twice in the same person; much more common in the white than in the negro race; generally milder in its character amongst women and children than amongst men; confined to certain geographical localities, and especially to commercial sea-ports in hot climates; prevailing most extensively during the latter part of the hot season; often epidemic, but sometimes sporadic in its appearance; not capable of transmission from one person to another in *a pure atmosphere*; depending for its essential cause upon a poison of terrestial origin, the nature and composition of which are entirely unknown,—which poison may be shut up in small and close apartments, in clothes, bedding, and so on, and transported from one place to another, and which is destroyed by a freezing temperature; sudden in its access, commencing with an initiatory chill, ordinarily of moderate severity, and of short duration, the latter accompanied with acute and violent pains in the head, back, and limbs, or immediately followed by them; then by a red suffusion of the eyes, moderate heat of the skin, and moderate acceleration of the pulse, loss of appetite, and thirst; a moist white villous tongue, with rosy tips and edges,—these febrile phenomena diminishing in activity, and mostly disappearing, in from twenty to thirty-six hours; the first stage of the disease, thus characterized, passing in mild cases into convalescence, but in grave cases being followed, after an interval of apparent but deceptive amelioration, by nausea and vomiting—the matter ejected from the stomach, in cases that are to terminate fatally, resembling coffee grounds; black or dark coloured stools, epigastric distress, general restlessness and jactitation; sighing respiration, hiccough, a yellow colour of the skin, coldness of the extremities, gradually extending to the trunk, and finally by death; the mind usually remaining free, but apathetic and indifferent up to the close of life; which symptoms *differ very widely in their degree of severity*, and *especially in their number and combination* in different cases, thus giving rise to different varieties and grades of the disease, which symptoms furthermore may either subside and disappear in the course of a few days from the time of their commencement, or may terminate with death between the third and seventh day of the disease, the bodies of patients exhibiting, on examination after death, in most cases, a yellow or buff colour of the liver, with dryness of its tissue; black spots or masses, more or less numerous, in the lungs; softness and flabbiness of the substance of the heart, and nearly in all cases unusual thinness and fluidity of the blood; and redness, mamellonation changes in the thickness, and softening one or more of the mucous membranes of the stomach; this organ and the intestines usually containing a considerable quantity of a very dark or black fluid, or semi-fluid matter; which disease differs essentially from all others, in its causes, its symptoms, and its lesions; and it is only, to a moderate extent, at least, in its graver forms, under the control of art."

(a) On the History, Diagnosis, and Treatment of the "Fevers of the United States," by Elisha Bartlett, M.D. Philadelphia: Leonard Blanchard.

When I remarked, that notwithstanding the propriety of the terms intermittent and continued fever, yet, that no fever intermitted, so as to leave the patient well, and none was so continued as to be absolutely without some remission, I believe I stated that in which all men of experience will agree; yet, we occasionally see febrile disturbances of a peculiar kind, (and highly essential to our inquiry is it not to omit them,) in which the febrile state is so persistent, that the remissions occur as very irregular and ill-developec exceptions to the rule. Certainly, it is not true in every case, nor, perhaps, in the majority, but is, nevertheless, of frequent occurrence. The febrile disturbance to which I here allude is what is called hectic, and I hope to show you by-and-by, that, like most other types, it brings its contribution to those elements which together I hope will constitute the demonstration we seek as to the nature of fever. It is generally most familiarly known and associated with the latter stages of diseases of the lungs; but, there are many forms of hectic not *necessarily* implying disease of these or any of the viscera. This form of fever is characterised by frequent pulse, irregular alternations of hot and dry skin, with states of more or less profuse perspiration; these symptoms being interspersed with occasional chills of all possible degrees, in different cases, from the slightest tremor up to actual and severe rigors. The appetite is irregular, generally deficient; the urine generally liberal, but pale. Bowels sometimes natural, sometimes even costive, but usually with a disposition to laxity. There is frequently an attempt at determination to the surface of a more permanent kind, in a sort of rose-coloured or crimson blush on the face; but all these operations of the skin are extremely uncertain and irregular. Still, the *tendency* is towards heat and dryness at *night*, and perspiration towards *morning*; but, when the stage of excitement has not been marked, or scarcely fairly developed, nay, even when hardly observable, the secretion from the skin may be still profuse or excessive. This absence of relation between what is the ill-defined previous exacerbation and the excessive secretion, is, I think, a peculiar feature in what is called hectic fever, under whatever circumstances it occurs. The pulse varies, but is almost always weak and frequent, sometimes *habitually* rapid. The appetite usually falls off, or is very uncertain; the patient becomes very thin; there is a peculiar expression of countenance; a certain sharpening of the features, sometimes a glassiness of eye, a large pupil, a peculiar inexpressiveness in the organ,—are striking accompaniments.

We shall have occasion almost immediately to recur to this hectic fever, for we have plenty of continued fever in surgery; and let us, for our first illustration, take what we call erysipelas. In speaking of this form of disturbance in the eleventh discourse,(a) after describing the local phenomena of phlegmoid erysipelas, I added, that the "constitutional excitement varied in different cases, but that in general it was severe. The complaint is preceded or accompanied by cold or shivering, and inflammatory excitement supervenes; the pulse becomes frequent, short, and bounding, (not often hard, I think); there is thirst, dry or foul tongue, want of sleep, often severe pain in the head, back, or both, and all the symptoms of fever, loss of appetite, and almost always a vitiated state of the secretions; the bowels are generally costive,—but to this there are exceptions. If the erysipelas is to proceed, this state of things soon becomes more alarming; the brain is disturbed, the pulse falters as to power, whilst its frequency is continued, or even increased; the patient becomes delirious; there is a dark state of tongue, sometimes red and dry, but soon becoming blackish; often involuntary twitchings of the muscles; and death closes the scene. In other cases, the fever having reached almost any height is found slowly to subside, the tongue gradually becomes moist and clean, the secretions natural, and the patient recovers more or less rapidly, &c. &c. Again, it is observed, that the severity of the fever and erysipelas is not always commensurate with the local mischief. Examination of the abdomen will sometimes detect tenderness in some parts, and not unfrequently in the region of the liver."

Now, I believe the preceding description is a case with which every surgeon is familiar; and yet it would do just as well in one part for many cases of inflammatory, and in another for a certain phase of what is called typhus fever.

No doubt there are seen every day, in the practice of surgery, febrile states, which seem characterised by great excitement, by great debility, and others where the two, at different periods, occur in the same case. Severe injuries exemplify this very strikingly. So, sometimes, do very slight wounds, punctures, or scratches in dissection, &c., of the which erysipelas is a sufficiently comprehensive type. Let us take the case of compound fracture, and hear what a philosophical surgeon says of it,—I mean Mr. Abernethy:—"A man (says he) having met with a compound fracture, and having had his limb put right, is in the following condition:—There will be an unusual excitement of the whole system, characterised by the following symptoms,—The pulse is increased in all its attributes; it is more strong, more full, more firm, and more frequent than usual; the secretions are diminished; urine scanty and high coloured; skin dry, and rather hot; tongue dryish and white; bowels have a tendency to costiveness; in short, it seems as if all the secretions were diminished. The nervous system is excited; the man is vigilant; he does not sleep, or if he forgets himself and does for a short time, he wakes suddenly in agitation and alarm." He goes on to say that there is defective appetite, thirst; if there be any disposition to take food it is of the vegetable kind, or acids, &c. After observing, that if vital organs be injured, the pulse will be frequent but not strong, and that fever is not essential to suppuration, he proceeds:—"When suppuration is established how different is the state of the patient! His pulse is, indeed, more frequent than natural; but it is neither hard, nor strong, nor full. His skin is moist, apt to break out into sweat from slight causes, such as taking food; after sleeping, also, he wakes in a perspiration. What is the state of his urine? It is more copious, sometimes even pale. His tongue is moist and clean. There is no longer any tendency to costiveness. He is languid, disposed to sleep, and appears conscious of weakness." What shall we say of this man? He is not well, and yet we cannot define the nature of his illness. Mr. Abernethy then proceeds with his case, and says, that if things do not go on well, "the pulse will become

(a) "Medicine and Surgery, One Inductive Science."

frequent, without strength. There are morning and evening sweats, such as Cullen describes, who has taken his description from the pulmonary hectic. Bowels become purged," &c.

Lastly, Mr. Abernethy speaks of another state. He says, "the patient may go on badly, the discharge from the injured part may increase, &c., when, on a *sudden*, it may become much less, or cease. The wound becomes dry, and inflammation, somewhat of an erysipelatous character, is set up. Corresponding with this change is an equally important change in the state of the constitutional malady. The pulse becomes strong and firm again, there is a burning sensation on the skin, and, *occasionally*, considerable perspiration. The urine is again scanty and high coloured; the tongue dry, and covered with a brown fur. There is great excitement of the nervous system, indicated by wandering of the mind, agitation, delirium, picking of the bed-clothes, subsultus tendinum," (twitching of the muscles, as I have called it,) "and so on." Mr. Hunter, he says, calls these symptoms of dissolution; but still they are not necessarily so. The disease, says Abernethy, is as like typhus as possible, and then would follow this significant remark. "I would venture to lay a wager," he would say, "I would take any physician to my patient, and that if I asked him, when he had seen the patient, felt his pulse, and so on, what was his disease? that the doctor would say, 'Decided typhus, Sir;'" yes, but Mr. Abernethy would archly add, "this patient doctor, has a compound fracture." "In short," said Mr. Abernethy, "you cannot distinguish it from typhus fever." This is the condition of which Mr. Abernethy said, "you may, if you like, call it sympathetic typhoid; I call it symyathetic irritative fever;" that is, he called it from certain obvious facts, which will retain their value whatever may be our future improved knowledge of their relations. All Mr. Abernethy's remarks are most interesting; they always display a perceptivity which it requires a great deal of practical observation thoroughly to understand or appreciate. The analogies he has above referred to, must, for the moment, speak for themselves.

The point at which he commences his description of the phenomena of compound fractures, necessarily excludes one which is necessary to our subject. All severe accidents at first produce a certain state of shock. There is generally paleness, coldness, chilliness, or other signs of depression; and, if important organs be injured, few things vary more than the time which this state of depression endures; or the patient may *never* recover from it; which, as regards the analogy it offers, you will find to be instructive. I could multiply these illustrations from surgery, and take them from different authors, as so many concurrent witnesses; but, these types must serve us. I might tell you, that I had seen a man in this country with carbuncle and with a fever which would have served equally well as a description of the plague, or for some forms of what have been called typhus. I should, indeed, have rather said anthrax, than carbuncle; for such I was disposed to consider it, because it entirely agreed with the usual description I had heard Mr. Abernethy give of the complaint, and because a gentleman who had seen a good deal of that form of disease in Egypt, in patients labouring under the plague, declared it to be a true specimen of anthrax. Lastly, in surgery we have febrile phenomena of continued form, occurring both suddenly and gradually. In all accidents, when important organs are injured, there is a state of collapse, with cold and shivering, perhaps sickness, as the immediate result, succeeded by reaction, in which the kind and continuance of the disturbance depends on the state of the injured organs, but which is characterized by increased action of the heart and arteries, alternating conditions of skin and other febrile phenomena, not at all distinguishable from certain cases where no mechanical injury has occurred.

In *many cases* of erysipelas, carbuncle, gout, we have a continued fever ushered in by many premonitory symptoms, such as precede many examples of continued fever, ordinarily so called. We shall by-and-by find many things in hectic fever very useful. As I have said, it is not at all confined to affections of the viscera. Lumbar abscess, and still more teachingly many diseases of joints, suggest to us very interesting relations of this hectic fever, which have not only already induced, in certain surgical cases, very successful modes of practice, but which will lend us a good deal of help in our endeavours to discover the nature of fever in general. As we are gradually getting nearer our work, which is to inquire into the real nature of fever, I will at once caution you against the terms idiopathic and symptomatic fever, until we shall have carefully considered them—a division which I fear has been mischievous, and which, as it appears to me, ought never to have been thought of until the grounds on which it rests and the suppressed hypothetical premiss it implies had been fully ascertained and clearly demonstrated, as I shall show in the proper place. We shall now, then, hope to proceed a little more quickly with our facts, and consider such as are furnished by small pox, scarlatina, measles, puerperal fever, and plague.

A LECTURE

ON THE SANITARY QUESTION,

ESPECIALLY AS IT IS CONNECTED WITH EPIDEMIC CHOLERA.

DELIVERED AT ST. THOMAS'S HOSPITAL.

By R. D. GRAINGER, Esq., F.R.S., one of the Commissioners appointed by Government to visit the Continental Cities where Cholera has prevailed.

I am sorry that the first words which I have to utter in this assembly are those to solicit your kind indulgence, as, in consequence of having been actively engaged during the last few days, and as I am also suffering from indisposition and fatigue, I have not had sufficient time to devote to the subject which I have to bring under your consideration.

I think it may be said, that the sanitary question is one of the most important which can possibly attract the attention of those who are devoted to the cultivation of medical science. I need not say, in an assembly like this, where so many of my medical brethren are present, that we often have to regret that our best directed efforts, guided by the skill and science of the day, are so frequently insufficient to secure the alleviation of human suffering, or to prevent the spread of disease. It must, indeed, be apparent to all who have watched the progress of late inquiries, that the great questions which concern the welfare and happiness of the human family as to life and health are to be sought for rather in the way of prevention than of cure; and herein it will clearly appear that the experience of the past justifies us in asserting that this is one of the great missions of medical science, inasmuch as we find that the ravages of disease have been stayed, not so much by cure as by prevention. It is quite certain, from watching the progress of human civilization in the western parts of the world, that the great diseases which destroyed mankind have been stopped by civilization,—not by medical science—that is to say, in an enlarged expression of the term; diseases, the most destructive, have been met by civilization rather than by medical means. Need I mention in this assembly the instance which we have before us in such a case as the plague,—formerly the dread pestilence of this and other countries. How has that been got rid of? Plague is as virulent, and destructive, and as difficult of management now, as it was in the times when it was described by Sydenham. How, then, has this land been exempted from its ravages? The praise cannot be claimed for medical science; it rests upon something else; and it must, I think, be confessed, that its progress and ravages have been arrested by the general progress of enlightenment in the western nations, by the better construction of cities, by the more cleanly habits of the people,—the rich as well as the poor; and, in fact, by the appliance of all those means which come under the comprehensive term of "sanitary measures."

And not to occupy your time by any retrospective considerations, I would rather fix your notice upon the circumstances surrounding and pressing upon us; and, for the illustration of what I have to say upon the state of that disease with which we are at present afflicted—Asiatic cholera—I will make some general observations upon the causes of fever. Here we approach a question of vast importance to the happiness of mankind. Is fever a disease which is contagious, and dependent, therefore, upon human beings meeting together—upon the intercourse of society? Is it generated in the human body, and capable of being propagated through the human body? or does it depend on some external circumstances operating on men, but independent of them? I would assert that these questions lie at the very bottom of sanitary improvement.

It is quite certain, from past experience, that, if the destructive diseases which have afflicted our race are contagious, and propagated from man to man, they never can be eradicated, for you cannot stop human intercourse. The attempt has been made again and again, and it has invariably failed. Every attempt to arrest disease by quarantine laws, by cordons sanitaires, by checking human intercourse, have utterly failed, and the consequence is, that these measures have been abandoned, by common consent, by every Government in this part of the world. It is a question of great importance to know whether fevers—typhoid fever, yellow fever, or cholera, are, or are not, contagious. If it can be proved that they are not, and that they depend upon external circumstances, there is a more hopeful field opened before us; that is to say, if we can determine that the causes and the circumstances which are necessary for their introduction, or at all events for the propagation of these diseases, are external, they may be counteracted. Then, with reference to fever: one thing is granted by medical men, that it particularly thrives and flourishes in certain districts and localities. This fact is of the highest interest to medical men, because it shows that, whatever the cause of fever is, whether it be contagious or not, they have the means of staying its progress in their own hands. I cannot now go into the statistics of this subject, but I would say generally, that fever is invariably found, especially the typhoid types, to prevail in those districts which contain the greatest amount of badly constructed houses, bad drainage, overcrowded neighbourhoods, and filth; and that, in proportion as these circumstances are removed, the disease is checked.

It has been found that, whenever and wherever sanitary measures are introduced, fever of every kind diminishes. Fever has been found to attack different parts of the same town and neighbourhood: the same classes of persons have suffered, according to the locality in which they resided, according to its more or less healthy character; and also as greater or less attention is paid to general cleanliness. As soon as a part of town, whether a court or alley, nay, so soon as even a house is cleansed, fever diminishes in that locality. Thus you see that you have a power over diseases of this class by sanitary measures. This has been proved again and again with reference to fevers, and, if time allowed, I could give many illustrations of it.

We often regard those who live in large towns as peculiarly liable to these febrile diseases; but it will be found, that they occur in all the villages and small agricultural districts of this country; and it can be shown, that in consequence of the filling up of stagnant ditches, the closing of ponds, and the introduction of drainage, villages which had been the constant scene of typhus and continued fevers have been saved, and, through intervals of years, during which the districts round them have been ravaged, these places have been preserved in a healthy state. I have had placed in my hands repeated proofs of this great fact.

As this is a mixed audience, I conceive it to be my duty to submit a few ideas as to the way in which opinions respecting the contagion of diseases are formed. The opinion of physicians and of medical writers, of those, in short, who rule opinion in this country, has been greatly determined by what they have observed in the great hospitals in which

they have been educated. These writers have been accustomed to see nurses stricken with typhus while attending their patients; they have seen that no clinical clerk escapes it, and they thus judge that it is contagious. But it should be remembered, that these classes,—nurses, students, and others,—are immersed in the very atmosphere of typhus fever, and are also exposed to the pestilential exhalation of the discharges of typhus patients, and that many of these persons have previously exhausted their health by attention to those studies which have gained them their distinctions, or, in the case of nurses, by night-watching, to say nothing of dram-drinking. The wonder is, that they should ever escape, not that they are often attacked. In a more favourable atmosphere, the results would be different; indeed, no experiments have yet been made, under circumstances which establish the opinion that typhus fever is infectious. Having made some extensive inquiries on the subject, of intelligent practitioners, in districts where they see a vast amount of typhus and continued fevers, I know not one who believes in its contagious power. I must take this opportunity of saying, that typhus fever is found to be lessened by sanitary improvements; and if these were efficiently carried out, we should hear little of such a thing as typhus fever. My own conviction is, that there is no proof whatever of continued or typhus fever being in any cases contagious. Typhus fever, scarlatina, and cholera cannot, it may be assumed, be produced by two causes, for we never see in nature the same specific result produced by two different causes.

The question of sanitary improvement is one inwhich the poor of this country are especially concerned. These Tables (referring to some exhibited) which are before us, show what must be regarded as frightful truths. They show us, for instance, that in consequence of filth and dirt, and the overcrowding of human beings in houses unfit for habitation, in the most unhealthy districts of England, out of a population of 100,000 born, 50,000 will die under the age of five, as in Liverpool and Manchester. Now, this question of disease does not touch that of food. It is certain that the inhabitants of Manchester and Liverpool, taking them by thousands, consume a larger proportion of animal food and are better warmed than the people living in the country. It is not, then, a question of food. It is something especially relating to the aggregations of men. It is not poverty. And the same thing is apparent with regard to the cholera.

If you turn to some of the healthier parts of the country, as Surrey and other agricultural districts, the mortality is only 20,000. It has been found in Liverpool, that the average age at which the gentry die is forty-three, while the mechanics and operatives are cut off at fifteen, sixteen, and seventeen years. The operatives of these places, therefore, lose twenty-eight years of human existence. Is this a satisfactory state of things in a Christian country, and in this enlightened age. Let it be observed, that this state of things brings its own great penalty with it; and if we merely view this question in its most sordid, viz., its pecuniary point of view, it seems to be an indication from on High that we must watch and mark our ways; for in these very districts where the mortality is the greatest, the human race increases—a thing that is most unexpected.

It has been proved by statisticians, that where the average rate of mortality is high, the increase of population is great—a result which could not have been foreseen, but by facts that are not to be controverted. In these districts where, in consequence of habits of recklessness and indifference to all that constitutes the greatness of human nature, and the apathy and indifference engendered by sickness, suffering, and want, it is found that human life so frightfully curtailed as to individuals, is increased as to the species. So that we may say to the economist, if you would diminish the amount of mortality, you will diminish the increase of population, which so much frightens you, but which need not present that aspect, if men would rightly understand the appliances under their control; because we know that this land could produce quadruple or quintuple the amount of food necessary for supplying the wants of its present inhabitants, and that by the appliances of science.

These are questions in which the poorer members of the community are especially concerned, not less so because, by the pressure of adverse circumstances, they are scarcely conscious of the fact; and these things devolve upon us a great responsibility, who have the means of knowing and judging. These are matters which must command the attention of all who can in any way direct and control human progress.

I have now to make some observations upon that disease which more particularly calls us together this evening, and which, at present, shows itself fearfully in some parts of our country, lightly in others, but significantly in all. There has come from the East a disease which, though at first seeming to obey no recognised and known laws, but to be determined by caprice, and presenting exceptions which could not then be explained, yet, when viewed upon the basis of facts and statistics, coming strictly within the known laws of disease—nay, obeying especially the laws of that disease with which we are so well acquainted, viz., fever. It follows the same habitat, attacks the same classes, affects the same ages.

It is an interesting fact to know, that in the last epidemic, out of 23,000 persons attacked with cholera in St. Petersburgh, 17,000 were between the ages of 18 and 40. This is a very significant fact; and I quote it in support of the observations of Dr. Southwood Smith, who has shown that fever also attacks persons of precisely the same age, from 20 to 40, thus carrying off the most valuable members of society; that, to use the very words of that distinguished philanthropist, "of all taxes that afflict this country, the heaviest is the fever-tax," creating thousands of orphans and widows, who of course exhaust the charities of the country.

This disease, cholera, does, however, obey certain definite laws; and one of the most important facts in reference to it has been determined by the Metropolitan Sanitary Commissioners, namely, that the seat of fever is the seat of cholera. Although there are exceptional cases, it obeys many of the known laws of epidemics; and the rational course for every medical man is, to ascertain, in the first place, the great indications of its multitudinous attacks, and then to take the exceptional cases, one by one, and examine them by themselves. I may mention the opinion of Dr. Romberg on the subject, who has stated to me, that cholera obeys the laws of epidemics, and not of contagious disorders.

The town of Frankfort on the Maine has had a remarkable exemption from cholera, though surrounded by districts in which it raged, and in constant intercourse with them. So, you may also take the whole kingdom of Hanover, which, with but one exception, has escaped. The town of Lunenberg, situated on the railway, was attacked in 1832, 1834, 1837, and now again in 1848. Lunenberg is in constant intercourse with the surrounding country, yet the disease has not extended beyond it. Here are indications of an endemic disease epidemic in that place; but still there is nothing like contagion. Sometimes one side of a street has been visited, while the other side has escaped. It has even been known to visit the same room in a house, when divided into flats and let to different families, at different periods, with intervals of years, while all the rest escaped. In the great majority of places visited by the cholera there were stagnant and pestilential ditches in the neighbourhood. It is, then, entirely a question of locality, and the districts which fall beneath its ravages are those which are foul and ill-cleansed,—exhaling pestilential vapours into the air, noxious to the smell, disgusting to the sight,—and fearfully overcrowded with human beings.

Probably most who are here have seen the cholera returns from Glasgow during the present epidemic, and have been startled with the number of victims it has carried off. There have been 140, and probably more cases reported daily. What is the reason why Glasgow has been thus specially attacked? First of all, clearly on account of the habits of the people, for I believe that there is more dram-drinking there practised than in any other town of Europe. You see houses for the sale of drink almost at every fifth door, and it has also an enormously over-crowded and miserable population. There is a fact which ought to be known far and wide, to all who can influence these things, that for several years past there has been brought into the wretched parts of Glasgow about ten thousand unfortunate Irish, without an additional room or house for their reception. These are facts which should ring from one end of the land to the other—facts which ought to be preached from every pulpit, to let all know what is the condition of the poor in that country; for what else can happen but religious desecration, demoralized habits, and physical degradation, when you find crowded into a town, already over-charged with inhabitants, an additional 10,000 annually, and not a brick laid or an additional room built for their reception. Is not this fact sufficient to show what would happen elsewhere under similar circumstances, and on a larger scale? It is impossible, under such circumstances, to prevent the outbreak of pestilential diseases: they are the very penalties and warnings from above, evidently to teach us the great duty which we owe as a nation to those who cannot protect themselves. This is the very handwriting upon the wall; and these facts cry aloud for change and improvement, when we find human beings living really in a state worse than that of the beasts which perish.

It is also necessary to observe, that in all those parts of Glasgow where you find the disease ravaging, you find nothing but filthy and disgusting sights. There is that pestilential stench, which, being present, you must have fever. With reference to cholera, be it remembered it comes always in the track of typhus fever, and goes always to the same localities. But there is always this great lesson taught the rich, that they cannot escape the penalty. At this time, it is found that a great many of the highest rank have fallen victims to this disease in Glasgow; that the best squares in the city have been visited by it, and death has laid his hand upon all; so that you cannot walk through the streets without seeing the hearse at many houses, as though that were "the city of the plague."

If further proof were wanting, I will refer to this map, (the plan of Hamburgh,) which shows the ravages of the disease in 1832. (The lecturer here pointed out the parts which had most suffered in that calamity, and continued.) It is a striking fact, as showing the beneficial results of sanitary improvements, that the great fire in that city destroyed a large part of the town. This part has since been rebuilt upon sanitary principles, so as to exceed, in this respect, any city in Europe, London not excepted; and the consequence has been, that whereas, in 1832, the old town, that burnt down, suffered severely from cholera, the new city that has taken its place has so far escaped, that for ten among the poor attacked in 1848 with cholera, in the old remaining part of the town, only one among the poor suffered in the part rebuilt.

In connexion with cholera, I will now explain very briefly some circumstances which are important with reference to the management and treatment of this epidemic. The lecturer then described what are most generally the premonitory symptoms of cholera, enumerating, amongst these, diarrhœa, rice-water discharges, great anxiety, restless sleep, incubus, and uneasy sensations about the legs, indicating cramp.

When a community was about to be attacked, it was invariably found that there was a great outbreak and an immense disturbance in the alimentary canal, an uneasiness and rumbling of the bowels, sometimes diarrhœa, and sometimes costiveness. When a whole population was seized with diarrhœa, it was certainly dependent upon the same cause as cholera, and it must be considered pathologically as cholera. There was no doubt that the whole of Europe was at this moment under the influence of the cause of cholera, whatever that

might be. The premonitory symptoms I have mentioned are the curable stage of the disease; but there is no cure for it when it gets to its complete state—that of collapse; all art seems, then, to be vain,—it is a struggle between the profound exhaustion caused by the disease and the powers of the system. The best result which had been attained by the German pathologists, particularly those of Berlin, is, that the first attack or influence in cholera is upon the blood; that the first impression is aerial, acting upon the blood, and thus the blood became poisoned. Professor Simon had stated that there is a great want of bile; but here is a gall-bladder, which is quite distended with gall, so that that could not be the case. I most earnestly hope, then, that the attention of pathologists will be directed to the great question of prevention rather than of cure, and particularly to the enlightenment of the public mind upon the subject; for it must be confessed, that there is at present a lamentable amount of ignorance prevailing amongst all classes respecting it. At this moment it is a fixed belief of the Irish in Scotland, that the medical men of Glasgow are banded together to get rid of them by poison. They even refuse to go into the hospitals, because they say they are to be taken there to be poisoned. And now, when the munificent hand of charity was extended to them, and sixty medical men had been appointed, at large salaries, to search out the disease and treat patients on the spot, those benighted beings complained, "Because we would not go into the hospital to be poisoned, they have sent these medical men to poison us in our own houses."

I have been recently attentively engaged in watching the progress of cholera in Whitechapel, and have been met by proofs of the densest ignorance and obstinacy which could possibly be supposed as to the necessity and value of sanitary measures.

In conclusion, I would urge that there are great duties which it is incumbent upon the rich to perform, as they would answer for it at the judgment-day; and the time has now arrived when they must not shrink from those duties, remembering that their wealth is entrusted to them as stewards of God's mercy.

I congratulate all who are interested in the great question of sanitary reform, that upwards of ninety towns in England have spontaneously requested that the provisions of the general Act for improving the sanitary condition of the country should be applied to them—a circumstance which, of itself, I conceive to be rich with future promise.

ORIGINAL CONTRIBUTIONS.

OBSERVATIONS IN THE HOSPITALS AND AMBULANCES OF THE CONTINENT.

THE HOSPITALS OF ANTWERP AND BRUSSELS.

By DOCTOR KIDD.

Before getting into the matter more immediately the subject of the present papers, perhaps a word or two about the medical institutions of Belgium may be not unacceptable to the readers of the *Medical Times*. Indeed, only got into Germany, it is necessary for one to bait a little, to get the ear attuned to the very mellifluous gibberish that resounds in all the hospitals and public institutions—that guttural thunder that looks so desperate on paper, of which we know so little, happily, in England.

The hospitals, and various medical institutions of Antwerp and Brussels, (the only ones I had time to inquire into,) are not very particularly fine; essentially French, like almost everything in Belgium, they have little to attract one, after the similar institutions of what we may call, perhaps, the parent capital of France; they are well managed, however, from all I could learn, and very useful, and well supported. The largest, the "HOPITAL ST. PIERRE," of Brussels, contains 300 beds; the second, in size and character, "ST. JEAN," 160 beds. Both seem to have gone through sundry and eventful changes since Waterloo, St. Jean being now replaced by a rather handsome building on one of the Boulevards. The erection of St. Pierre dates back so far as the end of the 12th century, when it was said to have served as an asylum for lepers; subsequently turned into a convent, it became a place of no little eminence; and, finally, enlarged to its present dimensions, was changed again into an hospital. The chief attendant here, Sentin, is well known over the Continent, and in England, I need scarcely say, by his discovery of starch bandages; all the appliances of which he has here in full force, and worth visiting. Gutta percha, and gun-cotton, are, however, likely to take the wind out of his sails, I think, at present,—a matter which lessens, however, in nowise, the value of the discovery.

I was disappointed in seeing his processes; they differ little, however, from what we are familiar with at home. My kind friend, Dr. Parkinson, physician to the embassy, called with me; but our bird had fled.

Brussels has done very little in the medical way. The only men known outside the city walls are Carswell, physician to the King; my friend, just named, at the Embassy; my able and excellent friend, Dr. Bushnan, and Sentin. In the department of statistics, Quetelet is familiar to the English reader; in the world of art, Verbockhoeven and Geefs. Medical men are fearfully paid in Brussels,—some two or three francs a visit; an English medical man being obliged, in addition, to undergo a searching examination before he can write a prescription. Why, in old Ireland, even, we still hang out for the guinea.

Carswell's practice is confined exclusively to the Court,—a thing to be sorry for, as we could have ill spared him from the great field of pathological anatomy, in which he was such a zealous worker. He seems, as ever, anxious for the furtherance of his favourite study, and furnished me very kindly with introductions to a fellow-labourer, Rokitansky, of Vienna. Of Dr. Bushnan, and his able and vigorous sketches of student life, the readers of the *Medical Times* need scarcely be reminded; his communications to the various journals spread themselves over several volumes, and few men have such an intimate knowledge of the Continental schools. Seutin's practice is known everywhere. Quetelet I found wonderfully communicative on his peculiar subjects; his figures are also known generally through Europe. He is, at present, arranging the census, and some sanitary matters for the Government, which cannot fail to be of interest. It is scarcely fair, possibly, to be taking my excellent friends in their mental *deshabille*,—as a matter of interest to strangers I merely enumerate them.

The population of Brussels, according to the last Census, was something about 120,000 inhabitants; that of Antwerp little more than half that number. There is a fine hospital at Antwerp, too, with 500 beds, a school of surgery, and a military hospital. The town is strongly fortified, with a citadel, telling of very warlike and formidable times; it looks now, however, very sleepy, and so much the better.

At Antwerp, however, it is impossible for the English visiter to think of anything but paintings and churches, of Rubens and his wonderful inspirations. The very air of the town is Rubenesque, if we may coin a word, pictures, and carvings, and statues, meeting you at every turn. To think of matters chirurgical becomes simply indeed an impossibility, though deeply you may get into the cant of picture criticism. If not "flat burglary," one may study anatomical details in the rich oak carvings, and wonderful details of those most wonderful creations of the great master. The bristling guns of the citadel, too, may furnish subject of wonderment, and have put us in recollection our more legitimate subject, and Larrey's writings. It was impossible, however, to get out of the benign influence of the great painter. Matters medical are managed here the same as at Brussels; a very general complaint existing of the very insufficient way in which the profession are paid. The days I spent here, the whole world, ladies and all, in skates, seemed to have established themselves in tents on the Scheldt—an additional reason for your contributor not finding any one at home.

As a general rule, Belgium is a healthy country, though saved at some distant epoch from the sea, most of it lying as level as a billiard-table, and likely again at any moment to be flooded. The appearance of the people is superior to that in other parts of the Continent that I have seen. A mixture of French and Flemish is spoken in the more northern parts of the country, the Walloon to the south, a circumstance that sufficiently accounts for the different looking races one sees even in the streets of Brussels. A thing not unconnected with the extreme levelness of the country, is, I think, the want of any very peculiar national character about the people. It seems pretty well established by ethnographers that, *ceteris paribus*, mountain countries are those in which national character becomes more defined, the inaccessible parts of hills affording so many retreats for the people indigenous to the districts; a peculiarity which a perfect level does away with. Passing through Wales or Switzerland, for instance, this opposite state of things exists. Whence your Tells and Hofers. Passing through Wales, indeed, the great gap of the Menai straits accounts at once to my mind for the old walls and fortifications of Conway and Chester, for those fine words in which Mr. Adolphus Tetterby himself could scarcely discover a vowel, and other curious and antique nationalities familiar to every one in England. The Belgian has none of this. The Belgian has had a succession of foreign masters depending on the level character of the country. There is nothing well chalked out in anything he does. The *laissez faire* enters into all his movements. In the palmy days of the Crusades, we are told the great men of Flanders did many wonderful things, more by accident, perhaps, than anything else. There was nothing national, however, about it. An expedition to California to-morrow would be followed by perhaps similar results. Something of the sort may possibly account at present for the dearth of great men, and accounts sufficiently to my mind for the indolent slowness of the constitution of this very slow and tentative race.

The study of the Continent at present, or rather this end of it, to one who stood among the broken barricades of July, is a thing of the most curious interest. A thing, too, which must enter intimately into any deductions we may make from the result of gun-shot wounds. Any one indeed that watched with the eye of a physician the results of that period, could not fail to discover that the chief mortality depended on *moral* causes—a lesson of no ordinary value in our every-day surgery. For after all, the sooner perhaps men begin to study moral causes, and give up your pure "knife and scissors" surgery, the better.

There has been fearful work in Hungary, and in Transylvania matters are even worse. Except one reads the German papers, indeed they cannot conceive the half of it. Wretched soldiers brought in with their eyes burnt out with scalding pitch, their limbs broken at every joint. Thus it is along the banks of the Danube here, within view of the Rhine almost. A "monarchy" has been established in the chair of Louis Philippe. A report, about which there are many misgivings, begins to be heard, that a fleet is soon to make its appearance in this classic river, just to keep the people in France quiet; in other words, that the ever refluent waves of military despotism in this country are likely soon to drift us back to the old moorings.

Such things may appear extraneous to our present subject; they are perceptible, however, in every phase of continental life. The people seem to live in one whirl of excitement, of a social or political kind.

I had almost forgot to say, that the Museum of Natural History at Brussels is very good; the Zoological specimens from India particularly fine; and that among the minerals are some magnificent things; chromates and malachites well worth a visit. The fossils of Maestricht will also interest the paleontologist in Brussels. Indeed one walks every step on fossils and fishes. At the Burgundian Library the manuscripts are perfectly miraculous.

Cologne.

"RACES OF MEN." — CONTRAST BETWEEN THE CONFORMATION IN THE BONES OF THE SKULL AND FACE OF THE CELT AND SAXON.

By R. TUTHILL MASSY, M.D., Exeter.

The cranium of the Celt is ugly, and approaches in form to that of the monkey. The forehead runs back, and is compressed. The temporal ridge on each side is prominent; the temporal region is flattened, compressing that organ called number, and this accounts for the thoughtlessness and want of proper calculation in the Celt. But the organ of constructiveness is in proportion. He is the artist possessing mechanical skill and manual dexterity. His galleries of paintings and sculpture at Versailles, and those of naval design at the Louvre, all speak for him.

The Saxon has a broad head. The forehead is large, well-rounded, and full towards the temple. The ridge is nearly invisible. Then comes his great mental calculations; he is the merchant of Britain and Ireland; his parietal bones are expanded; conscientiousness and cautiousness are largely developed. He is careful, prudent, and circumspect, and he respects truth, justice, and probity. The centre of his head stands high, giving benevolence, veneration, and firmness their due position.

The parietal bones of the Celt are not so expansive; consequently, those noble qualities are not so marked in his life. He is incautious and frivolous. Look at his temporal bone; it is large; he has a surprising taste for music; noise and clatter are his delight. Above and behind the ear, how large it gets! The region of the aggressive groupe is swelled out; he is courageous and energetic; irritable and prone to dispute. We have all read of his campaigns in Algeria, consuming and destroying everything, animal and vegetable, man and beast, house and garden.

Self-esteem is large on the Saxon skull; he undertakes responsibilities, and governs.

Love of approbation is large on the skull of the Celt; he is fond of display, and is extremely ceremonious.

The back of the Saxon's head is large; his neck is thick; and the occipital bone is wider than in the Celt, but it does not run so high, so that one has the social groupe in width, whilst the other has it in height.

Let me now compare those heads by dividing each into three regions, the intellectual, moral, and animal; the animal region is much more extensive in the Saxon than in the Celt; yet, it is less used, for his moral region is more developed, and his sentiments are more pure. There stands his intellectual region, filled with thought over-ruling the animal passion, and guiding the moral feelings.

What a massive intellectual region this Saxon has, when placed by the side of the Celt, who has more than doubly lost it, first, by the reclining forehead, secondly, by the large frontal sinus; and, lastly, by the great concave orbit arching up the brain; and thus he is without the reflective or expressive faculties of the Saxon; he has no order, and is careless and negligent.

Having entered so much on phrenology in my description of the skull, I must take a similar liberty in contrasting the bones of the face, and draw into my assistance the muscles of expression, and the cartilages of beauty.

In the Celt, the face is short, compressed, and square, with the molar bone prominent; the edges of the alveoli somewhat; the teeth are bad; the lower jaw-bone is angular, and flattened both at the side and at the chin; the orbits are wide, and when the eye, which is small, is placed in this orbit, it goes deep and is sunk, the cartilages of the lids lose their plumpness, and the corrugator supercilii of *either* (a) or both sides get into action, wrinkling vertically the brow of "the man of the revolution." The nose is short; the cartilages are thin, and inclined to turn up; the mouth is a little too large; the ear is delicate; altogether the countenance is austere and cunning.

In the Saxon, the face is oblong and large, the ear large; his physiognomic lines are almost straight; the nose is well proportioned and commanding; the eye is full and expressive; the mouth and lips are agreeable, and the chin is formed so firm, that the man cannot be changed; his teeth are good; —all those features exhibit harmony and please. He is the "plain, blunt man, who loves his friends."

To prove the correctness of my statement, examine a Celt and Saxon regiment. The first time I saw the French infantry, I thought them all little boys, until I examined the withered faces, the flat sallow cheeks, and aged looks. Little, then, did I wonder at their inability to stand the English bayonet; they should be borne down or along, having no weight or comparative power with the Saxon.

Come with me now to Wales, and you will see this Celtic head and face modified into many shapes, yet not having altogether lost its expression. Here is one with a narrow high forehead, and small quick eye, of an extremely excitable temperament, endowed with a natural facility to learn and communicate, but is a "fond and false deceiver." There is another, who has great breadth of forehead, the sign of intelligence, but yet not so; for the upper and lateral parts of the head are not well formed. The ideas appear very deep—indeed, so deep that the owner can never reach them. This person of the melancholic temperament is generous and good-natured, but a savage when provoked to anger. In a third, both dispositions are united into pride and cunning, without forethought or prudence.

The *costume* looks well on a pretty girl, and not otherwise. That coquettish hat and little cap surrounding her smirking face—her roguish eye, and that inviting lip and rosy cheek—all tell of careless happy youth. How lightly she trips up that hill; I see her ankle—it is beautiful; and now I know why she wears so short a petticoat.

I consider the Welch very hospitable.

Now, we shall go to the annual *Puck* Fair, held at Killorglin, near the Bay of Dingle. A goat is here, fantastically dressed. Every one laughs at its playfulness—leaping and jumping, *pucking* right and left; at one time overturning a crowd of children; now in among the droves of wild ponies which have just been hunted down from the Kerry mountains—kicking up their heels, and, not having halters, they are dispersed right and left, causing great confusion. And here you meet the Celt of Ireland—a small lot from the hills, queer boys, with open mouths; surprise is marked in every feature; their make is slight and delicate, and they are quite as hardy as their ponies.

Ireland is composed of the many tribes of Europe. Since 1169, its first invasion by the Anglo-Normans, like England, you can trace in one family the pomp and dignity of the Norman; in a second, Roman impetuosity and ardour; in a third, the tenacious Saxon, the man who never yet lost sight of his object; and, a fourth, walks the man of gold, the avaricious Jew, with the hooked nose and splendid eye. Where have I left the native Irish, with the large mouth and prominent teeth, his hair so long and thickly plaited as to resist the cut of a sword? He is nearly extinct, with his brother, the native Briton.

I have now and then met a peculiar race scattered through Ireland, with lovely, rich, dark brown hair, having a golden tinge—the real auburn; the skin is soft and beautiful; the thinking forehead forms almost a line with the straight mild nose; the mouth, lips, and chin are exquisite; the teeth are white and well set; and then that expressive, soft, dark eye contains so much honest love, it really speaks; the whole countenance is expanded and open; such harmony of parts; the curves and softness of the cheek and chin of the Irish peasant girl; the back of the head droops so gracefully, the elastic chest is softly rounded, the abdomen not too full, and the expanded haunches running fine to the knee, again expanding and tapering into such a chiselled ankle and foot. This poor girl is almost always a victim to pulmonary consumption.

The man is equally elegant: he has the beautiful head and oval face, fine wide chest, straight forehead and limbs; how intellectual he looks! Of this same family there is a fair man and woman with similar conformations, differing only in the blue eye and fair hair. One of those last girls I saw shot by accident; the prisoner was her lover.

Occasionally you will meet this race doing penance on Holy Island, performing a weary pilgrimage round and round on the bare knee, travelling the rough pathway on the toilsome crag of some holy well.

From eighteen to twenty-eight is the female age on which I wrote in my last contribution, and on which I now write; the man is from twenty-five to thirty-five in years; and now for the Englishman of this age.

He has a perpendicular forehead, benevolence and veneration running high; his nose is of the Grecian or Roman order; his chin and mouth are well-formed; all co-operate with his character of truth, decision, and kindness.

The English woman has the same features, but her cellular tissue is more developed, giving softness, roundness, and plumpness to the whole contour. She has the complexion of the lily and rose; her luxuriant hair, perfect figure, graceful attitudes, sweet voice, and retiring, thoughtful disposition have made her the admiration of the world; and the English-Irish are like this noble race, full of intellect and feeling, a truth-loving people.

The Scotchman has a little more bone, and consequently more muscle; stout in his build, coarse in his outlines, the nasal bones are wide; the eyes are distant from each other, giving width above the nose corresponding to individuality; so he is inquisitive, and makes the best botanist and agricultural chemist (a); he is the most industrious man on the globe; but he is too near, too stingy, too penurious; he thinks only of himself, his country, and people.

The Scotchwoman is the same, modified down to her sex and calling; she makes the best wife and mother, for her home and husband are her all. The Scotch-Irish are like them in form and in act; intent on business, continually working, always improving, industrious, energetic, and enterprising. Ascend Cave Hill, look down on the manufactures of Belfast—her smoking chimnies; see the surrounding country, a well-drained, well-cultivated land; take in your glance the Lough filled with shipping—all the work of untiring talent.

Those Irish are Saxons: thousands of them are descendants from the army of the Commonwealth. I attended one of regular descent from Oliver Cromwell, for a *feigned disease*. Her head was round and full at the sides; her make was short and thick. A few shillings had a wonderful effect in restoring this woman to her legs. The highest point in the cranium of the Irish Saxon is firmness.

The Celtic Welch, the Celtic Scotch, the Celtic Irish, and the French, have one characteristic—poverty, dirt, and immorality. The first have, in the very centre of the cabin, a miniature pond or cesspool, for the ducks and children to dabble in together; in the cabin of the second, the cows litter; in the cabin of the third, the pigs. One day I had the painful duty of amputating a little child's hand at the wrist joint; it had been crushed and shattered between the jaws of a sow, during the poor mother's absence. In agony the mother told me how she had only gone to the haggard for a few sods of turf; the screams of her child brought her instantly back, when to her horror the little arm hung out of the cradle, and the hand was in the sow's mouth. The fourth are filthy—they are personally dirty; face, hands, blue blouses, shoes, and stockings; and, if Paddy is known for his un-

(a) Harrison says, "This pair of muscles cannot act separately." This, I believe, is incorrect, as they act independently of each other.

(a) I am aware that Spurzheim allows men, not having certain bumps, to have the qualities of which they would be indicative, but not to that extent.

buttoned knee breeches, the French may be known for ungartered stockings hanging over dirty shoes. This careless appearance surprised me one morning at Abbeville, as I entered the cavalry barracks; the troopers were just riding out their horses for exercise; I could hardly believe my eyes as they passed me to walk the streets on dirty horses covered with straws, a few of the soldiers having on wooden shoes, all wearing dirty, loose socks, falling down, exposing unwashed legs, half-concealed in what were once clean trousers.

Were the English cavalry to meet them, thought I!

To return to England. A fine robust man stood opposite a painting, admiring the shrewd eye of "a monk of the olden time." I felt struck with the forcible likeness of my acquaintance and the smooth monk. "In your neighbourhood," I asked, "was there a monastery?" "Yes," he answered, "near where I was born." And it so happens, that, where monasteries were, you always meet with robust, shrewd men, with great calculating powers. In the same places are the richest valleys, the best wooded hills, the most beautiful rivers, the finest scenery, and, what adds beauty to all, are the incomparable girls—tall, straight, intelligent. About Bath, and on the Wye, where stands "Fair Tintern," those many beauties may be seen, and in the many monastic parts of Ireland are lovely women and brave men. About Adare and Askeaton, near Quin Abbey, and all the other abbeys, we have but to go and see them.

I have now before me the skull of a female Celt, and one of a female Saxon. Both are centrally deficient, and more so transversely than antro-posteriorly. The powers of reasoning are weak, and the powers of love are strong. Man can only guide her by affection. It wins everything in woman. In all her reflections, she falls back on *love—her reason.*

I cannot conclude without referring to Dr. Knox's admirable lecture, proving the taste and talent of the Irish. The Doctor speaks of the poplin work, which cannot be equalled in Europe, and strongly recommends Schools of Design.

The *statesman* should study the lectures of Dr. Knox; and the Englishman, who wishes to know his own mixed race in Ireland, should go over and quietly walk through each county—talk to his own people improved by Irish blood—think on the Irish soldier, the great warrior, fighting for the British crown, England's glory. Then, in your wanderings by some lonely church, behold the hero of India standing o'er his father's grave, his head drooped, the tears falling; now he stoops to plant the weeping ash or willow!

Allow me to compare this man's head and foot. The proportions are perfect, and let me endeavour to prove the great relation which exists between the faculties and the organization. Compare his well-formed tarsus or heel with his well-formed occipital bone. The metatarsus, or instep, is linked with the parietal region, and with the phalanges, or toes, comes the frontal bone—their length and delicacy showing the height and smoothness of the forehead; the well arched sole, formed by the astragalus, navicular, and cuboid, and their elastic ligament forms a comparison with his firmness, veneration, and benevolence. Those faultless arches covering a well involuted and convoluted brain, and, as in this man the beauty of the ankle runs with that of the cheek, may I place the malcus and the malar bones side by side.

It has been said, that "a happy organization of the human body is always accompanied with excellent intellectual faculties."

The comparative anatomist will not altogether condemn this distant relation, nor will the physiologist blame me when he first examines the harmony of parts in the horse and elephant; nor will the latter, when he considers the contorted dispositions of individuals born with club-feet. I have known boys and girls having but a slight twist in the outline of the foot, possessing many talents, good and evil, but always mischief—a shade of irritability and satire.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

ACADEMY OF SCIENCES.

Meeting of Jan. 2. M. POUILLET in the Chair.

ELECTION OF VICE-PRESIDENT.

M. Boussingault, Vice-President for the year 1848, became *ex-officio* President for the year 1849. He took the chair, and M. Duperrey was elected Vice-President for 1849.

FOREIGN HONORARY MEMBERS.

In consequence of the death of M. Berzelius, a vacancy took place in the list of foreign honorary members of the Academy, and the commission proposed the following list of names, amongst which the meeting was called upon to choose a member:—Messrs. Brewster, of St. Andrews; Buckland, of London; Ehrenberg, of Berlin; Herschell, Liebig, Melloni, Mitscherlich, and Tiedemann. Dr. Brewster was elected by a large majority.

ACADEMY OF MEDICINE.

Meeting of January 3, 1849. M. VELPEAU in the Chair.

M. BERARD.

M. Velpeau stated, that M. Bérard, the new Dean of the Faculty of Paris, was called upon by the regulations of the Academy to become *ex-officio* a member, and requested him to take a seat.

M. Bérard, in answer, observed, that, from the nature of his previous studies, he had not considered himself justified in presenting himself to the Academy as a candidate for membership. His new duties obliging him in future to reside in Paris, he would profit of the privilege conferred upon him by the Academy; and if at another period he should cease to preside over the Faculty of Medicine, the loss would be doubly painful to him, as it would, at the same time, deprive him of the advantage of assisting as a member at the meetings.

THE CHOLERA.

M. Bally read a short account of the epidemic at Lille, where its existence could no longer be questioned. The malady was brought by a Dunkerque boat, and had chiefly spread amongst the poorer class of the population. It was as fatal as in 1832 to persons in whom it attained the cold stage; but it affected a much smaller proportion of individuals. The number of deaths on the 24th of December was 40. A great many cases of cholerine had been observed in the city, but in every instance the progress of the disease was readily checked by proper treatment. The winds became northerly on the 20th, and a sharp frost set in. No new cases were observed until the direction of the wind again changed to the west. The official statistics of the mortality from cholera in the Department du Nord were, up to the 22nd, 160 cases, and 94 deaths.

CHLOROFORM.

M. Baillarger was of opinion that the dark colour of the arterial blood, stated by M. Amussat to follow the inhalation of anæsthetic vapours was a symptom of asphyxia, referrible to the imperfect nature of the instrument employed, and to the restraint under which it was sometimes necessary to place the subjects. The presence of syncope during inhalations was a circumstance which M. Baillarger considered as deserving of much attention, and he thought that, in persons subject to frequent loss of consciousness, it would be only prudent to abstain from exhibiting chloroform.

M. Blandin stated, that the instrument employed, and the length of time during which inhalation was continued, accounted satisfactorily for the very various degrees of insensibility produced. Unconciousness to pain was very rapidly obtained, although the subject still preserved the perfect consciousness of what was going on about him. Further than this it was never necessary, and it might be dangerous to prolong inhalation. In his opinion, the young lady at Boulogne had died a victim to chloroform. Not choosing to refer the fatal result to that agent, it had been put to the account of syncope. Death might, it is true, have been brought on by syncope; but it was the chloroform which rendered that syncope fatal. M. Blandin thought it was the duty of the Academy to warn the public against the indiscriminate use of a method which has its dangers as well as its advantages.

The meeting adjourned at a quarter to five p.m.

A NEW METHOD FOR THE INCISION OF FISTULOUS ABSCESSES.

BY M. DIDAY, OF LYONS.

(Gazette Médicale.)

M. Diday, struck with the imperfection of the methods hitherto employed for the purpose of making a counter-opening in fistulous abscesses—to prevent the stagnation of purulent matter within their cavity—begins an interesting article on the subject by the somewhat overdrawn description of the dangers of incisions of the skin upon a grooved probe. Many surgeons, says M. Diday, hesitate and delay the operation, when the parts to be divided have any degree of thickness; when they have made up their minds, they begin by performing an unnecessarily large incision, and even then the blade is often guided only by chance—and the probe, forced forwards by the hands of the operator with a degree of strength which the witnesses cannot appreciate, lacerates the intervening parts, and finally appears at the external wound.

Taking, for example, a case of inguinal abscess, already opened, but requiring a second aperture in a more dependent part, M. Diday recommends the introduction, through the previously existing orifice, of an Indian trocar, the blade of which is concealed within the canula. The instrument is pushed forward and perforates the walls of the abscess in the desired place, and the narrow puncture thus performed from within outwards, may be enlarged at will, by introducing the point of a narrow-bladed bistoury into the protruding extremity of the canula. This part of the trocar may also be employed for the easier introduction of a tent into the newly-made passage.

DISTINCTION OF HUMAN BLOOD FROM THAT OF OTHER MAMMIFERÆ.

BY DR. CASANTI.

(Journal de Chemic. Méd.)

Baruel showed, some years since, that, by the addition of sulphuric acid, blood evolved a peculiar odour, different in the various classes of animals; M. Casanti proposes phosphoric acid at 1,18 sp. gr. for the purpose of distinguishing human blood from that of other mammiferæ.

The blood of a mammiferous animal, when evaporated to dryness, and treated by phosphoric acid, agglutinates in a homogeneous, brilliant, and cohesive mass; it is not so with the blood of birds. Human blood, placed in contact with phosphoric acid, acquires a hepatic colour, and becomes extremely cohesive and plastic. That of other mammiferæ, the horse, mule, ox, &c., gives a very different result. The powder is, at first, softened by the acid; but the particles form bright and hard granules, which have no tendency to unite.

PROCEEDINGS OF THE FACULTY OF MEDICINE.

The removal of the late Dean of the Faculty, M. Bouillaud, has been attended with circumstances of an unusual character. His predecessor, Professor Orfila had, it appears, outstepped the limits of the annual budget of the School; but the inquiry which M. Bouillaud set on foot demonstrated, that, although more money had been laid out than the amount granted by Government, still no other blame but that of irregularity could possibly attach to M. Orfila, who had employed the surplus in the arrangement of the magnificent museum of comparative anatomy with which he has endowed the Faculty. M. Bouillaud's determined hostility to the late Dean, gradually made him so unpopular with his colleagues, that they requested him to resign; he refused to comply with their demand, and the body of Professors immediately petitioned the Minister, who, without any further delay, appointed M. Bérard to fill the office. M. Bérard, the Professor of Physiology, was invested in his office, and was received by the pupils with demonstrations of affection which could only be compared to the en-

thusiasm with which a few months since the same pupils greeted the appointment of Professor Bouillaud, another instance (if any were needed) of the instability of popular feeling in this thrice-happy Republic.—D. M'Carthy, M.D., Physician to the British Embassy.

IRELAND.

(From our Dublin Correspondent.)

DUBLIN PATHOLOGICAL SOCIETY.

A meeting of this Society was held in the Anatomical Theatre of Trinity College, on Saturday, the 6th of January, at four o'clock.

R. Adams, Esq., M.P., in the Chair.

KALOID TUMORS.

Dr. O'Ferrall exhibited drawings of various kaloid tumors. The first case he brought forward was an idiopathic example of the disease; it occurred on the arm of a gentleman of middle age, and presented the usual characters of these tumors; it was of a reddish colour, elevated about two lines above the surrounding skin, and was irregular in its margin, having little processes that radiated outwards; it possessed a firm consistence—unyielding to the touch when contrasted with the surrounding skin. At the time Dr. O'Ferrall saw this gentleman for the first time, he had, as yet, suffered little or no inconvenience from the tumor. Under these circumstances, Dr. O'Ferrall did not wish to meddle with it, but told the gentleman to call on him again, if at a future time it should cause him annoyance. After the lapse of a few months, the patient returned and said, the tumor was now the seat of severe pain. Upon this Dr. O'Ferrall resolved to remove it, which he did by a comparatively large incision, cutting through the skin external to the extremities of the projecting processes, so as to remove the entire of the disease. The wound healed favourably, and, since that period,—now about two years ago, the patient has not suffered from any return of the tumor. The next case brought forward by Dr. O'Ferrall, occurred in a cicatrix, situated over the deltoid muscle. The girl who had been the subject of this case, had been under Dr. O'Ferrall's care, for a pendulous tumor, springing from the integuments near the shoulder-joint, and which Dr. O'Ferrall had removed. Several months afterwards, this girl returned to St. Vincent's Hospital, complaining of severe pain in the place from whence the tumor had been removed. Upon examination, it was ascertained that the former cicatrix had assumed all the characters of a kaloid tumor. It had spread to nearly an inch in breadth, was resisting, elevated, coloured, and its margin rendered uneven by little processes radiating outwards into the surrounding healthy skin. This tumor, Dr. O'Ferrall removed like the former, and, although a period of three years has elapsed, there has been no renewal of the disease. The third drawing presented to the Society was that of a man, in whose temples kaloid tumors had become formed in the cicatrices of leech-bites. This man had been leeched in the temples some months previously, and had left St. Vincent's Hospital without anything remarkable appearing in the seat of the leech punctures. When he again presented himself at the Dispensary, these cicatrices had enlarged to the size of peas; had become elevated, hardened, coloured, and irregular at their margins. As there was nothing pressing in the symptoms, excision was not practised in this case. Dr. O'Ferrall said, that he had brought these cases before the attention of this Society, inasmuch as considerable difference of opinion existed as to the nature of kaloid tumors. Many pathologists consider them as essentially malignant; and Rayer was opposed to their removal by excision. The latter authority recommends that they should be treated by pressure, but Dr. O'Ferrall, although he had known very unpleasant ulcerations to be produced by this means, had never experienced eradication of the tumors through its instrumentality.

HEPATIC APOPLEXY.

Dr. Law said, that the case which he wished to bring under the notice of the Pathological Society was one of unusual interest and rarity; it was a case of hepatic hæmorrhage, or apoplexy, from rupture of the right branch of the hepatic artery, from which resulted extensive laceration of the texture of the liver and of the capsule, by which the blood escaped in such large quantity into the cavity of the abdomen as to cause sudden death.

The subject of the case was John Conroy, aged 19, who had from his childhood Pott's curvature of the spine, engaging about the 8th, 9th, and 10th dorsal vertebræ. He was admitted into Dunne's Hospital for an urinary affection. He had a frequent desire to make water, which was discharged in small quantity, and which, after standing for some time, deposited a sediment resembling a ball loosely wound, composed of thin laminæ of membrane; it was not alkaline in its re-action. Dr. Law directed for him calomel, in small doses, combined with camphor and opium, and diluent drinks; a very small quantity of mercury affected his mouth, and his urinary affection was much relieved. He now began to complain of pain along the spinal column, and extending to the upper and lower extremities. Dr. Law should have connected this with his early spinal affection, if he had not other patients, at the same time, making similar complaints; he directed leeches to be applied along the spine, and prescribed colchicum and other anti-rheumatic remedies. Under this treatment, the patient appeared rapidly to improve, and he seemed to be getting so well that it was intended shortly to discharge him from the house. It was remarkable, however, that on the 24th of December the other men in the ward observed this patient to be very low spirited, and he told the nurse that he did not think he should ever leave the hospital alive. The nurse did not attach any importance to this saying; she thought he was nervous, and probably affected by the sudden death of a patient, which had occurred a short time previously in the ward. On Christmas-day, when Dr. Law visited the hospital, rather late in the afternoon, he was surprised to find this man evidently dying. He was in a state of collapse, which shortly terminated in death.

At the autopsy, the contents of the thorax were found healthy. This cavity was found contracted more than what is usual, even in cases of Pott's curvature, the left lung lapped in front of the heart, and neither lung collapsed on raising the sternum. Upon opening the abdomen, a large quantity of blood was found in the cavity of the peritonæum, partly coagulated and partly fluid, extending from the under surface of the liver and down along the right lumbar and iliac regions into the pelvis. At this stage of the examination, the liver was in its normal position, its upper surface applied against the diaphragm, and concealed from view. The hæmorrhage was conjectured to have proceeded either from a ruptured aneurism of the aorta,—which Dr. Law did not consider likely, as in all such cases (except when the aneurism proceeds from the anterior part of the artery, when the tumor presents itself at once, which was not the case here), the blood is poured out, not into the cavity of the peritonæum, but into the retro-peritoneal cellular membrane; or from a rupture of some larger vein, whether the porta itself, or some large branch. The aorta was found in the abdomen quite normal. Attention was now directed to the liver; and there was found upon its convex surface, nearly commensurate with the entire of the right lobe, a defined dark appearance, raised above the level of the surrounding structure, and which, when pressed with the finger, readily yielded, and bespoke the broken down condition of the subjacent part. That extensive hæmorrhage had taken place into the liver was now unquestionable. But the points to be determined were—first, from whence it came; second, how it got into the cavity of the peritonæum. A little blood was certainly to be seen oozing from the surface of the liver; but could this have supplied the large quantity that was found in the cavity of the abdomen? In order to decide these questions, Dr. Law consulted with his friend, Mr. R. W. Smith, who thought that injecting the hepatic artery was the most likely method of ascertaining the true answers to the inquiries. The latter gentlemen, accordingly, did inject the artery, first with water, and, subsequently, with wax. The left branch retained the injection, but it escaped almost immediately from the right, and through a small rent at the most convex point of the capsule; thus proving that the hæmorrhage proceeded from a rupture of the right branch of the hepatic artery, and, ultimately, through the lacerated capsule into the cavity of the peritonæum. The almost immediate division of the artery into small branches, on its entrance into the viscus, prohibited the hope of finding the exact opening in the artery from whence the blood came. That the presentiment of his death, and which the poor fellow announced to the nurse, was caused by the faintness from loss of blood, there can be no doubt. The smallness of the rent in the capsule allowed only a small quantity to escape at once, and thus delayed the fatal termination; and this cause, there is reason to believe, would have delayed it still longer, had it not been for the exertion of getting up to the night-chair.

Dr. Law has not been able to find an exactly parallel case to this. Andral mentions one of hæmorrhage into the cavity of the peritonæum from rupture of a branch of the porta; and Dr. Stokes has described a case where death ensued from bursting of a hepatic aneurism; but these cases were not precisely analogous to the present. As the term apoplexy has been applied to hæmorrhage in other organs besides the brain, Dr. Law feels that he is quite justified in extending the term to a similar lesion of the liver. The case is one of deep interest, but one of much difficulty as regards its causes. Little assistance can be derived towards ascertaining these, by applying to their explanation the conditions which more or less directly induce apoplexy in the two other organs in which it occurs, viz., the brain and lungs. In the brain, the arteries are, at all periods of life, more delicate in their texture than those of other parts; and, from the softness of the organ in the midst of which they are placed, they are less supported. If, then, the force of the heart, or its impulsive energy, be unusually augmented, at least for any time, the vessels not unfrequently yield, and apoplexy is the result. Hypertrophy of the left ventricle of the heart (when not caused by disease of the aortic valves, in which case, the lesion, indirectly, protects the brain) is a frequent source of apoplexy. The arteries of the brain are at least as prone as any others to become, in old age, the seat of calcareous deposit: if they then be exposed to undue action of the heart, it is not to be wondered at that they should often give way: it is thus that we often hear of an old man falling down in a fit of apoplexy from the excitement of passion. If, in the same way, we apply the ordinary conditions of pulmonary apoplexy to the case in question, we, equally, look in vain for those conditions to explain it. In pulmonary apoplexy we have the hæmorrhage proceeding either from the actively or passively congested capillaries; or from rupture of a branch of the pulmonary artery,—the structure of this vessel being rendered friable by disease. In the case of hepatic apoplexy, Dr. Law had no reason to suspect any disease of the vessel, nor yet any peculiar determination to the liver. The only conjecture that suggested itself to him was this, that the heart,—acting, as it always does, more energetically, in cases of deformed chest, and not having free play in the thorax, in consequence of the organs being compressed within its narrowed limits, and not leaving it room to act,—reserved itself till it had reached where it was less restrained,—the cavity of the abdomen. Dr. Law threw out this conjecture for the consideration of the Society; but he was free to confess, that he was not quite satisfied with it himself, but gave it for want of a better. He had no reason to suspect any previous disease of the liver that could have affected the vessels; although, from the nature of this organ and its functions, such disease might exist much more insidiously than in the other organs in which apoplexy occurs, and not betray itself by symptoms.

CARCINOMA OF TIBIA.

Dr. Hutton exhibited a leg, which he had amputated on the 3rd of January, 1849. The man from whom it was removed was 37 years of age, and had been admitted into the Richmond Surgical Hospital on the 22nd of November last. He was formerly a soldier, but was discharged eight years ago, and, as it appeared from his discharge-paper, for what was described as an osseous tumor of the leg. On his admission his appearance was healthy, and he seemed well nourished. The upper part of the tibia was enlarged; there was a firm hard tumor on the front of the upper part, and a larger one situated on the inside, and a little lower down. The latter was not so hard, and had an elastic feel, approaching to a sense of fluctuation. He complained of great pain on pressure. The upper and outward tumor had existed for a long time; but the lower and inward one he had only perceived about a fortnight before admission. Both tumors so much resembled nodes, that, although the patient would not admit anything in his history to warrant such being the case, Dr. Hutton resolved to treat them on that supposition. The larger one was punctured, but only a few drops of dark venous blood exuded. The tumors were then painted daily with tincture of iodine, and iodide of potassium was exhibited internally. Subsequently, both tumors were blistered; but, notwithstanding this treatment, the swelling of the leg increased, the sense of false fluctuation became more decided, and the nocturnal pain became worse. An incision, about an inch long, was now made down through the periosteum, but nothing but blood flowed from the wound. He was kept under the influence of opiates, and leeches and poultices were applied to the larger tumor. On the 8th of December, as matters remained in the same state, and as Dr. Hutton was still willing to believe that the severe symptoms might be occasioned by deep-seated suppuration, the bone was drilled with McDowel's archimedean drill; but no matter exuded, and the bone was found during the operation to be hard and resisting throughout. On the 11th, another incision, about an inch long, was made into the most fluctuating part, when at length a large quantity of thick healthy-looking pus escaped. After this, the symptoms considerably improved; he was put under the influence of bark, and he seemed for some days to be getting better. On the 18th, however, the circumference of the limb began rapidly to increase; and, on the 22nd, a fungus commenced to show itself, projecting from the incision. This fungus, from henceforward, bled considerably every day. On the 27th, it was proposed to amputate the limb above the knee. The operation was performed January 3rd, the patient being under the influence of chloroform. After the removal of the limb, Mr. Smith carefully injected the vessels. The integuments were dissected off the tumors, and a longitudinal section of the bone was then made. During the course of this examination, it was ascertained that the inner and lower tumor was caused by a carcinomatous growth attached to the internal surface of the tibia. This had scarcely at all penetrated the osseous structure with which it was in contact. It was invested with a strong fibre-cellular cyst, except at the place where the fungus sprang from it. The neck of this fungus was closely embraced by the edge of the cyst, and it was manifest that it had protruded through an incision made in the latter by the knife, opposite to the spot in which an external ulcer was visible in the integuments. Upon examining the section of the bone, the cause of the hard resisting nature of the upper and outward tumor became evident, inasmuch as this latter tumor, which was of the same carcinomatous nature as the other, was covered externally by a thin layer of bone. The latter carcinomatous mass communicated extensively with the medulla of the bone.

CARCINOMATOUS DEGENERATION OF STOMACH.

Dr. Mayne said, that the specimen which he had to show was an example of a very ordinary form of disease, and if it were not for the absence in this particular case of one of the usual symptoms, he should not have thought it worthy of being brought before the attention of the Society. An examination of the stomach on the table would show, that it was the seat of a carcinomatous deposit, situated near the pylorus, but not involving that orifice. It would be perceived that the walls of the viscus were very considerably thickened, and a section would display that a foreign growth had taken place between the coats. The mucous membrane might be observed to have commenced to ulcerate in that part subjacent the heterologous deposit. The individual who was the subject of this disease chiefly complained during life of a burning heat in the region of the stomach, but had not throughout the course of his illness any tendency to vomiting. Similar cases had, on former occasions, been brought before the Society, and it was for the purpose of adding another observation to those already accumulated as to the absence of vomiting in those cases of cancer of the stomach which do not involve the orifices, that Dr. Mayne thought it right to lay this case before the Society.

PERFORATION AS A TERMINATION OF CARCINOMA OF THE STOMACH.

This specimen was shown by Dr. Lees, as a rather rare termination of cancerous disease of the stomach at a comparatively early stage. The perforation, which was very large—not less than the size of a half crown—was situated on the posterior part of the lesser curvature. Dr. Lees had exhibited at the last meeting of the Society a specimen of simple perforation of the stomach, but in that instance the coats of the viscus were everywhere else apparently normal. In this specimen, however, the walls of the stomach in the neighbourhood of the perforation were very much thickened, and manifestly the seat of a heterologous deposit. The patient had never presented any symptoms of stomach-disease during life; and the perforation, when it occurred, was immediately and correctly diagnosed by the medical attendants.

SCOTLAND.

(From our Edinburgh Correspondent.)

EDINBURGH OBSTETRICAL SOCIETY.

This Society was instituted in 1840, for the purpose of receiving communications, and conversing on subjects connected with the obstetric department of the profession. Every member is expected to communicate such interesting obstetric cases as he may meet with in the course of his practice, and to exhibit any remarkable morbid specimens he may be able to obtain. The Society consists solely of physicians or surgeons engaged in the practice of midwifery, and no strangers are admitted to its meetings. It has continued to prosper ever since its establishment, and for the last two years authorized accounts of its proceedings have been regularly published in the "Edinburgh Monthly Journal of Medical Science."

SECTION VIII.

Meeting 1st, December 20th, 1848. Dr. SIMPSON, President, in the Chair.

STATISTICS OF DR. LAWRENCE'S PRIVATE PRACTICE.

Dr. Simpson read a communication from Dr. Lawrence, of Montrose, containing an account of 360 labours, which occurred in his private obstetric practice

The 360 mothers gave birth to 380 children. Of these, the face presented in 1 case; the breech, in 5 cases; the arm, in 3 cases; the funis became prolapsed, in 2 cases; and, in 3 cases, the delivery was completed by forceps. One case was complicated by the occurrence of post-partum convulsions, a twin case, after the delivery of the second child.

SPONTANEOUS EVOLUTION.

Dr. Simpson related at length a case of spontaneous evolution, which he had observed since the subject was last discussed in the Society. The child weighed upwards of 3½ lbs., and measured nearly 18 inches in length. There was only one circumstance which rendered the case particularly worthy of remark in regard to the mechanism of the evolution. After the shoulder had descended deeply into the pelvis, and while the uterine contractions were acting powerfully, but in vain, the fœtus quickly made a slight turn upon its long axis; the shoulder maintained its deep position in the pelvic cavity; but instead of the child being bent and folded upon one of its sides in a very unnatural manner, its trunk was now flexed upon its anterior surface. After the fœtus had assumed this new position, it was soon expelled by the unaided uterine pains, according to the usual mechanism.

NEW SPECULUM FOR RECTO AND VESICO-VAGINAL FISTULÆ.

Dr. Keiller exhibited a very ingenious instrument, which he had used for the purpose of detecting and more easily conducting the treatment of vesico-vaginal and recto-vaginal fistulæ. It consisted of a two-bladed metallic speculum, the blades of which separated laterally, and along their whole length, thus exposing at will a large part of the entire length of the vagina. After the instrument is introduced, and the blades separated, a third blade, having a handle, and resembling a blunt gorget, is applied to the bare wall of the vagina. This blade is moved over the mucous surface, so as to detect and expose any fissure or fistula that may be hidden in the vaginal folds.

NEW OBSTETRIC INSTRUMENT TO SUPPLANT THE USE OF THE FORCEPS.

Dr. Simpson exhibited a new obstetric instrument, which, when further perfected, he thought might prove useful in many cases where the short forceps were now ordinarily applied. It consisted essentially of a disc, slightly concave on the surface, which is applied to the child's head, and is made to adhere on a principle exactly the same as that on which the common schoolboy's sucker acts. By the use of such an instrument the mother would escape all the risk of injury to the soft parts in the pelvis, incurred during the introduction of the blades of the forceps between them and the head of the child. It would be applicable chiefly in those cases where all that is required to complete the delivery is the addition of some force applied to the child, either by increased strength of uterine contraction, or by instrumental aid. Dr. Simpson had successfully delivered one such case in the Maternity Hospital by means of the instrument.

ANENCEPHALOUS MONSTERS.

Dr. Weir exhibited to the Society an anencephalous monster, born at the full time. He had now witnessed in his own practice three such cases. One of these presented by the breech, the other two by the head. In one of the latter the labour was extremely difficult; after the head was nearly born, immense force was required to make the shoulders descend. One of the children lived for thirty-six hours.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

The following gentlemen have been elected office-bearers for the present year. *President*, James Syme, Esq., Professor of Clinical Surgery in the University of Edinburgh. *Vice-Presidents*, Sir Wm. Newbigging, John Goodsir, Esq., Dr. Begbie. *Councillors*, John Coldstream, M.D., James Dunsmure, M.D., Richard Mackenzie, M.D., Benjamin Bell, Esq., Halliday Douglas, M.D., Alexander Wood, M.D., James Robertson, M.D., Wm. Cumming, M.D. *Treasurer*, Robert Omond, M.D. *Secretaries*, John Taylor, M.D., William Robertson, M.D.

ADDRESS OF THE PRESIDENT.

The Society met on Wednesday, the 3rd instant, when the President, upon taking the chair, spoke to the following effect:—

He expressed his sense of the honour which was attached to the occupation of that chair, and his gratitude for the kind feeling of the members of the Society which had led them to place him in it. He said, that the best, indeed the only return he could make was, to exert every effort in his power to promote the objects for which the Society was instituted. These, he understood, were, assisting in the

accumulation and diffusion of medical science, increasing the good understanding and fellowship of the members of the Society, and maintaining the honour and dignity of the profession. With regard to the first of these objects, it appeared, from their past history, that many communications distinguished by talent, research, and original observation, had been contributed; and, although they had ceased to publish their transactions in a separate form, the records of medicine contained abundant evidence of the novel views and important facts which had been made known through their meetings. But, however much they might have already done, there could be no doubt, in the mind of any one acquainted with the composition of the Society, that it had never yet fairly put forth its strength, and that it possessed a latent power, which, if duly exercised, was adequate to the accomplishment of much more than had hitherto been achieved. He here particularly alluded to the great benefit that might be derived by themselves, and their brethren in the country, from the communication of detached cases occurring in the ordinary course of practice, together with the exhibition of morbid parts concerned. Instead of any comments of his own upon this subject, he preferred reading an address which had been circulated among the members by Dr. Abercrombie while he was President of the Society, feeling sure that the sentiments of one whom they all so much esteemed and respected, must have much more weight than anything which he could say in favour of the proposal.

Although communications of the kind alluded to had been occasionally introduced at their meetings, they had never constituted more than a secondary part of the business. That the reason of this might have been the existence of a Pathological Society in Edinburgh, but as it had some time ago ceased to exist, there could be no objection to the plan being fully developed; and if they were to meet once a fortnight instead of monthly, the alternate evenings might be devoted to this purpose.

As to the second object of the Society, there could be no question that the most certain way of accomplishing it was through the successful attainment of the one just mentioned, since nothing could tend more to the establishment of a kind and friendly feeling between the members than frequently meeting together for their mutual instruction. They all knew the effect of a good dinner in smoothing asperities and soothing animosities, and it seemed fair to anticipate a similar effect from mental repasts, at which they might all derive satisfaction from a common source.

In order to maintain the honour and dignity of the profession, they had of late years heard much of Royal Charters and Acts of Parliament; but, he must confess, that he altogether distrusted such means, either for elevating themselves, or for keeping down the presumptuous individuals who ventured to undertake the treatment of disease without having passed through the schools. In his opinion, a College of Physicians or Surgeons had no legitimate claim for respect except what was founded upon the character of its members, and the assistance contributed by them to the advance of their respective departments of medical science. He saw no use in attempting to effect a classification of the profession, which the public assuredly always would, and alone could do. And, instead of attempting to suppress quackery by penal enactments, he thought the more reasonable course was to elevate the profession in the estimation of the public, so as to satisfy them that it was for their own advantage to avail themselves of services rendered safe and efficient by study and experience, in preference to those of ignorant and designing empirics. He was glad to find these sentiments meet with such a cordial reception, and expressed his fear that there were other medical communities in which they might not have proved quite so palatable, since the members of the profession who were the least scrupulous in degrading it, were ever the loudest in demanding legal protection.

But, to pass from such painful subjects; he had much pleasure in adverting to the advantages which they possessed, as medical practitioners, in Edinburgh.

They enjoyed the best opportunities of cultivating their profession, and its collateral branches. They had among them the greatest medical school, not only of this country, but of Europe; which had every prospect of an increasing prosperity, and must give life and energy to every medical institution connected with it. But best of all, they maintained a social position singularly favourable to freedom of sentiment and liberality of conduct, inasmuch as they were not pressed down by stratum superstrata of wealth, rank, and title; but practised a profession which stood so high in public respect, as to prevent them, in their social intercourse, from ever suffering that painful sense of inferiority in station which, in other Metropolises, had, probably, in no small measure, contributed to the back-slidings of their brethren. He thought that the possession of all these advantages rendered it peculiarly incumbent upon them to exert every effort in their power for the good of the profession; and he trusted that the Medico-Chirurgical Society would always prove a powerful instrument for this purpose. In conclusion, he begged their indulgence for the imperfection of his services in discharging the duties they had confided to him, and expressed his hope that he might be able to afford them as much satisfaction as the amiable and excellent gentleman who had preceded him.

On the conclusion of the President's address, Dr. Begbie read a very interesting paper on the connexion between anæmia and goitre; and Professor Hughes Bennet gave an account of a remarkable cure of an ovarian tumor which had occurred, in his clinical wards of the hospital, by its spontaneous suppuration and ulceration into the bladder, and the application of pressure to assist in the evacuation of the cyst. A short discussion ensued on both of these papers; and in the course of the evening the suggestion of the President, that the meetings should take place once a fortnight, appropriating the alternate nights to pathological discussion, and the exhibition of morbid specimens, was agreed to. The first meeting for this purpose will accordingly take place on the evening of Wednesday, the 17th inst.

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THE MEDICAL TIMES.

SATURDAY, JANUARY 13, 1849.

THE INSUFFICIENCY OF THE NON-MEDICAL BOARD OF HEALTH.—THE CHOLERA AT TOOTING.

THE proceedings occasioned by the late melancholy occurrence at Tooting, shows the inefficiency of the Board of Health, as at present constituted. Fortunate was it, indeed, that so observant and intelligent a gentleman as Mr. Grainger was sent to investigate and remedy, in as far as human power was able, an evil which, had common prudence and rationality been exercised, would never have arisen.

The precipitate and highly injudicious steps taken by the Board of Health, in sending to Tooting fifty labourers, armed with pick-axes, scoops, &c., to upturn noisome trenches as a remedy for cholera, is a pretty good specimen of what may be expected from the Board; and but for the experience and intelligence of the before-mentioned gentleman, the consequences would have been, in all probability, more fatal, and greatly aggravated.

The malady which broke out in Mr. Drouet's establishment at Tooting, strictly speaking, can scarcely be recognised as cholera, while the symptoms and suddenness of the invasion plainly point out the cause.

From 1,400 to 1,500 children occupied, as dormitories, buildings in seven compartments, each of which were 50 feet in length and 24 in breadth; a range of buildings 150 in length; also, two old family mansions. Why, on a moderate calculation, these unhappy children must have been packed, for the purpose of sleeping, as close as figs in a drum. And, pray, what ventilation had these 1,500 breathing subjects during the sleeping hours? We are not exactly told, but are informed by one of the medical gentlemen who was called to assist in the treating of the numerous cases, that he found the children four and five in a bed, *for want of room;* and, by another, that sufficient provision had not been made for warming the apartments: from which we may infer, that all apertures were stopped, to remedy, during the cold weather, the deficiency of warmth which should have been managed after a more appropriate fashion. We are also told, that these unfortunate sufferers were insufficiently clad and fed; the presumption, therefore, follows, that they were not overburthened with bed-clothes, so necessary at this and at all seasons, to protect the person, during sleep, from atmospheric influence, when it is less capable of resisting the noxious impressions of sudden vicissitude.

Looking to the evidence given throughout the investigation of this matter, there cannot be a doubt in the minds of experienced persons, that insufficient food and raiment, and the privation of vital stimulus in the shape of pure breathing air, from crowding in insufficient spaces such a number of children, were the predisposing causes; and that peculiarities of atmosphere, in which is comprised hygrometric influence, atmospheric pressure, electrical tension, &c., &c., were the exciting causes.

An occurrence parallel (so far as atmospheric poisoning) to the one in question, as reported by Sir George Baker, will be found recorded in the 3rd volume of the "Medical Transactions of the Royal College of Physicians," as far back as the year 1782. Seventy-three children, belonging to the parish of St. James, Westminster, were removed in the month of September, about the 28th, from Wimbledon, where they had been maintained at the expense of the parish, to a large house in King-street, near Gordon-square. The children, who were in good health on occupying

this house, became suddenly indisposed; first one, and soon after many others. On the 8th October the first case occurred; the symptoms were, excruciating pain in the stomach, back, and limbs, with delirium and costiveness. Many were relieved by spontaneous discharges, by vomiting, and by stool. Nothing could be detected in the cooking utensils or in the locality, to account for the disease. It was, however, observed, that the cases were confined to a certain room of the house, which had been painted, as had all the other rooms, a month before occupation. This bed-room was twenty feet long and sixteen broad. Ten beds were placed in it, and were occupied by eighteen persons. This room had also been a favourite one, on account of its warmth, and had been generally crowded at night by a greater number than its complement. It was also discovered, that, in order that as much space as possible might be made for beds, the chimney had been stopped up with bricks! and it had been the constant custom of the servant at night to keep the door shut, and the window shutters closed, so as to exclude all air. In the adjoining chamber of the same dimensions, and painted at the same time, eighteen girls slept on nine beds; the chamber differing only in having an open chimney, and not being so closely shut up at night, none of the children suffered. A striking fact was also noticed, that a servant-girl in attendance as nurse only one night in the fatal chamber, suffered as the others, with delirium, &c.

The paint in this instance evidently gives character to the disease,—the colicky and constipated symptoms.

We shall not here attempt to discuss the question, as to what share malaria or fœtor from imperfect drainage, which seems to have been hunted for with much avidity, had in the Tooting affair; but observe, that it is somewhat extraordinary, that in all legislative and other proceedings for sanitary purposes, the cess-pools and sewers seem to be the chief object of solicitude,—the all-engrossing subject is the noxious properties of stinking vapours, as though there were no other deleterious gases surrounding our globe inappreciable to the olfactories, and of far more consequence in a sanitary point of view. Now, although vapours, arising from cesspools and imperfect drainage, unquestionably contribute one of the many predisposing causes to disease, they are not of such paramount consideration as *ventilation*; for, their noxious properties, from whatever source they may arise, depend more or less on their existence in open or confined spaces. The indefatigable Parent Du Chatelet, in his work on "*Hygiene Publique*," has shown that stenches, filthy exhalations, however disgusting, are not necessarily the cause of disease, when not pent up, as, *à priori*, they may be supposed to be. He informs us, that at one of the most extensive "Chantieres d'equarrissages," situated at Mountfauçon, within a mile or two of Paris, occupying a large open space of ground, where thousands of horses, dogs, and cats are taken yearly to be slaughtered, and where almost all the ordure of Paris is collected together, the most abominable stenches are to be met with; the ground saturated with the blood of the murdered animals sends forth a most disgusting fœtor, as do also the enormous mounds of putrid flesh for the purposes of manure, and the generation of maggots for the feeding of poultry! Yet the workmen living and employed in these places, in the filthy occupations of glue and music-string making, &c., &c., enjoy an immunity from disease that is truly astonishing, and their exemption from illness during the destructive prevalence of cholera in Paris, was equally remarkable. The existence of such disgusting nuisances, as represented by Duchatelet, can by no means be approved of; but reference to them here is made, to show, by well ascertained *facts*, that the remedying of the effluvia arising from imperfect drainage, cess-pools, *et hoc genus omne*, is not of such *vital* importance in a sanitary point of view, as not only to take the lead, but engross much, if not all, attention in sanitary reform. All sanitary measures, to be effective, must be based on ventilation, which, by striking at the root, will remedy all—much more than the olfactories will guide to. Ventilation, by supplying the vital stimulus, the very *pabulum vitæ*, not only fortifies the system against the poisonous effects of the various deleterious compounds of the atmosphere, by enabling it to bear up against them, but also to resist, to a great extent, atmospheric vicissitude, the grand excitant of all maladies, whether of an endemic, pandemic, sporadic, or epidemic nature.

TREATMENT OF NAVAL SURGEONS.

The abuses connected with the administration of the Navy Medical Board; the injustice and petty tyranny exercised over those members of the profession who, in an evil day, have placed their future prospects and hopes of advancement in the hands of men who almost daily show themselves incapable of appreciating talent and of rewarding meritorious services, have oftentimes compelled us to advocate a thorough reform of the medical department of the Navy. From time to time, vague and unsatisfactory rumours have reached us, that those abuses were soon to be reckoned amongst the things that were. Yet nothing has been done. The abuses, the injustice, and the tyranny remain *in statu quo*. Men, whose services have conferred honour on the profession to which they belong, who have advanced science even at the risk of their lives, and who, in some cases, not few in number, by their talents and enterprise, have made discoveries of incalculable advantage to the nation, are cast aside, superseded, or artfully deprived of their right of promotion. Others, nay ALL, on first entering on active service, find themselves degraded below the rank of gentlemen—a rank which their education entitles them to hold. There has been no amendment, no reformation,—and therefore we feel ourselves again called on to denounce the crying abuse of power from those in whose hands it is vested.

In the extended curriculum required of those who intend entering the Navy as surgeons; in the decided preference given to those who have taken degrees in medicine; and in the recognition of the principle, that a sound medical and surgical education can only be acquired through the portals of science, we observe a praiseworthy desire, on the part of the Navy Medical Board, to obtain thoroughly educated men, and by that means to sustain, as far as possible, the efficiency of the department. Still, cramming a man, *usque ad nauseam*, with numerous courses of lectures, is not the way to qualify him for the discharge of his professional duties; nor will he be able to amputate a limb, extract a ball, or dress a wound, one jot the better for having M.D. attached to his name. What we would point out is, that the regulations of the Board seem intended to enlist the services of thoroughly educated men, and consequently of gentlemen; then, having enlisted them, they do their best to render them of little or no avail, although the good sense and perseverance of the assistant-surgeon generally carry him victorious through a struggle, which must be undergone to be fully appreciated.

It is needless to state, that the Assistant-Surgeons, messing and living in common with boys, and worse still, with disappointed men, cannot study—cannot even refresh their memories on the more abtruse points in practice. But we must state, most emphatically, that the whole Board of Admiralty is highly reprehensible for placing an educated man and a gentleman in a false and, we are sorry to say, in a degrading and demoralizing position: false, because while he is allowed to rank with a lieutenant, he is not allowed to enjoy the privileges of that rank; degrading, inasmuch as with a certain *status* in society, and an occasional recognition of his rank, he is obliged to associate with mere boys, when his education should entitle him to associate with his brother officers in the ward-room; demoralizing, for—but we forbear concluding this sentence, as a statement made in a former number of this Journal discloses a tale of so harrowing a nature in this respect as to render comment unnecessary.

Grievances must be redressed. It is the interest of the whole nation, and especially of the medical profession, to see this one redressed; and speedily too, or the navy will certainly be deprived of the services of educated men, who must and will have their position as gentlemen fully recognised by the authorities. The representations of certain corporate bodies who have a direct interest in this subject, will, no doubt, tend to the removal of this—the first abuse.

LUNATIC ASYLUMS AND THE GOVERNMENT.

There are few things that require more careful inspection than the management of private asylums for lunatics, and there are not many where the most accurate inspection may be so successfully eluded. The inquiry into the state of the Fishponds Lunatic Asylum has pressed this matter upon our attention, and led us to consider whether there may not be something radically wrong in the system on which these matters are conducted.

If Dr. Bompas be guilty of all that has been charged against him, none would more regret the scandal fixed upon a professional brother than ourselves, or would be more eager to wipe off the stain from the fair character of the profession; but doubts exist as to the facts alleged,

and to the benefit of these doubts Dr. Bompas is fairly entitled. Too implicit credence must not be put upon the assertions of lunatics; for they are prone to be irritable, capricious, dissatisfied, and malevolent, and to exaggerate every little harshness to which they may have been subjected to the dimensions of a huge brutality. Ignorant people are equally prone to believe their statements. We knew a lunatic who, being treated with such a culpable lenity that he succeeded in escaping twice, and by crossing on one occasion to the Continent, getting thrown into prison, and half-starved, nearly lost his life, yet used to speak with the highest approbation of the establishment in which he resided; but so soon as he was more stringently guarded, and escape was hopeless, he vituperated his surgeon, his house, and management, with the choicest maledictions.

Granting, however, that there may have been some remissness in the conduct of the Fishponds Asylum, yet is Dr. Bompas fairly treated by the system on which he is judged? The visiting justices are his accusers, opposing counsel, judge, and jury. They could scarcely do otherwise than bring in guilty the man whom they had themselves brought to the bar. The sentence justifies the prosecution; otherwise Dr. Bompas would have suffered a great hardship, the system would have been denounced, and public indignation roused to protect a defenceless man. It is necessary for a bad system to veil itself by success; the first failure exposes it to condemnation.

Private lunatic asylums contain sources of evil which are not easily remedied. There are many excellent and humane men who have undertaken the responsible task of alleviating mental affliction, and have fulfilled the delicate and manifold requirements of their duty with much skill, kindness, and benevolence. To such men the system stands indebted; they owe nothing to *it*, but the public are under great obligation to their humanity and intellectual refinement. Happily for the public, who are compelled to repose so much confidence in our integrity, such men abound in our profession. The evils exist both in the system and in its administration.

Lunatic asylums should be under the closest inspection, and should be conducted by persons who have no pecuniary interest either in the health or sickness of their patients. In fact, the care of the insane should not be a trade. There are many private asylums, not held by educated medical men versed in the cause of disease, and able to analyse mental manifestations, but which are the mere gainful investments of coarse, grasping, matter-of-fact speculators, who look only to the profit which their repulsive occupation may return. Many damnatory statements have been reported to us by medical men who have been engaged by such parties to attend their patients; and we cannot regard the permission granted to such sordid speculators otherwise than as a great evil. It is their interest to keep their patients ng as they can, because, where there is so competition, the supply is uncertain, and one patient leaves; it is difficult to find er to fill his place.

present system does not afford the means of a particular and complete inspection, and thus hardships and injurious treatment may be suffered by the wretched lunatic for many years before they meet the public eye. Every humane man must be shocked by this possibility. The existing Commission is unequal to the performance of its varied and onerous duties; and the members must necessarily feel their thorough insufficiency for their task. When men become too old for active public duty, they ought to be superseded. The public interest, and more especially the interests of the poor lunatic, demand the judicious exercise of such a power.

If, however, the Government and the public are not prepared to adopt a more comprehensive and radical measure with respect to private Lunatic Asylums, they ought, at least, to limit the number of these establishments, so that inspection might be more easy and less formal. No one, for example, should be permitted to hold a license but a medical man, who, by his education, would offer a guarantee of his qualification for the performance of the multiplied duties he would undertake. A sufficient number of active and intelligent inspectors should be appointed, under the authority of a Central Board, and that Board might be very appropriately, if its constitution were altered, the General Board of Health. Such a Board, directing and supervising all the departments of State-medicine, must be instituted,—it is a want of the times; and if there were a clear head and strong will, conversant with these varied subjects, in the Commons' House of Parliament, such a consummation would, ere long, be realized.

We think it idle to combat for the propriety of inspectors in the case of private lunatics; it is already a fact. The lunatic is disfranchised, by not being a free agent; there is, consequently, no violation of the principle of personal liberty; he has property and family interests which require the intervention of the law to arrange; he becomes, in fact, the child of the State, which, in a highly refined and complex state of society like our own, is bound to protect both his person and his property; and the person, too, primarily, for the appropriation of the latter is entirely dependent on the doom of the former.

There is, then, great need of a Medical Board of Health, to secure the efficient performance of the various public duties borne my medical men; it would also give an amazing impulse to the science of medicine, confer a consequence on the profession in the opinion of society, and save the public money.

DISTRICT LUNATIC ASYLUMS IN IRELAND, AND THE *NON-RESIDENT MEDICAL SYSTEM* ENFORCED BY THE IRISH GOVERNMENT.

We offer, below, an analysis of the medical attendance given by the single medical officers, who visit (but do not reside in) the District Lunatic Asylums of Ireland.

In Ireland it is worthy of remark, and calculated to give rise to serious reflections in the English mind, that the Lord-Lieutenant and Privy Council were busily engaged in 1843 in passing rules, *studiously* excluding all *resident* medical care of the insane from the District Lunatic Asylums of Ireland; while, at the same time, the British Government was as *studiously* engaged in preparing and passing a Bill, enforcing *resident medical care* in similar establishments in Great Britain!

"DURATION OF MEDICAL ATTENDANCE ON THE DISTRICT LUNATIC ASYLUMS OF IRELAND, DURING A PERIOD OF THREE YEARS, ENDING THE 31ST OF DECEMBER, 1846:—

"*In Armagh*, having an average of 130 patients, it was about twenty-seven hours per month for three years, ending the 31st December, 1846.

"*In Clonmel*, having an average of 130 patients, it was twenty-five hours per month.

"*In Connaught*, having an average of 300, it was forty hours per month.

"*In Carlow*, having an average of 190, it was apparently about one hour per day;—*apparently*, because the return is not given in *monthly averages, as called for*, but in *days' attendance*—the difference is material, because it might be two hours *three times a week*, or three hours an seventeen minutes per day, three times a week, as in December return, 1844, or fifty-six minutes, as in August of same year.

"*In Derry*, containing an average of 210 patients, medical attendance was at an average of twenty-eight hours per month.

"In *Maryboro'*, containing 170 patients, on an average, the attendance stands, in the return, similar to that from Carlow; the amount being *in hours per day*, not stating whether *it was every day*; it would appear, however, to be about forty hours per month. There is a note attached to the Return from this Asylum to the effect, that two or more visits have been paid to "urgent cases" occasionally in the day; it may be well also to state that in the Parliamentary Report of the Inspectors for 1844, (at page 35), it is stated that a *daily average of sixty-eight patients have been under medical treatment* in Maryboro' Asylum, with (as in this Return, called for on the 10th of February, 1847, from same Asylum), an *average daily attendance of the medical officer of less than two hours*, and on whom, during that period, was also imposed, as in all other Asylums, the arduous duty of regulating the *moral* directions of the remaining number, amounting to one hundred patients.

"*In Waterford*, containing an average of 130, the attendance was about fifteen hours per month.

"*In Richmond*, (Dublin), containing 280 patients, the average duration of the medical attendance was forty-eight hours per month, independent of the attendance of a visiting surgeon, amounting to about twenty-seven hours per month, and whose duties are not even glanced at in the Rules regulating these Asylums.

"In this asylum, the last Inspectors' Report (at p. 20) states, that "the number of patients during last year, subject to restraint and seclusion, was *twenty*;" and, to make up for the notorious want of a resident medical officer, a medical *Pupil* was placed as Resident medical attendant!

"Alas! to what unworthy and disreputable shifts the advocates of an exploded system must have resorted, when, under the very eye of the Executive, such a step is permitted, or even advised.

"*In Limerick*, containing about 320 patients, the average duration of medical attendance was nearly *sixteen* hours per month.

"*In Belfast*, the Resident Physician, Doctor Stewart (who acts *in direct opposition* to the rules, while *no other rules exist* to guide that great establishment, containing nearly 300 inmates), devotes his entire valuable time to the welfare of the patients. With what results to society, the large amount of cures testify; and, to science, his admirable reports bear ample evidence. Doctor Thompson, by the return, visits two hours per week, to aid by his advice, in any points of danger or difficulty.

"Let any man, of an unprejudiced mind, now calmly consider the stinted amount of time devoted to these great asylums by the solitary medical attendant on each, and then ask himself, if he be a person in power or of influence, how can such a state of things be permitted to go on, in the face of an Act of Parliament *rendering it imperative in*

Great Britain to have a medical officer devoting his entire time to the well-being of the patients in the lunatic asylums of that country; while Ireland, *said to be united*, now nearly half a century, to England, has not, *in any instance*, similar medical care bestowed on her insane.

"There is scarcely a man possessed of common sense in either country, that is not daily repeating the language of the Latian Prince,(a) while there scarcely passes a session, that matters are not taking place, or *omitted*, which tend *practically* to render such hopes as fond and as unsubstantial as if the very genius of Mischief presided over the destinies of this unfortunate land.

"The Metropolitan Commissioners in Lunacy, for England, (in 1844), denounced in terms befitting their talents and humanity, *one* County Asylum, which alone had not a Resident Medical Director, and which kept 'a pony on the lawn ready to be saddled,' (page 115), to send for medical assistance in *their* cases of 'urgency'—yet in Ireland, that unhappy land of contradiction and misgovernment, we find men, possessed of reasoning faculties, who not only do not denounce with uplifted hands and 'moral force,' the *total absence, in all the great Government Asylums of Ireland*, of any Resident Medical Officer; but actually, in the most Hibernian manner, defend the cruel system now in mischievous and fatal existence,—a system which has neither uniformity nor design—which presents no two Asylums similar in any one department, although said to be under uniform regulations, discipline, and *medical control*,—which exhibits 'without note or comment,' a charge for medicine and medical extras of (b) *Two* Pounds for last year in one Asylum, (Armagh), containing 130 patients, and one hundred and twenty-two pounds for similar purposes in *another* Asylum (Waterford), containing exactly a similar number of patients (130), and of sixty-seven pounds for same items in a *third* Asylum (Clonmel), with an average of 135 patients; which exhibits a *Monthly* medical attendance on great Asylums, varying from *forty hours per month*, (in Maryboro', containing 170 patients), to *fifteen hours per month*, (in Limerick, containing over 300 patients)."

THE PER-CENTAGE OF CURES IN THE TEN DISTRICT ASYLUMS OF IRELAND, DURING A PERIOD OF TEN YEARS, ENDED 1845.—Extracted from the Tables of the Society for the Diffusion of Useful Knowledge, upon returns furnished by the Asylums themselves.

	Per cent.		Per cent.
Armagh	25	Limerick	17
Belfast	28	Derry	22
Carlow	17	Maryboro'....	18
Clonmel	21	Richmond	13
Connaught....	17	Waterford	29

Waterford appears to exceed Armagh or Belfast in its per centage of cures; but it should be borne in mind that the accommodation for patients in Waterford is double that in Belfast, being 120 beds for a population of 196,000, while in Belfast it is only 250 for 722,000. Cork Asylum only became a district in 1846. Its cures amounted to 32 per cent. during the ten years in question; but here again, accommodation and population must be considered; and, compared with other Asylums, Cork has or had, in 1844, 418 beds, for a population of 834,000, while Belfast had but 254 beds, for a population of 722,000; Cork, moreover, excluded all cases not deemed curable, or at least improveable. Such consideration should form an important item in any comparison between Curative Institutions, situate in the same country.

EDINBURGH ANÆSTHETICS AND THE DUBLIN OBJECTIONS TO THE PRACTICE.

[To the Editor of the Medical Times.]

SIR,—Your Irish Correspondent, since his appointment, has written two letters to the *Medical Times*, in which he has thought fit to attack me. The attacks have been made by him partly under the names of Dr. Montgomery and Dr. Collins, and partly under his own character as the anonymous Correspondent of your Journal. It is in relation to what he states in this last respect that I now address you.

He has adduced, in a late Number of the *Medical Times*, some charges which he thinks "really require explanation" on my part.

1st. He accuses me, by implication, of sending pamphlets on Chloroform to the "unlearned in medicine." He instances, from Dr. Collins, that I had supplied them, for example, to the "Viceroy of Ireland and the Fellows of Trinity College, Dublin." Now, he is living on the spot, and has the power of ascertaining whether this be true or not. I never sent or supplied, directly or indirectly, a single pamphlet on Chloroform to Ireland to the parties in question.

Dr. Montgomery, in one of your Correspondent's letters to the *Medical Times*, is described as indignant, forsooth, that others than medical men had read the same pamphlets on chloroform. Surely, your Correspondent has misrepresented Dr. Montgomery. Would he or Dr. Montgomery have had me tell my bookseller not to sell them except to the members of the Profession? Did Dr. Montgomery lay down this regulation to *his* bookseller when he pub lished his Essay on the Signs of Pregnancy? I have seen that excellent Essay more than once in the hands of ladies. My Essays on Chloroform sold in greater number than his work on Pregnancy. But even for that I can claim no credit. It was the *subject* that was interesting; not the way in which it was treated. For we may rest assured, that people (men and women) are—however improperly—more interested at this time of day in the discovery of the means of destroying human pain, than in the discovery of the means of detecting human pregnancy.

If we apply the same mode of thought to any other profession, it will, perhaps, be seen better how untenable and ridiculous it is. If to-morrow your Correspondent's countrymen, Mr. Grogan or Mr. Shiel, were to publish a pamphlet on the abolition of capital punishment, or the reform of the finances, ought the reading of it to be restrained to lawyers, legislators, and Members of Parliament? Should the Bible, and works on theological doctrine and discipline, be allowed to be read only by members of the clerical profession? If the discovery of a new order in architecture were made, would you prohibit any description of it that was published from being read by the "exalted in rank and unlearned in architecture," and have it circulated and read by architects and builders alone? I fear the world would look upon such a proposition on the part of any man as something a little beyond eccentricity.

2ndly. Your Correspondent charges me with (in my writings on chloroform) "reflecting on the practice of an older and more experienced brother (Dr. Collins)."

This second charge is of precisely the same character as the first. In none of my writings on chloroform, have I reflected, or did I ever dream of reflecting, on Dr. Collins's *practice*. The only passages in which, as far as I recollect, I mention Dr. Collins's name, or in any way allude to him, are in a "Report on the Progress of Anæsthetic Midwifery," published originally in the *Monthly Medical Journal* for October, 1847. At page 45 you will find the following remarks:—

"Up to within the last few months, and till the power of annulling pain by the inhalation of ether was discovered, severe bodily pain, such as we witness in surgery and midwifery, was universally regarded by the Profession as possessing an evil and morbid effect. Some of the opponents of anæsthesia have taken up a novel and different view; and, as a medical argument against the practice of anæsthesia in midwifery, it has been particularly averred, that a labour pain is 'a desirable, salutary, and conservative manifestation of life-force.' (Dr. Meigs.) Parturient 'pain is (says Dr. Copland) often salutary as respects its effects; neither its violence nor its continuance is productive of injury to the constitution,' &c. No opinion, I believe, could be more erroneous. I have already shown, in this Journal, from the evidence of extensive statistical returns, that some of the graver operations of surgery are now much less fatal in their results when patients are operated on under the condition of anæsthesia, and consequently without any attendant pain, than the same operations were formerly, when patients were submitted to all the agonies of the surgeon's knife in their usual waking and sensitive state. The prevention of the pain in surgical operations is, in other words, one means of preventing danger and death to those operated on; the saving of human suffering implies the saving of human life. And what holds good in relation to pain in surgery, holds good in relation to midwifery. Pain, whenever it is great in degree or great in duration, is in itself deleterious; and by shielding our patients, by anæsthetic measures, against the more severe portion of the pains of parturition, we not only preserve them from the agony of their more immediate sufferings, but we preserve their constitutions also from the effects and consequences of these sufferings. And the evidence which I have adduced in the preceding pages tends to prove, that, when thus freed from the endurance of pain by artificial anæsthesia, they assuredly, as a general rule, make both more rapid and more perfect recoveries than when such means are not used; just as woman, in a savage state, and where she enjoys a kind of natural anæsthesia during labour, recovers more easily and rapidly from the shock of labour than the civilized female. In short, in cancelling the pains of parturition, by anæsthesia, we also, I believe, to a great extent, cancel the perils of the process; for the mortality accompanying labour is regulated principally by the previous length and degree of the patient's sufferings and struggles. In the Dublin Lying-in Hospital, when under Dr Collins's able care, out of all the women, 7,050 in number, who were delivered within a period of two hours from the commencement of labour, 22 died; or 1 in every 320. In 452 of his cases, the labour was prolonged above 20 hours; and of these 452, 42 died; or 1 in every 11,—a difference enormous in its amount, and one surely calculated to force us all to think seriously and dispassionately of the effects of severe suffering upon the maternal constitution."

The other passage in which I allude to Dr. Collins's Report is in an Essay entitled "Remarks on the Superinduction of Anæsthesia in Natural and Morbid Parturition." At page 10 I have observed:—

"All pain is, *per se*, and especially when in excess, destructive and even ultimately fatal in its action and effects. It 'exhausts (says Mr. Travers) the principle of life.'(a) 'It exhausts (says Mr. Burns, of Glasgow,) both the system and the part.'(b) 'Mere pain (observed the late Dr. Gooch) can destroy life.'(c) And the great pain accompanying human parturition is no exception to this general pathological law. For, in fact, the maternal mortality attendant upon parturition regularly increases in a ratio progressive with the increased duration of the woman's sufferings. The statistical data published by Dr. Collins, in his Report of the Dublin Lying-in Hospital, affords ample proof of this general principle. According to calculations which I some time ago made from Dr. Collins's data, I found that while, in the women delivered in the Dublin Hospital, and whose sufferings were terminated within 2 hours, only 1 in 320 of the mothers died; where the labour varied in duration from 2 to 6 hours, 1 in 145 of the mothers died; in those in whom it continued from 7 to 12 hours, 1 in 80 died; where it endured from 12 to 24 hours, 1 in 26 died; where it lasted from 24 to 36 hours, 1 in 17 died; and out of

(a) "'Fœderis æquas
"'Dicamus leges, sociosque in Regna Vocemus.'
"(b) Vid. Tables of last Report to Parliament, [page 75,) and the discrepancies of which exhibit a strange commentary on 'Uniform Rules.'

(a) "Inquiry Concerning Constitutional Irritation," Vol. I. p. 76.

(b) "Principles of Surgery," Vol. I. p. 502.

(c) Dr. Merriman's "Synopsis of Parturition," p. 239.

all those whose parturient sufferings were prolonged beyond 36 hours, 1 in every 6 perished."(a)

These, I repeat, are the only two passages in which, in my papers on chloroform, I allude to Dr. Collins; and I most willingly leave it to any unprejudiced medical man to say whether there is any reflection on Dr. Collins's practice in these observations. My reasonings and deductions from Dr. Collins's data would have been equally true, if he had lost only 1 in 200 or 1 in 300 patients, instead of 1 in 100; for, in truth, these reasonings and deductions have nothing whatever to do with what was his practice, or whether the success of it was good or bad, above or below the usual standard—1 death in 10, or 1 in 500. It would have turned out equally true, that "the maternal mortality attendant upon parturition increases in a ratio progressive with the increased duration of the sufferings and struggles of the labour." And that formed the sole object of my argument.

3rdly. Your correspondent gravely offers to the readers of the *Medical Times*, as if they were perfectly true, some remarks of Dr. Collins on the relative "sufferings" during labour of his patients and mine. Now, in doing this, he certainly could not have investigated Dr. Collins's statements, or he would easily have seen how different the allegations which he quoted from him really are.

In the last letter of Dr. Collins to me, from which your Correspondent quotes, he (Dr. Collins) has completely allowed his feelings, as a disputant, to overcome all his ordinary feelings of respect,—even for those facts and cases that he had himself previously published. And, there is no more foundation for the statement which your Correspondent has cited from him on this third point, or, indeed, for most of the various statements in which Dr. Collins has indulged in that letter to me, than there is for the first charge or insinuation of your Correspondent and Dr. Collins, that I spoke of above, namely, that I had supplied one or more of my pamphlets on Chloroform to His Excellency the Viceroy of Ireland!

Let me merely add, that various so-called moral objections have, within the last year or two, been brought against the employment of anæsthetics in midwifery. The one your Correspondent principally mentions and dwells upon in his letters, on the part of the Dublin Obstetricians, seems, from his own account, to amount to this,—that Irish ladies should not be relieved by their physicians of the sufferings and agonies attendant upon labour, *because* the Viceroy of Ireland and the Fellows of Trinity College have read some papers written on Chloroform. The objection is novel, and perhaps rather peculiar; but I have no doubt, that posterity will, nevertheless, deem it as valid and unanswerable as most of the other moral objections that have been adduced on the same side of the question.—Yours, &c.

J. Y. SIMPSON.

Edinburgh, Jan., 1849.

(a) The data upon which these calculations were founded, are contained in two Tables published by Dr. Collins himself, in his Practical Report, p. 22, and p. 364. Out of 16,414 cases in the Dublin Hospital, Dr. Collins noted the duration of the labour in 15,850; and, among these 15,850 cases, 138 maternal deaths occurred. The following Table contains, in its first column of figures, the total number of deliveries that took place under each specified period of duration; in the second column is stated the corresponding number of deaths occurring among each set of these deliveries; and, in the third column, is given the proportion which the deaths bear to the whole deliveries, in labours of each specified degree of duration.

TABLE showing the Proportion of 138 Maternal Deaths in relation to the Duration of Labour in 15,850 cases of Delivery, in which the Duration of Labour was noted by Dr. Collins.

Duration of Labour.	Number of Deliveries.	Number of Deaths.	Proportion of Deaths.
Within 2 hours ..	7,050	22	1 in 320
From 2 to 6 hours..	6,362	44	1 in 145
From 6 to 12 hours	1,672	21	1 in 80
From 12 to 24 hours	502	19	1 in 26
From 24 to 36 hours	134	8	1 in 17
Beyond 36 hours ..	130	24	1 in 6
Total	15,850	138	1 in 115

REVIEWS.

A Practical Treatise on the Use of the Microscope, including the different Methods of Preparing and Examining Animal, Mineral, and Vegetable Structures. By JOHN QUEKETT, Assistant Conservator of the Museum and Demonstrator of Minute Anatomy at the Royal College of Surgeons of England. Illustrated with Engravings, &c. London: H. Ballière. Paris: J. B. Ballière. 1848. Pp. 464.

The structures of the various animated beings by which we are surrounded have for many ages occupied the attention of philosophers. The researches of those who lived in bygone days have successively added to the stores of knowledge, and the man of science in these modern times, in order to carry on towards perfection that which ancient philosophers had begun, has been compelled to call to his aid chemistry and the microscope. By the former, he is enabled to ascertain the composition of physical structures; by the latter, he can detect the existence of beings and tissues of which he would have no knowledge with only the limited power of observation which nature affords him through the medium of the eye.

For a series of ages, philosophers endeavoured to extend the field of vision, by the employment of instruments which would magnify minute objects. They succeeded to a certain extent, but their experiments in optics, seemed for a time in no way to advance those sciences which are intimately connected with the healing art. The microscope, however, from being a mere philosophical toy, has now become a most important instrument in the hands of the anatomist and physician.

Mr. Quekett, in his interesting work, appears to have imbodied all that is now known in reference to this instrument. He has narrated its history, pointed out its uses, and stated the way in which it may be employed to the best advantage. To the medical student this work will prove of the highest value; for, in the present day, he will be considered as having but very imperfectly studied his profession if he is ignorant of the most approved means of making microscopical investigations. Such a work as this had long been wanting, and we have no doubt that the medical profession will highly appreciate the work which Mr. Quekett has published more especially for its use.

The first part of the volume is devoted to the history of the microscope, in which we have different instruments described, and the successive improvements which were made in their construction. In the second part, the best means of using the instrument are pointed out—its position—the adjustment of the light and focus—the illumination of objects—the application of the micrometer and goniometer, and the means of employing the polarizing apparatus.

The third part treats of manipulation; and here we have pointed out the method of cutting glass, of cementing cells, of mounting objects in fluid, in Canada balsam, and in the dry way; also of making sections of bone and teeth, of shell and other hard tissues, and of wood. In this part, also, we have shown the method of dissecting and preparing vegetable and animal structures and figures—the way of exhibiting objects of interest—the means of viewing the circulation in plants—of procuring infusory and other animalcules—of examining morbid structures, and, finally, there are given miscellaneous hints on the management of the microscope and microscopic preparations.

Mr. Quekett's work is one which reflects great credit upon him as a talented and industrious author; and those who would become expert in the use of the microscope should obtain his invaluable treatise. The nine engravings and two hundred and forty-one woodcuts are admirably executed.

On the Influenza; or, Epidemic Catarrhal Fever of 1847-8. By THOMAS BEVILL PEACOCK, M.D., &c. London: John Churchill. 1848. Pp. 182.

Influenza is a disease that has been long known in Europe, and has, in consequence, been attentively studied. The object which Dr. Peacock has in view in publishing the present work is, to describe the recent epidemic influenza as it came under his own observation in London. He has performed his task with great credit to himself. His description of the different types of the disease is marked by great truthfulness, and his treatment is very judicious.

The author, after having given an introductory review of the commencement and progress of the epidemic in the metropolis, treats of the several varieties under the heads of simple catarrhal fever—catarrhal fever, with pulmonary complication—and catarrhal fever, with predominant disorder of the abdominal organs. This last class is further sub-divided into cases of simple enteric fever—fever with bilious disorder, and characterized by a tendency to relapse, or assume a remittent form—and gastro-enteritic and bilious fever, complicated with rheumatism. Twenty illustrative cases are then given, and two Tables—one showing the number of cases of certain forms of disease admitted into the Royal Free Hospital, from February, 1846, to February, 1848; the other, a meteorological Table, with the number of deaths from certain forms of disease, registered during the six months ending April 1, 1848.

A Descriptive Atlas of Astronomy and of Physical and Political Geography; embracing the latest Information and most Recent Discoveries in Astronomical and Geographical Science, with Descriptive Letter-press. By the Rev. THOS. MILNER, M.A. Division I. and II. London: Orr and Co.

We have looked through the two parts of this work, and have been surprised that such an amount of letter-press, so many excellent wood-cuts and copper-plate engravings, can be furnished to the public at so small a price. Each part contains no less than eighteen beautifully-coloured maps, and almost every page is adorned with one or two excellent wood-cuts. To the scientific student this work will prove of great value. The physical maps exhibit the distribution of temperature, of water, of land, of plants, animals, and the human race. The section on meteorology is an excellent epitome of the science.

MR. G. B. CHILDS, THE EDITOR OF THE "MEDICAL GAZETTE," AND MR. MOYLE.

[To the Editor of the Medical Times.]

SIR,—The Editor of the *Medical Gazette* has suppressed my letter forwarded to him last week, in refutation of the charge made against my professional reputation; hence, he is evidently resolved not to act justly by me. In the same spirit which characterizes his first attack, and contrary to a just sense of impartiality and fair dealing, he has thought proper to insert only a short paragraph from my reply, and to make comments thereon prejudicial to my character.

If Mr. Moyle is not ashamed of his letter addressed privately to the Editor, why refuse to have it published? I am quite willing that my correspondence with Mr. Moyle should be made public, as I have no wish or inclination to suppress truths or misrepresent facts.

I am sensible that the columns of your journal are ever full of valuable and instructive matter; but in justice to me, I trust that you will allow a copy of my

letter, addressed to the Editor of the *Gazette*, to have a place in your journal of next week.

I have the honour, Sir, to be,
Your obedient servant,
GEO. BORLASE CHILDS.

[To the Editor of the Medical Gazette.]

"Qui alterum accusat probri eum ipsum se intueri oportet."

SIR,—A notice in your Journal of to-day, of a paper of mine, published in the *Medical Times*, respecting an epidemic, which prevailed in the town of Penzance, has caused me much surprise. Although deeply sensible of the injustice done me, I will not suffer my feelings to be influenced by a spirit of rancour or abuse, nor will I condescend to reply in the same tone that pervades your attack on me. I confide my professional reputation to a statement of facts, and not to the precarious test of my opponent's assertion or your remarks.

If, from a private communication, received from Mr. Moyle, you have felt yourself justified in adopting the language you have used, then, Sir, I charge Mr. Moyle with a misrepresentation of facts, which, I am well satisfied, he never intended should come to my knowledge; if otherwise, then, I may presume, that inheriting the united bravery of the "four-and-twenty *tailors*," in a Quixotic spirit, you are disposed to break a lance with me; but allow me to say, that the precipitate retreat of these honourable gentlemen does not redound less to their credit than your unprovoked assault on a reputation long tried and established. But, sir, I perceive you are classical as well as brave. I must, therefore, indulge a little in the same pastime, *Non ego hac ferrem calidâ juventâ*, but *tempus edax rerum*. At one phase of my existence I should have chafed and fretted under the lash of an editorial thong, but now "I would rather pity than chide," *satis dict.*

I come now to the facts. Having many friends and relatives at Penzance, and being well acquainted with its neighbourhood, I felt naturally anxious to obtain some information respecting an epidemic which had caused so much affliction to my family. Mr. Moyle having enjoyed the privilege of attending my relatives in the town, one of my little nieces having died of the disease whilst under his care, and another of my sister's children lying in a most precarious state, it was suggested, by those equally interested with myself, that I should write to Mr. Moyle on the subject; I did so, and enclosed a number of interrogatories, framed in such a manner as to require little labour and less head-piece to answer. In a few days I received from Mr. John Moyle, a son of the gentleman who attended my relatives, answers to these queries, in a letter concluding thus, "If these answers, hastily thrown together, though accurate as far as they go, are of any use to you I shall be amply rewarded," &c., &c. I also received a few lines from Mr. Moyle, sen., to the following effect:—That his son had *spent his leisure time for some days past in replying to my queries*, and if there was any further information I wished for, I was to write to him again.

The answers I received confirmed many views which I had previously entertained respecting the disease; and from the tenor of Mr. Moyle's letter I was satisfied, as would have been every honest man, that Mr. Moyle supplied me with the information, fully cognizant of the use I was about to make of it. I wrote to Mr. Moyle a few days subsequently, thanking him for his letter, and stating, at the same time, that I had written my paper and was about to publish it. Some days after I received a letter from Mr. John Moyle, informing me that his father had also written a paper on the subject, and had sent it to one of the medical periodicals, but hoped "that it would *not clash* with mine." I immediately answered this communication, expressing my regret that I had not been made acquainted with this fact before, as my paper was in the hands of the Editor of the *Medical Times*. As Mr. Moyle was not frank enough to inform to what Journal he had forward his paper, I must be excused for giving credence to his assertion. You, Sir, from the date on which you received Mr. Moyle's communication can best inform me if I am right in doing so. My paper was sent to the *Medical Times* more than three weeks since, and not receiving any reply from Mr. Moyle to my last letter, I did not conceive that my paper would, to use Mr. John Moyle's own expression, "*clash*" with his father's, and, therefore, presumed that it was not necessary to withdraw it.

Instead of Mr. Moyle condemning me, I have a greater reason to be dissatisfied with him. I am strongly of opinion, that Mr. Moyle would never have dreamt of publishing a paper on this disease had I not called his attention to it. I am ready to prove that the construction of his paper is based entirely upon the interrogatories I placed before him. He ought, therefore, to be thankful to me for affording him the opportunity of figuring in a journal *once* in his life, and drawing his attention to the peculiarities of a disease which but for me, as far as the Profession is concerned, would inevitably have passed to the "tomb of all the Capulets."

On the comparative merits of the two papers, it would be ill-judged in me to make any observation. They are now in print, and the Profession is best able to form an opinion on their merits, as well as the amount of information I have derived from Mr. Moyle.

Had Mr. Moyle been more frank and generous, instead of closing his communication with me, and subsequently blasting your mind by a private communication, it would have redounded more to his honour and interest; let him, in future, remember this—"*Quid de quoque viro et cui dicas sape videto.*"

I am, Sir, your obedient servant,
GEORGE BORLASE CHILDS.

December 30, 1848.

DR. STEVENS' SALINE TREATMENT OF CHOLERA.

To George Ross, Esq., Surgeon to the Western City Dispensary, &c. &c.

DEAR SIR,—As I stated in my first note to you, (published in Number 482, Vol. XIX. of the *Medical Times*,) I have long taken great interest in (and have published on) the nature and treatment of Cholera Indica, or Asiatic Cholera, and I read your erudite lectures with great avidity. I respectfully requested you to inform me where you derived the data on which you constructed your third Table, given in your fifth lecture. You kindly furnished me with the facts, and desired the publication of our correspondence: in this I readily acquiesced, on these grounds, viz.: That the information elicited by our discussion might be interesting to the readers of the above Journal, and that we might unfold *the true value or utter worthlessness* of the "saline treatment," which originated with Dr. Stevens, of the island of St. Thomas, in the West Indies, in the year 1827.

In the series of papers which I shall present to yourself and the profession through the *Medical Times*, I propose to make a philosophical and critical examination of the basis of Dr. Stevens's peculiar views—the history of these—the facts on which they are built—the results of their application in cholera, and the statistics thence arising. Lastly, I shall present our readers with a general *resumé* of the inquiry, and endeavour to deduce the practical conclusions which I hope may determine the profession to adopt *generally*, or to reject *wholly*, the treatment of Asiatic Cholera by the non-purgative neutral salts. The restoration of thousands may depend upon the issue of the proposition: truth *demands* its fair investigation, and suffering humanity *claims* it at our hands.

In the outset of this "Critical Examination of the basis of Dr. Stevens's peculiar views," it seems to me essential, that our readers should be made acquainted with the professional qualifications of Dr. Stevens, who has lived so little in England, his early education, his subsequent opportunities for the observation of febrile diseases, and the estimation in which his labours have been held.

In the year 1805, he was a pupil, and afterwards prosector, of the celebrated Allan Burns, whilst he was doing his excellent work on the surgical anatomy of the neck, and made the dissections for it. In 1810 he went to the island of St. Croix, where he practised successfully, obtaining both reputation and emolument. In 1812, in the island of St. Croix, he tied, for the first time, with success, the internal iliac artery. (See "South's Translation of Chelius," Vol. II., pp. 256, 257, where he also gives Professor Owen's dissection of the case, which is also detailed in the "Medico-Chirurgical Transactions," Vol. V., page 422, and in Hodgson's Work on the Arteries, page 425. The preparation is now in the College museum.) This fact was scoffed at in the public lectures of some surgeons of eminence as doubtful, till some of them had witnessed the dissection, many years afterwards, by Professor Owen. Dr. Stevens, I find, has ever been an ardent student in, and a considerable contributor of facts and useful observations to our profession. In the earlier part of his professional life, he bent his acute mind to the subject of the chemical and vital qualities of the blood. In the year 1827, as I find in his work on the blood, he first applied his views of the saline treatment in the various forms of fever in St. Thomas's Island, the results being a remarkable reduction of the mortality in the West India fevers. I find also, at page 413 of the above work, a letter from a captain in the Royals, then quartered at Trinidad, which he writes to a friend, in which he says:—"If you know Dr. Stevens, pray give him my best regards, and tell him, that since he was here, (four months ago yesterday,) the Royal regiment *has not lost a single man*, which I attribute mainly to the lesson which he gave to our assistant-surgeon, and for which God bless him." Previously to this, it appears that the battalion to which this gentleman belonged had lost one-seventh of its actual strength within a few months,—viz., from the 1st of January to the 28th August.

I also find, that in the course of a year there were 1,100 cases of various West Indian fevers, treated by Dr. Stevens's plan, and the mortality was only eleven in this number. These facts are numerously and most respectably attested. Dr. Stevens still continued accumulating facts bearing on the nature of the blood, in America, where he went in the year 1830.

In the year 1829, in November, Dr. Stevens gave a paper, "Observations on the Blood," to the College of Physicians, which was not publicly read until the year 1830, 3rd May. See page 353 of the beforementioned work on the blood. Therein he has condensed his views into five aphorisms, viz:—

1st. That *all* acids give a dark colour to the colouring matter of healthy blood, and, in proportion to their strength, they change their colour, from red to black, as certainly as they change vegetable colours from blue to red. When any one of the acids was diffused in a small quantity of water, and then mixed with the fluid blood, the colour of the whole was immediately changed from red to black. Even the vegetable acids so completely blackened the blood, that the addition of a little water converted the whole into a fluid, exactly resembling the black vomit.

2. That the *pure alkalies* have a similar effect with the acids, in changing the colour of the blood from red to black, though not in the same degree.

3. *That the whole of the neutral alkaline salts* immediately changed the venous blood from a dark Modena red to a bright arterial colour.

4. That even those salts which contain an excess of alkali, the sub-carbonate of soda, for example, immediately changed the venous blood to a beautiful bright arterial colour.

5. That when the neutral salts were mixed with the dark and dissolved blood that had been taken from the heart of those that had died from the yellow fever, even this black and dissolved fluid was immediately changed from black to a colour that was highly arterial.

At page 382, I find that Dr. Hacket admits that the blood is invariably dark-coloured and diseased in the West Indian fevers, *without one single solitary exception to this rule.* At page 383, Dr. Stevens says, that he has reasons to believe that it is carbonic acid, and not carbon, that is the cause of the dark colour of the blood in the venous circulation,—a conclusion fully confirmed in a paper read at the Royal Society, and published in their Transactions.

In that collossal work of my friend Dr. Copland, "The Dictionary of Practical Medicine," you will find the views of Dr. Stevens frequently referred to, and his experiments on the blood recognised with praise and deference, especially in the article "Blood," page 191. The author there says, that Dr. Stevens had described the appearance of the blood in tropical fevers with greater minuteness than his predecessors, and that he has referred to most important changes of the saline constituents of this fluid, and has fully confirmed some very detailed observations adduced by myself several years ago. The acknowledgment of Dr. Stevens, by Muller, in his "Elements of Physiology," who re-wrote a part of this work, in consequence of finding that he had not done justice to him, and that the experiments of Professor Brand, of London, at the Royal Institution, fully confirmed those of Dr. Stevens, does him great credit.

In the year 1834, when the Duke of Wellington was installed Chancellor of the University of Oxford, Dr. Stevens was chosen, by the authorities at Oxford, as one of the three medical gentlemen most fitting, by his labours on the blood, animal heat, &c., to receive a degree.

I have, therefore, now, I think you will agree with me, shown that Dr. Stevens was early educated in our profession in the best school of his day; that his chemical and physiological acumen are widely acknowledged; that the application of these to the practice of medicine has signally benefited the sufferers from tropical fevers, by diminishing the mortality to a degree truly wonderful, particularly in the Danish island. Lastly, I think you will conclude with

me that if, up to this stage of our inquiry, I have made it apparent that Dr. Stevens's views, character, and acquirements entitle him to the same degree, at least, of credence that we must accord to any other writer on Indian cholera, or any of the tropical fevers, we are bound to receive his statements without prejudice.

In my next letter I shall enter more fully on the facts on which Dr. Stevens has built his views, detail some of the results of their application in cholera, &c.; and, in the order I have indicated, endeavour to deduce the *practical* conclusions of which our profession is manifestly so lamentably deficient, as evidenced in the treatment of the present unusually fatal visitation of Asiatic cholera.

I remain, dear Sir,
Very faithfully yours,
EDWARD ASTBURY TURLEY.

Ivy-house, Worcester, Jan. 8, 1849.

CHLOROFORM IN CHOLERA.

[To the Editor of the Medical Times.]

SIR,—In your last Number I observe a communication, in which the author would make it be believed that he, and not Dr. Hill, was the first to write on *chloroform* in cholera.

At this late period I am astonished to find so much ignorance on that subject. When Dr. Hill's letter appeared in the *Times*, I publicly contradicted what he said about Mr. Ferguson having been the first to suggest chloroform in cholera. Dr. Hill did not venture (so far as I know) to give a denial to what I said about my having been the first to publish on the subject, so far back as December 16, 1847, immediately after the *discovery* of chloroform. I hope you will let Dr. Hill and the author of the "Fallacies" know that, if there is any merit in the matter, it does not belong to either of them.

As I am speaking of cholera, I may mention, that North Berwick has, as yet, been entirely free of it; and I mention, moreover, as an interesting medical fact, that, owing to our pure air, we have not half the diseases usually found in other places. The land is dry, free of wood and stagnant waters, and, altogether, the place is one of the healthiest in Europe. I could adduce many facts in support of this, and, amongst others, the readiness with which some of the most formidable diseases yield to medical treatment. I find, however, I am digressing, and must, therefore, reserve my remarks till a future opportunity.

I am, your most obedient,
JAMES MOFFAT, M.D.

North Berwick, January 4, 1849.

EXCESSIVE BRANDY DRINKING—PERFORATION OF THE STOMACH—DEATH.

[To the Editor of the Medical Times.]

SIR,—A very interesting pathological discussion has lately had a place in the *Bath Journal*, and, as the subject appears to me well worthy of the consideration of the profession, I am induced to call your attention to it.

A Dr. Grindrod, who gives lectures to popular audiences on the advantages of temperance, and on the dangers attending the use of ardent spirits, exhibited, early in November, in Bath, a human stomach with a hole in it, which he stated had been caused by drinking brandy under the following circumstances:—

A robust and healthy young fellow, a sailor, drank freely of "spirit of brandy many degrees over proof" on the evening of the 4th of February, and got drunk. He died on the evening of the 5th, and, on the 6th, a coroner's inquest was held upon the body touching the cause of death. In addition to what has been just stated, it came out in evidence that the man had not been previously a drunkard, and that he enjoyed good health; that the cook of the ship to which the deceased belonged had, himself, tasted the spirit of brandy, and was of opinion that the man drank "enough of it to kill him in twelve hours;" that one of the sailors saw the deceased at seven o'clock on the morning of the 5th, when he seemed quite well; that at eight o'clock the same morning, he complained of pain in the stomach, for the relief of which the captain gave him a glass of brandy; that finding no relief from the brandy, he was sent ashore for medical aid; that, according to the evidence of Mr. J. Page, a surgeon, who made a *post mortem* examination, on the 6th, the stomach presented several patches of inflammation and a perforation; that the stomach was empty; that Mr. Page at first thought, notwithstanding the brandy-drinking, that, from the appearance of the stomach, the man died of the effects of some *corrosive poison*; and, under that impression, refrained from giving his opinion, as to the cause of death, until he had made an analysis; that, not being able to discover, by the usual tests, the presence of any corrosive poison, he (Mr. Page) came to the conclusion, that the morbid condition of the stomach had been occasioned by the application of ardent spirit to the mucous membrane of that viscus, and that death was caused thereby. This conclusion was objected to as an erroneous induction, by Mr. Bush, a surgeon in Bath, who argued, that there was no precedent for it; but that, on the contrary, in all the fatal cases upon record, from spirit-drinking, death had been occasioned by the effects upon the brain; the stomach presenting but little or no marks of inflammation; and, with respect to the "hole" or perforation, especially, Mr. Bush contended, that it must have been the result of pre-existing and progressive disease, to which conclusion he the more confidently came, from the physical characters of the "opening."

A physician, however, who was present on the occasion of the lecture in Bath, said, *at once*, (according to the statement of Dr. Grindrod,) on inspecting the stomach, "*that it was clearly caused by spirit-drinking.*"

Here, then, is the question for the consideration of the profession:—Was the condition of the stomach in this case caused by the excess in brandy-drinking; or was it partly or wholly the effect of pre-existing and progressive disease? I hope that the Pathological Societies in London and in the other great cities where the opinions of eminent men can be elicited will take this subject into consideration. I refrain from giving my own opinion; but I may remark, that there are some circumstances in the case worthy of especial notice. The first is, that the deceased, at seven o'clock in the morning of the 5th, *seemed quite well.* The next is, the rapidity with which he sunk. It is to be regretted, that the exact *locality* of the *perforation* has not been mentioned; but, no doubt, the appearance of this in your columns will induce Mr. Page to send you a full and correct description. I ought to have stated, that Mr. Bush urged that there were cases upon record, where even mineral acids had been swallowed in considerable quantity without proving fatal; and he also remarks, that if the condition of the stomach in the case under consideration had been caused by the drinking of ardent spirit, it was a *unique* case, nothing like it having been noticed by any of the authorities.

In conclusion, let me add, that the discussion in the *Bath Journal* has been carried on with great ability and excellent good temper on both sides, the disputants quoting authorities in support of their respective views. The *dictum* of the Bath physician who saw, by a glance at the preparations, that the state of the stomach had been caused by spirit-drinking, is much relied upon by Dr. Grindrod. The profession will, no doubt, give to that opinion its full value, especially as it corroborates the opinion of Mr. Page, who made the *post mortem* examination; but it is worthy of remark, that Mr. Page, with the recent morbid condition before him, came to that opinion only as an alternative, when he could not detect, by analysis, any corrosive poison, to the effects of some such substance he was, at first, inclined to attribute the death of the unfortunate man.

Mr. Page's fidelity to science, and laudable professional prudence in abstaining to give his evidence till he had made the analysis, does him great credit, and stands in remarkable contrast with the decision of the Bath physician.—I am, Sir,

Your Constant Reader,
M. D.

As the subject is interesting, we shall be happy to receive a communication from Mr. Page. [ED. *Medical Times.*]

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

[To the Editor of the Medical Times.]

SIR,—In your last Number there is a letter signed "A Fellow," on the election of members into the Council of the College of Surgeons, totally at variance with the spirit of the Charter; and, I may add, with the spirit and feeling of the times.

Whatever may have been the policy or justice of the change effected by the Charter of 1841, (and, on these points, unfortunately, the greatest difference prevails,) there is now no retrocession, or "house-listing," as your Correspondent suggests.

He is not probably aware that, within the last two or three months, a proposition was made by Mr. Guthrie, in the Council, and *all but carried*, to petition Government to amend the Charter, so as to allow the admission into the fellowship of a very large number of the members of the College,—an alteration not unlikely soon to be effected.

Mr. Grainger, and others, now on the Council, would not have been elected under the old system; cliquism is destroyed, and every Fellow, who labours earnestly and diligently in his profession, stands a fair chance of being elevated to the Fellowship.

A FELLOW BY EXAM.

THE CELT AND SAXON—REMARKS ON DR. TUTHILL MASSY'S LETTER.

[To the Editor of the Medical Times.]

SIR,—I have read, in the number of your Journal for December 2, 1848, a Paper, headed "Races of Men: a few observations on them by Dr. Tuthill Massy;" and, up to the present time, have vainly endeavoured to comprehend it.

The Doctor professes to state his views on those "races which he has seen in Ireland." Killarney, the Killeries in Connemara, Leenane, Galway, Kerry, Glamorganshire, Limerick, Clare, Giant's Causeway, Donegal, Antrim, and Londonderry, not to speak of England, Scotland, and France, have formed the field of his itinerant observation.

Now for his views. "Each province of Ireland" may, as he says, "have its own peculiar race," or, if he will, even "each county;" but the leading assertion of the learned Doctor, that "the Irish language spoken by a Munster man is quite unintelligible to a Connaught man," I must beg leave, respectfully, to dissent from. "Round faces and dark eyes" may abound "about Killarney," "long faces and dark eyes about the Killeries," but, I was not prepared for the astounding discovery, that "with the round face you have the round head, and with the long face the long head!" As for the Killery ladies, I want to know what their "riding astride" has to do with the "races of men?"

Passing over the philosophical speculations which infer, that "from the similarity between the huts of the Irish and African, *either one* must have visited the country of the other *first*," (indisputable, if the visit ever was made,) I come to the statement, that "in the north of Ireland you meet a people like the Scotch;" may I ask, where is the wonder? are not most of the inhabitants of the North of Ireland of Scotch descent? But, in what the similarity between the Kerry Irish and Glamorganshire Welch consists, I am (though I, too, have visited those districts) nearly as much at a loss to know, as must have been the Doctor, who confesses he only "thought he could trace" it. Captain Fluillen made, long ago, a comparison much of the same kind between Alexander, of Macedon, and Harry, of Monmouth.

I must confess, the Doctor's exposition of his views has, in no particular, enlightened me, save as to those lines of "beauty and of grace," anterior, lateral, and posterior, in the latter of which alone he allows the Saxon woman to excel. With regard to the fourth, that "curved line from the ear to the insertion of the deltoid muscle," which the Doctor finds "full of charms," and peculiar to the Celtic woman, I should gladly, for the sake of the Hibernian fair, receive further and fuller information.

Meanwhile, I cannot help protesting against the learned Doctor's exclusive admiration of the Celtic ladies—an admiration, doubtless, strengthened by his vivid recollection of the graceful attitudes of the Amazons of the Killeries, who "manage their houses" so "remarkably well."

I am, Sir, your obedient servant,
ANGLO-HIBERNICUS.

QUESTIONS PROPOSED TO A CANDIDATE FOR THE DEGREE OF M.D. AT THE UNIVERSITY OF ABERDEEN.

[To the Editor of the Medical Times.]

SIR,—Having observed that in the late Parliamentary Committee upon Medical Legislation, Dr. Christison, as the representative of the College of Physicians of Edinburgh, spoke rather slightingly of the ancient curriculum of study at the University of Aberdeen, and of the laxity that formerly prevailed in the examination for the degree of M.D., I think it may interest yourself, as well as your readers, especially those who have some idea of presenting themselves at King's College for this degree, to read the style of an examination which took place during the past year. The candidate possessed the *diploma* of a General Practitioner, and, in consequence of that privilege, the examination in Celsus and Gregory,

which otherwise would have taken place, was remitted.

MEDICINE.

Question.

1. What part of the alimentary canal is liable to ulceration in gastro-enteritic fever?
2. Describe the appearance and shape of the ulceration?
3. Is the ulceration situated near, or furthest from the mesentery?
4. Where is the ulceration situated in dysentery?
5. What is the appearance, and how does it differ from the former?
6. Name the glands and their situations in the alimentary canal.
7. Describe the usual causes of obstipation, their nature, and their situations.
8. What are the results of each of these causes?
9. Is there any serious evil resulting from collections in the appendix cæci?
10. State your treatment; and your opinion of aloes as a purgative, and enemata, in such cases.
11. Do you know if there are other concretions formed in the alimentary canal besides those of a fæcal nature?
12. How would you diagnose ovarian dropsy from peritoneal dropsy, or from pregnancy?
13. Is the urine peculiar, and is there frequent inclination to make it?
14. At what stage of the disease would this occur, and on what account?
15. If you tapped your patient and still found much enlargement of the abdomen, what suspicion would arise in your mind?
16. What is meant by a unilocular and a multilocular cyst?
17. How would you distinguish the latter from hydatids?
18. What is your opinion of diuretics in ovarian dropsy; describe your treatment then?
19. If you would perform paracentesis, state your reasons for so doing.
20. What rule would induce you to empty the cyst and leave it open?
21. Mention if you are acquainted with any other mode of getting its walls to adhere.
22. What other diseases are the ovaria liable to?
23. Are these common to them, or to them as well as the uterus?
24. What is the appearance of an early stage of albuminous urine in nephria, and what difference is noticed in the urine in an advanced stage of this disease?
25. State the specific gravity of the urine in a late and in an early stage, and give the tests for the detection of albumen.
26. What is the appearance of urine in hepatic diseases?
27. What are the salts abounding in it?
28. Describe the appearance, and state the range of specific gravity of diabetic urine.
29. What tests would you employ to satisfy yourself it was saccharine?
30. Does the urine in diabetes, nephria, and hepatic diseases equally undergo decomposition after it is voided?

SURGERY.

1. Supposing a man is knocked down, and becomes insensible, but recovers, and is again attacked with coma, what would your suspicions be?
2. At what part of the skull would such an injury be most likely to give rise to these symptoms, and on what account?
3. Are there any rules by which you might classify fractures of the skull?
4. If a sharp-pointed instrument is forced into the skull, what would be the probable results, and how would the bone suffer?
5. What is the appearance of a man with, and what are the symptoms of, concussion?
6. State the earliest and the latest period at which the symptoms may arise?
7. Is there anything peculiar about the hearing, and to what period of time may these symptoms last?
8. What are they followed by?
9. Describe the pathological condition of the brain at this stage?
10. Is your patient safer, when lymph is poured out, than in the acute stage?
11. Is this the ordinary course and termination of meningitis?

PHYSIOLOGY, ANATOMY, &c.

1. What is the whole skull composed of?
2. Which is the most brittle, and which is the thinnest table?
3. Can fracture take place of the inner without fracture of the outer table?
4. Does the dura mater perform any office besides supporting the brain; if so, state what that is?
5. How does the skull obtain its blood?
6. Does it get more blood from the scalp than from the dura mater?
7. Describe the anatomical distinction between the dura mater and the arachnoid.
8. Name the membranes in the body analogous to the dura mater, and to the arachnoid.
9. Describe the nature of a joint, and how it is lined.
10. What difference exists between it and a serous surface?
11. Name the peculiarities of the two membranes under inflammation.
12. Is purulent matter poured out into joints?
13. What are the usual results of inflamed synovial surfaces?
14. Name the glands, and their localities, throughout the alimentary canal, from the tongue to the anus.
15. How would you recognise jejunum from ileum, if laid out before you?
16. What is the use of the valvulæ conniventes?
17. How many coats are there to, and which is the most important one in, an intestine?
18. Describe the process and the situation of chymification, of chylification, and of fæcification?
19. What is bile, and where is its immediate seat of secretion?
20. Is it essential to life? Is it essential to digestion?
21. What is gastric juice? is it essential to life and to digestion?
22. Is the kidney essential to life?
23. What would be the probable effect of obliteration of the ductus communis choledochus?
24. What organs especially suffer in suppression of bile and of urine?

CHEMISTRY—MATERIA MEDICA.

1. What is the composition of the atmosphere?
2. Are there any other matters in it?
3. What is the composition of nitric acid, how is it obtained, and where does the water come from?
4. What form is arsenic in when used as a poison?
5. Describe the method of detecting it?
6. You have spoken of Reinich's test; what do you understand by the reduction test, and by Marsh's test?
7. What would be the most like it, and how would you distinguish it?
8. Give the chemical composition of bile?
9. Is it acid or alkaline; and on what does this principle depend?
10. Describe the composition of urine, and name the deadly principle it contains?
11. How many urinary calculi are there; briefly relate their composition?
12. Which of these is most commonly met with?

The candidate was then desired to write a prescription for acute meningitis, with blood-letting, cupping, calomel and opium, &c., giving the Latin in full, as well as the doses, &c.

To all these questions he gave satisfactory answers, and his degree was immediately conferred upon him by the Senatus. Any one who would like to reply to the questions may show your readers how far this examination might be considered a slight or a searching one. The examiners asking these questions in rotation, were, the President, the Dean of the Faculty, and two others, Physicians, members of the Senate.

If any of your Correspondents are desirous of ascertaining the answers which the Candidate gave to these questions, he will be happy to furnish them in a future Number of your Journal.

The University of Aberdeen and King's College has, it appears, 400 students in its school. The spot is very retired, quiet, and most suitable for study; lodgings and provisions are very cheap, and, with its hospital, it presents many advantages for the prosecution of hard study, which may be sought for in vain in our busy Metropolis.

The above line of questions the candidate, it seems, was quite unprepared for, as he imagined that it would be, as heretofore, an elementary, theoretical, and partly clinical examination; and a good number of first-rate men from England, holding the double qualification of hall and college, have been hard put to it to pass the examination for M.D. at King's College.

I remain, Sir,

Your obedient Servant,

January, 1849. SPECTATOR.

GENERAL MEDICAL ANNUITY FUND.

REPORT OF THE PROCEEDINGS AT THE SPECIAL GENERAL MEETING, HELD AT THE ANCHOR HOTEL, NEWPORT PAGNELL, DECEMBER 5th, 1848.

JOHN ROGERS, Esq, in the chair.

The following Report of Mr. Daniell, the Managing Director, was read:—

"It is necessary, before I enter into the particulars connected with this Society, to inform you of the reason why the usual annual meeting, which ought to have taken place in July last, was unavoidably postponed. You will find, by reference to a document furnished to us by the late Secretary, that he complained of the inadequacy of his salary; and that the duties of his office involved so much of his time, that he could not continue to perform them without a considerable increase in his remuneration. Questions arose, also, in reference to some of the rules, which involved us for a while in difficulty, and, of course, caused delay. On the subject of the Secretary's salary, I deemed it prudent to consult with Dr. Robertson, and by the counsel of that gentleman, aided by the Chairman of the last Committee, Mr. Rogers, it was determined that the funds of this Society would allow of no augmentation of payment to the Secretary; and Dr. Robertson was requested to announce this fact to Mr. Staines, and at the same time to convey to him, that, after the 25th of March, I, as Managing Director, aided by an amanuensis, would conduct the affairs of the Society. I regret to say, that the behaviour of the Secretary after this communication was exceedingly annoying; and that the books and documents were so long withheld from me, that it was impossible I could comply with that rule which appoints a specific time for the annual meeting of the Members. Through the kindness of our very excellent President, Dr. Robertson, we have been enabled to obtain the assistance and judicious suggestions of an able barrister. Those suggestions and improvements, as regards the rules, will be laid before you; and it will be necessary for you to decide to-day upon the adoption or rejection of all or some of them.

"I regret that in framing the rules of this Society, one grand omission has taken place. I allude to the amount of accumulated capital which it will be necessary for us to possess, before we can grant annuities to applicants. It will only be necessary for us to discuss this question to-day, and to frame some proposition respecting it, to be submitted to the annual meeting, after due notice is given. It has always appeared to me an essential point in the further conducting the affairs of this Society, that it should be placed under such Government protection that will insure for it all the privileges and advantages which belong to 'Friendly Societies.' It appears, from a late Act of Parliament relating to those Societies, that our rules and regulations will require considerable alterations, to render them eligible for enrolment; but I must particularly press this subject upon the consideration of the members, for, without the protection of Government, we have no true security for our funds, nor shall we be able to obtain so large an amount of interest upon our capital. I have consulted Mr. Neison, the celebrated Actuary, upon this question, and I find that, under certain modifications, the Society can be enrolled. The particulars of this correspondence will be laid before you; and, although this meeting is incompetent to decide upon that question, I am anxious it should form one subject of your consideration.

"I regret to say, that I have received many letters from the Honorary Local Secretaries, complaining of the apathy of the profession on this subject, and the difficulty they find in inducing gentlemen to become members of this Institution. I think, however, more favourably of our profession, than to believe that this unwillingness to join us arises either from apathy or want of sympathy in the objects for which we are striving. We must remember that this Society is, after all, but in an infant state, and is, at present, perhaps, too rudely constructed to merit the entire confidence of the pro-

fession. My aim is, and ever has been, to render it as perfect as a human institution can be; and my hope is, that as we progress, many who appear now apathetic, will, in the end, not only give us their cordial support, but help us both by their counsel and influence.

"To Mr. Martin, of Holbrook, and his coadjutors in Ipswich, we are especially indebted, for most energetic and active exertions; nor can I omit to name Mr. Lambert, of Sowerby; Mr. Downing, of Castle Eden, and other gentlemen, who have, at their own expense, reprinted our prospectuses, and employed much time and trouble in propagating the views and intentions of this Society. A donation of books, of the value of two guineas, has been presented (for sale) to the Society, by Dr. Greenhill, of Oxford.

"You will be kind enough to remember, that the proposition which led to the establishment of this Society, was made at Sheffield, before the meeting of the Provincial Association; and that this Society was originally designed to form an integral part of that Association. A subsequent meeting at Norwich, however, severed this connexion. Still, in its independent character, it preserved its original name, "The General Medical Annuity Fund," but it was given it in order that it might be distinguished from an existing fund, belonging to the Provincial Association, called "The Benevolent Fund." It will appear, from the opinion of the legal gentleman before alluded to, that it is desirable to make some alteration in the title of our Society, and to this point I would request your attention.

"A List of the present Members of the Society, and a financial statement of its affairs will be laid before the meeting.

"It must be obvious to all, that in conducting an establishment of the extensive character contemplated by this Institution, there will be a considerable outlay of money. Since, however, it has fallen to me to manage it entirely, I have studiously avoided all unnecessary expense; and I am resolved, so long as I shall continue to conduct the affairs, to be as cautious in spending the funds of the Society as is compatible with its advancement; at the same time, it must be understood, that there is a wide difference between managing a County Institution and a National one. Trifling as may appear the amount of postage for single letters, yet the vast number that have been issued from the office, and the many parcels of books and other documents furnished to the Honorary Local Secretaries, render the article of postage very heavy for this infant Institution to bear. I think I may, without giving offence, suggest, that gentlemen who seek for information would confer a favour upon us, were they to enclose postage stamps. Some gentlemen have been kind enough to do so. You will find, on looking over the list of members, that a considerable accession has been made to our number this year; this I consider mainly attributable to the Honorary Local Secretaries. It may become a question hereafter, whether the establishment of districts or branches would not tend to advance the success of the Society. It has occurred to me that, with very little trouble, this might be done; and, certainly, this would lessen the weight of central duties, and furnish valuable data for the efficient distribution of the funds of the Society, whenever they shall be in a condition for distribution.

"In the further developement of this scheme, I feel assured, that, however active or energetic I may be in this cause, I can never, single handed, propel its machinery; nor does my locality furnish sufficient assistance in the matter. I do not, however, call upon you to discuss this question now, but I hint it in passing, that you may know, that neither Northampton nor Newport Pagnell, can furnish a Committee large enough to transact the business of a National Institution.

"If I should have formed the nucleus of a Society, which in its final developement, will furnish food to the destitute, and help in need, to the bereaved; or even, if I have succeeded in calling attention to the subject, and others, more capable than myself, should, upon my suggestions, rear the superstructure I desire, my aim will be accomplished, and my satisfaction complete. You must permit me, gentlemen, in conclusion, to express my gratitude to Mr. Rogers for his very kind and efficient services. His generous co-operation has lightened my labours considerably; and the sound good sense which he he has manifested, whenever his opinion has been sought, has tended in no small degree to guide me correctly in my duties. My own feelings insist upon this tribute, and I shall be gratified if you permit me thus publicly to express them."

Mr. Daniell, the Managing Director, laid before the meeting an account of receipts and payments, from the 1st day of July, 1847, to the 4th day of December, 1848; and also the following general statement of receipts and payments, on account of the Institution, from its commencement, viz.:—

RECEIPTS.

1847.	£	s.	d.
June 30.—To amount of donations received up to this day, being the close of the second year	155	6	0
To amount of subscriptions to the same time ...	175	7	0
To amount of donations from 1st July, 1847, to 4th December, 1848, both inclusive	60	3	0
To amount of subscriptions received during the same period	194	5	0
To interest allowed by bankers on balance ...	3	16	0
	£588	16	0

PAYMENTS.

1847.	£	s.	d.
June 30.—By expenses to this day	77	10	4
By Secretary's salary...	26	5	0
By expenses shown by the late Secretary's account to have been paid by him from June 30, 1847	18	17	3
By expenses since paid by the Managing Director	17	7	3
By balance shown by the late Secretary's account to be in his hands, from the amount of which he claims a remuneration for further services	64	8	0
	£204	7	10
1848.			
Dec. 4.—By balance in the hands of the managing Director	27	11	6
In the hands of Treasurer	356	16	8
	£588	16	0

Abstract of the resolutions passed at the said special general meeting, relative to the rules:—

That the following new rules shall be adopted; and that certain of the existing rules shall be altered, viz.:—

First.—That the 1st, 8th, 12th, 14th, and 16th rules, so far as regards the Secretary, shall be altered; and

That the Treasurer shall have no management of, or control over the said Society.

That the office of paid Secretary shall be abolished, and that his duties shall henceforth be performed by the Managing Director, who shall be empowered to appoint a clerk to assist him; such clerk to act entirely under his direction, and to have no control over the affairs of the Society; but to be allowed out of the funds of the Society, such an annual sum of money, by way of salary, (not exceeding £10,) as the Managing Director shall think fit; and

That the Society shall henceforth be called "*The General Medical Annuity or Relief Fund Society.*"

Secondly.—That no alteration be made in the second rule.

Thirdly.—That for the more accurately defining the duties and liabilities of the Trustees, and for making provision as to the investment and management of the trust-funds, and the appointment of new Trustees, the Trustees shall hold the monies, stocks, funds, and securities of the Society, and the interest and dividends thereof, upon such trusts as the Directors, or a majority of them present at any annual or special general meeting, shall from time to time direct. That, in addition to the 5th rule, the Trustees shall have power, at the request of the Directors, or a majority of them present at any annual or special general meeting, to invest the trust-monies on freehold, copyhold, or leasehold securities, in England or Wales, (but not in Ireland;) such leaseholds to be held for a term not less than sixty years, then unexpired, or upon security of any incorporated company, with power, by such Direction, as aforesaid, to vary the securities for others of the like nature.

That if any of the Trustees shall die, or desire to be discharged, or refuse, or be incapable to act, the majority of members present at the next annual or special general meeting shall appoint new Trustees, to whom, jointly with the continuing Trustees, the trust-property shall be transferred. That the Trustees shall be chargeable only with such monies as they shall receive; and shall not be answerable for one another, nor for any person in whose hands any part of the trust monies shall be placed, nor for insufficiency of securities, nor for involuntary losses; and may reimburse themselves, out of the monies in their hands, for all expenses incurred in execution of the trusts.

Fourthly.—That the 10th rule shall be altered; and

That the next annual meeting of the subscribers shall be held in London, at some place, and at some time in June, 1849, to be fixed by the Managing Director; and all subsequent annual meetings shall be held at such time and place as may be determined upon at the preceding annual meeting.

GOSSIP OF THE WEEK.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—Dr. Markham was admitted a licentiate of this College on the 21st of December, 1848.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College, at the meeting of the Court of Examiners on the 5th inst.:—Messrs. Robert Blagden, Albemarle-street; Charles Walter Paulton, Cricklade, Wilts; Henry Rowland Hoskins, Hoxton; John Wilmshurst, Colchester; Frederick Dicker Fletcher, Canterbury; Richard Scott Boley, Bristol; John Baker Boley, Bristol; and John Mills Wills, London.

MEDICAL PORTRAIT GALLERY.—We have just seen two beautifully executed lithographic portraits of Dr. Budd and Dr. Forbes, published by Mr. Stone, of the College of Surgeons. The likenesses are very striking; and we think that the friends and other eminent physicians will feel grateful to Mr. Stone for the publication of these spirited portraits.

COMMISSIONER IN LUNACY.—Mr. Samuel Gaskell, who has held the situation of Superintendent to the County Asylum of Lancaster for upwards of nine years, has just been appointed a Commissioner in Lunacy by the Lord Chancellor.

OBITUARY.—On the 30th ult., at his residence, Hall Barns, Altrincham, Cheshire, in his 67th year, Samuel Hibbert Ware, Esq., M.D., F.R.S.E., &c.—On the 4th inst., after a week's illness, Mr. William Perse Baker, of Bow, Middlesex, surgeon, aged 41.—On the 9th inst., at Colchester, Essex, after a short illness, William Byass, Esq., late of Worthing, surgeon, many years resident at Berbice, British Guiana, second son of the late John Byass, Esq., surgeon, Arundel, Sussex, aged 57.—On the 6th instant, aged 79, Charles Edward Clarke, Esq., formerly Assistant-Surgeon in the Coldstream Guards, and late of Lower Grosvenor-place, Pimlico.—Lately, Mr. Nicols, surgeon, of Earl-street, East, London. Deceased's habits of life were of a most singular and eccentric nature. His shutters having been closed for several days, some of his neighbours felt convinced that something was the matter, and they accordingly made known their suspicions to the police. Two officers repaired to the house, where, having affected an entrance through a staircase-window, they found deceased lying upon his cloak, in front of the fireplace, dead, and with the greater portion of the flesh eaten from his face by two dogs, who were found in the room, and who, evidently, had had nothing else in the place upon which they could feed.

DEATH OF DR. HIBBERT WARE.—This gentleman died on Saturday at his residence, Hale Barns, near Altrincham, in his 67th year. The deceased was descended from an old Manchester family. After his father's death, he went to Edinburgh, where he studied medicine at the University. He took his degrees, but never practised, preferring the

more genial occupation of literature and scientific research. He continued to reside in the Scottish capital over twenty years, during which time he was an influential member of all its more noted literary institutions and scientific societies.

MUNIFICENT BEQUESTS.—The funds of the Liverpool Dispensaries have just been augmented by the princely sum of 1,000*l.*, free of legacy-duty, under the will of the Rev. George Vanburgh, late rector of Aughton; who has also left to other non-medical charities upwards of 13,000*l.* Mr. C. Hoare has also just presented the sum of 100*l.* to the City of London Dispensary.

THE HUNTERIAN ORATION.—This Oration, annually delivered in the Theatre of the Royal College of Surgeons, in commemoration of the birth of John Hunter, the founder of the Museum, will be delivered by Mr. Cæsar Henry Hawkins, one of the Surgeons of St. George's Hospital, on Wednesday, Feb. 14, at three o'clock.

BEDFORD GENERAL INFIRMARY.—Dr. Witt, the Physician to this Institution, for upwards of twenty years, has just resigned the appointment. The Governors have given notice of their intention to elect a successor on the 22nd instant.

THE CHOLERA AT TOOTING.—The following is the official Report of the medical authorities at Tooting as to the state of that establishment with regard to the progress of cholera:—"Jan. 10.—Return of fresh cases of cholera, diarrhœa, and deaths, with number under treatment, from 2 p.m., yesterday, up to 2 p.m. this day:—Number of deaths, 18; cases of diarrhœa, 5; cholera, 10; number under treatment, 119; total number of cases since commencement, 294; convalescent, 34; gross number of deaths, 112. One adult young woman died to-day, after sixteen hours' suffering, from the epidemic. Carbonic acid, in many cases, has been employed very beneficially in alleviating distressing vomiting; combined with opium, it has a tendency to relieve both that and the diarrhœa, and acts also as a stimulant. On the whole, the cases of cholera are not so numerous, and the majority of the deaths now taking place are the result of the consecutive fever, which, in a great many instances, assumes a low typhoid character; and, from the prostration of their strength while gliding from the collapse of cholera, the children are but ill able to go through a second such ordeal.

ST. PANCRAS.—Number attacked, 78; deaths, 7; under treatment, 14; and collapse, 1.

HOLBORN UNION.—The return furnished from the Royal Free Hospital, last evening, is as follows:—"Boys attacked with 'the Tooting Disease,' 45; girls, 26; total, 71. Cured—Boys, 10; females, 0. Boys under treatment, 36; girls, 21; total, 57. Died—2 boys and 2 girls. Nine out of every ten have the itch."

STRAND UNION.—The report last night at the establishment, taken for the children of this Union in Little Ogle street, was, that some slight cases of diarrhœa had presented themselves. It is stated, that several nurses at Mr. Drouet's have taken the disease, and died at Tooting.

THE CHOLERA IN HERTFORD GAOL.—The disease originated from a person committed for a trifling offence three days before it broke out. Thirteen cases of cholera and premonitory diarrhœa had occurred; but, from the vigilant attention of the surgeon and officers of the gaol, only four cases have hitherto proved fatal.

CHOLERA AT CARLISLE.—Four cases of malignant cholera are reported to have occurred in this town; three after a few days' illness of secondary fever; the other, a healthy young woman, who had had vomiting and purging late in the evening, was found dead on the following morning. The body was examined, and an inquest held upon it. The appearances after death exactly agreed with the general description given by authors who have paid attention to its pathology. One case occurred in a person who had been in Dumfries the day before. Another, a servant girl, who was living in a family who had friends from Dumfries, staying on a visit; they left their house a fortnight ago, in which the disease had commenced its ravages—facts worth noticing.—*Communicated.*

THE cholera has at length entirely disappeared from Syria.

CHOLERA.—EDINBURGH.—The number of new cases reported since our last has been 30. The recoveries have amounted to 13. The total numbers, as reported, are:—Cases, 773; deaths, 434; recoveries, 195. There have been 5 cases and 6 deaths in the parish of Inveresk, and 2 cases and 1 death in the parish of Duddingstone.

GLASGOW.—The disease has made alarming progress here this last week, there having been reported no less than 1,308 new cases, 437 deaths, and 423 recoveries. The total numbers reported since 11th November are:—Cases, 2,954; deaths, 1,206; and recoveries, 694.

RUTHERGLEN.—Since 12th December there have been in this town 59 deaths and 47 recoveries, and 6 cases remained under treatment.

GREENOCK.—Two fatal cases have occurred in this place.

AIRDRIE.—The total number of cases in New Monkland, including the town of Airdrie, up to the 6th January, has been 106, of which 64 were fatal, 21 recovered, and 21 remain under treatment.

PAISLEY.—The disease has made its appearance in this locality, but it has been confined to persons who can be mostly shown to have caught the disease in Glasgow.

BARRHEAD.—There have been 7 cases of cholera here, and 5 deaths, since its first appearance about a fortnight ago.

PORT-GLASGOW.—One fatal case has occurred here last Wednesday.

ROTHESAY.—About twenty cases have occurred in this place, the majority of them having been fatal.

HADDINGTON.—The total number of cases in the parish of Haddington is 45, and the deaths 14. There was one fatal case at Blackshiels, in the parish of Fala, on Thursday, the victim being the Kelso carrier.

KELSO.—The total number of cases in this town now amounts to 110; the deaths to 57, and the recoveries to 31; remaining under treatment, 22.

JEDBURGH.—The total number of cases from the commencement has been 82; deaths, 12; recoveries, 12.

DUMFRIES-SHIRE.—Another fatal case at Hoddam has been reported to the General Board of Health. Another case occurred at Moffat on Saturday last, which terminated fatally after a short illness. There have been nine cases in the parish of Durrisdeer, five of which had proved fatal.

POLLOKSHAWS.—The number of cases between the 24th December and 2nd instant, inclusive, has been 34, with 21 deaths. The cases on Wednesday were 9, and 2 deaths.

STRANRAER.—Two cases of cholera have occurred at Stranraer, one on the 26th ultimo, and another on the 2nd inst.

ROSS-SHIRE.—Two cases of supposed Asiatic cholera have occurred at Craigton, on the Ross-shire side of Kessock Ferry. A fatal case of cholera has also occurred at Ardrishaig, on the line of the Crinan Canal.

BELFAST, January 5, 1849.—Remaining on January 4th, 15; new cases, 5; died, 2; cured, 2; remaining, 16: total cases since the commencement, 73; recoveries, 24; deaths, 28; remaining, 16.

PUBLIC HEALTH OF GLASGOW.—CURIOUS FACT.—At the annual meeting of the Glasgow Royal Infirmary on Monday last, Professor Thomson, in reply to a question by the Dean of Guild, stated, that if they were to compare the number of deaths in the city and neighbourhood during the past week with the corresponding week of last year, they would find that they were double last year to what they were last week.

CHOLERA.—The *Journal de Calais* states, that the cholera has made its appearance in Guignes, and that there were already no fewer than twelve cases, among whom was the oldest inhabitant, a man 98 years of age. The sufferers were principally the poor, and the working men living in the marshes.

TYPHUS FEVER.—The accounts from Roubaix, relative to the typhus fever raging there, are far from cheering. It has made considerable progress since the cold weather has set in, and the number of deaths has doubled. On the 24th and 27th ult., in particular, the whole population was in the greatest alarm.

MEDICO-CHIRURGICAL SOCIETY (BRIGHTON).—At the ordinary monthly meeting of this Society, held at the Town-hall, Brighton, January 4th, Dr. Forbes Winslow read an elaborate paper on "*Ramollissement, or softening of the brain, more particularly associated with improvement of mind, the result of an over-taxation of the brain and nervous system, occurring in persons subject to great anxiety and distress of mind.*" An animated and interesting discussion followed. It was proposed by Dr. Mackness, of Hastings, and seconded by Benjamin Vallance, Esq., of Brighton, President of the Society, that Dr. Winslow be requested to print his excellent paper, with such additions as may tend to further illustrate the subject, in the *Psychological Journal.*

MORTALITY AMONGST EMIGRANTS.—The year 1847 has been unparalleled for the amount of immigration to Canada; near 100,000 souls have left the British isles for these provinces the past year,—over 5,000 of these died on their passage out, 3,389 at Grosse Isle, 1,137 at Quebec, 3,862 at Montreal, 130 at Lachine, and 39 at St. John's,—making in all, at these several places, 13,815. How many have died in other sections in Canada East cannot now be known, nor, indeed, how many have perished in Canada West; but, coupling all those who have perished with those who have passed into the United States, Canada cannot now number 50,000 souls of the ninety odd thousands which landed upon our shores. In sketching a retrospect of these terrific scenes, the Montreal Committee forcibly remark,—"From Grosse Isle, the great charnel-house for victimized humanity, up to Port Sarnia—along the borders of our magnificent river, upon the shores of Lakes Ontario and Erie, and wherever the tide of immigration has extended, are to be found the final resting-places of the sons and daughters of Erin—one unbroken chain of graves, where repose fathers and mothers, sisters and brothers, in one commingled heap, without a tear bedewing the soil, or stone to mark the spot. Twenty thousand and upward have gone to their graves, and the whole appears, to one not immediately interested, 'like a tale that is told.'" The disease of which the emigrant passengers, and in many instances the officers and crews of ships, perished at sea, and of which a great number were ill on their arrival in the United States and Canada, was typhus in its genuine form. In some ships, dysentery, small-pox, and measles swelled the amount of mortality, and added to the number of sick that reached the ports of destination.

WE find, in a Brussels journal, a statistical account of the changes in population in Belgium. The same paper had shown, in a previous article, that the scarcity in 1845 and 1846 had had a pernicious influence on births, marriages and deaths. The same influence has predominated during 1847; namely: deaths have increased; births and marriages have diminished. The following Table shows the results of the last five years:—

Years.	Deaths.	Births.	Marriages.
1843	97,055 ..	132,911 ..	28,220
1844	94,911 ..	133,976 ..	29,326
1845	97,783 ..	137,012 ..	29,210
1846	107,835 ..	119,610 ..	25,670
1847	120,168 ..	118,106 ..	24,145

Bad harvests give rise to elements of mortality, which exercise their influence a year and even two years later, on account of the privations they entail on the poorer part of the population. The months of January and February, 1848, were still under the noxious influence of the former years in Belgium; but since March the mortality has considerably decreased; thus, the mortality during March, April, and May, 1847, amounted to 37,060; while in 1848 it was no more than 30,949. The increase of mortality has proved the strongest among persons of from 15 to 60; below and beyond those limits it has been less sensible; the female sex have been less subject to it than the male. It follows,

that the latter support privation in food less easily than the former.

NUMBER OF MEDICAL STUDENTS IN FRANCE.—The number of medical pupils now inscribed in the faculties, or preparatory schools, is 2,019: 950 in Paris, 174 in Montpellier, 109 in Strasbourg, and the rest distributed amongst the twenty-one preparatory schools. In the faculty of Paris 272 pupils, in 1848, took their first inscription, and 230 sustained a thesis for their degree of doctor. The number of receptions as doctor, which had increased from 1826, when they were 215, to 1837, when they were 487, has gradually declined since this latter period, and in 1846 had fallen to 211. An analogous decrease has been observable for the second order of medical men—viz., officiers de santé. The medical jury of the Seine, which used to receive from 70 to 80, and even 90, per annum, from 1827 to 1837, has not admitted more than from 40 to 50 since that year. The diminution has been still greater amongst the pharmaciens received at Paris. In 1843 the number was 192, whilst in 1848 it has been only 55. The reason of this falling off in these various branches was that the profession was overstocked. Even at present in Paris, notwithstanding the decrease just mentioned, there are 1,380 doctors, 166 officiers de santé, and 385 midwives. The second arrondissement alone contains nearly 400 doctors more than existed in the whole capital in the seventeenth century, in the time of Gui-Patin. Since 1833, there has always been an increase until the present year.

OBSERVATIONS ON THE WAKING OF BIRDS IN THE MORNING.—M. Dureau de Lamalle has made some interesting observations upon the time in the morning at which eight species of birds commence singing. The result of his observations is, that from the month of May to July, the chaffinch commences his note at from one to half-past one o'clock in the morning; the blackheaded tomtit, from two to three; the quail, from half-past two to three; the blackbird, from three to half-past four; the nightingale of the wall, or red-bellied tomtit, from three to half-past three; the hen, at four; the sparrow and great tomtit, from five to half-past five. According to M. Dureau de Lamalle, the cause of waking up more or less early, of each species, arises from the necessity of providing food for the young. This period having passed, birds wake at sun-rising.

INFUSORY ANIMALS.—M. Pouchet, of Rouen, has shown that, in the infusoria called, by M. Ehrenberg, *polygastrica*, there are vesicular stomachs, more or less in number, from twenty to forty. The contractile vesicles of these microscopical animals are true circulatory organs, representing the heart, or a multiple of the more elevated animals. These vesicles are generally unique, and contain a fluid analogous to blood, of a bright yellow colour. In the *rotifera*, the cardiac vesicle is unique, and acquires comparatively an immense size for such animalculæ; it slowly fills, but empties itself by a sudden contraction. In the *colpodes* and *glaucomes*, the movements of this vesicle closely imitate those of the heart.

ILLIBERAL TREATMENT OF A NAVY ASSISTANT-SURGEON.—Mr. Robert M'Cormick, R.N., surgeon, of 21 years' standing, and 15 years' actual service, chiefly in the West Indies, and North and South Polar regions, with Captain Sir Edward Parry and Sir J. Clarke Ross, performing the duties of naturalist in addition to those of surgeon, contributed the geological portion to Ross's narrative of the expedition; on his return from which he remained on half-pay for two years, when he received the appointment of surgeon to the William and Mary, one of the Royal yachts,—an appointment held by his predecessors for a permanency, or until promoted, (one of whom was made Deputy-Inspector of the Woolwich division of Marines, another receiving the appointment of Surgeon to the Dockyard.) On the yacht being paid off last year, to be replaced by the Fisgard frigate, Mr. M'Cormick was not even permitted to serve the ordinary period of three years, customary on an appointment to a ship newly commissioned, thus placing him on half pay instead of giving him that promotion to which he was so justly entitled, not only from the peculiar nature of the services he had performed, but which had been conferred on every other officer of the expedition alluded to, on its return, now five years since, during which period no less than eight surgeons have been made Deputy-Inspectors, four of whom are juniors to Mr. M'Cormick, and with no other services to recommend them for that step than the ordinary routine duties of their station. Notwithstanding the unjust treatment to which he has been subjected by the Admiralty authorities, Mr. M'Cormick offered his services to Government to conduct an expedition in search of Sir John Franklin,—an expedition which he was eminently qualified to undertake, from his great experience under two such distinguished leaders as Parry and Ross. This gentleman has, moreover, other claims on the attention of the Admiralty, as being the son of a naval surgeon who lost his life in the shipwreck of Her Majesty's ship Defence, during the war.

EXPENSE OF MAINTAINING MILITARY HOSPITALS.—The expense of supplying all the hospitals in the empire, general as well as regimental, not only with medicines for man and horse, but with provisions, wine, fuel, lights, &c., amounts to 77,000*l.* To cover this in part, there is a stoppage of 10d. a day from the pay of each patient, and a contribution from farriery allowances amounting, the former to 65,000*l.*, the latter to 900*l.* This leaves for actual outlay by the public the sum of 10,600*l.* The pay of the medical staff at home, exclusive of that of regiments, is 12,000*l.*, additional pay 2,500*l.*, pay of medical staff abroad 31,000*l.*, additional pay and allowances 5,300*l.* Total expediture, 50,800*l.*

ESTABLISHMENTS FOR THE INSANE IN WESTERN RUSSIA.—The insane in the provinces of Polish Russia, says M. Lasègue, are admitted into the wards of the Civil Hospitals without any methodical classification. Ten, twelve, or even twenty individuals are collected together hap-hazard, and closely shut up during the five winter months. The medical men agree in declaring, that the means at command, for properly treating the insane, are utterly insufficient. A physician in charge of a hospital is obliged to visit not only 1,300 patients, but to take charge also of the insane. That which made the greatest impression on M. Lasègue, was the profound silence, and the perfect order which prevailed in the wards of the insane. The individuality of these individuals has, as it were, been annihilated for the advantage of order. None of the delirious imaginations seem to have the power of developing themselves. The system adopted is, that of intimidation without chastisement; fear, without injury; but in lunatics under such discipline, the disorder of the patient advances, and he passes from the acute stage to one more permanent. After a certain time, the insane fall into a half stupid condition, which continues for years. The treatment is completely *sui*. It is difficult, if not impossible, to draw from asylums actually open any just conclusions in reference to the relative proportions of lunatics to the population. Idiotism is extremely rare; imbecility is more common; general paralysis not often observed.

HOMŒOPATHY.—A Homœopathic College has been organised in Philadelphia.

[Advertisement.]

LONDON AND PROVINCIAL JOINT-STOCK LIFE OFFICE.

No. 39, Nicholas-lane, Lombard-street, London,
December 1, 1848.

SIR,—The Directors of this Company have instructed me to transmit our Prospectus to you, and to acquaint you, that considering as highly important the onerous duties devolving upon Medical Gentlemen certifying the eligibility of their patients for Insurance, they have determined, that in every case examined and reported upon by a medical referee, under the authority of this Office, a Fee of One Guinea will be paid to him; and that proposals for Insurance be issued to Medical Gentlemen applying for such.

I am, Sir, your very obedient Servant,
T. FOLEY, Actuary and Secretary.

To the Editor of the "Medical Times."

MORTALITY TABLE.

For the Week ending Saturday, Jan. 6, 1849.

CAUSES OF DEATH.	Total.	Average of five Winters.
ALL CAUSES	1,131	1,169
SPECIFIED CAUSES	1,129	1,164
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	359	221
SPORADIC DISEASES:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	42	54
Tubercular Diseases	165	203
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.....	109	141
Diseases of the Heart and Blood-vessels.....	39	40
Diseases of the Lungs, and of the other Organs of Respiration	203	243
Diseases of the Stomach, Liver, and other Organs of Digestion	60	67
Diseases of the Kidneys, &c.	7	13
Childbirth, Diseases of the Uterus, &c.....	7	9
Rheumatism, Diseases of the Bones, Joints, &c.....	13	7
Diseases of the Skin, Cellular Tissue, &c.	2	1
Malformations	4	3
Premature Birth.....	24	23
Atrophy	23	15
Age.....	47	73
Sudden	6	14
Violence, Privation, Cold, and Intemperance	19	37
Causes not Specified	2	5

TO CORRESPONDENTS.

"Mr. Southee, Cambridge."—We are sorry, that, from the great press of matter, the appearance of the communication must be deferred to next week.

"Dr. Bushnan, Brussels."—The letters have been received.

"Mr. Crummey, Stokesley, Yorkshire."—Article on cholera received.

"Dr. Wigglesworth, Swansea."—The packet has been received.

"Dr. Kidd, Cologne."—A private letter has been forwarded.

"D. W. Etherley."—An application to any of the ship-brokers in London is the most likely way of succeeding.

"Dr. Tuthill Massy."—"On Excessive Hæmorrhage during the Catamenia," received.

"The Author of 'The Fallacies of the Faculty,' Bolt-street."—Letter received.

"Mr. Tomlins" is thanked for his suggestion.

"Dr. J. Dillon, King's-terrace."—Communication received.

"Dr. John Davis, Uteward."—An answer shall be given next week.

"Mr. Benson" 's Communication is an advertisement.

"Socius."—We have not heard that it is the intention of the governing body to send Deputations to the large towns.

"A Bachelor of Medicine."—The suggestion shall receive attention.

"Beta."—There must have been some mistake in the Hospital Report sent us this week.

"Amicus."—We donot know of any single work including all the special affections mentioned.

"Mr. Lambert."—Dr. Rigby is one of the physicians.

"Medicus."—Our Correspondent has the remedy in his own hands.

"M.D."—We shall be glad to receive the promised papers.

"A Subscriber."—We shall take an early opportunity of noticing the complaint.

"A Country Surgeon."—The letter should be addressed to the Secretary of the College of Surgeons.

"Spectator."—The remarks on pharmacy seem written from a misunderstanding on the subject.

"L. J., (New-road)."—Yes.

"A Student of Bartholomew's" is thanked for his offer.

"Suffolk."—The word "Chemist" would be no protection against the Apothecaries' Act.

"An Edinburgh M.D."—The difference depends on circumstances.

"Mr. Boultbee, Whittlesea," is thanked for his suggestion, which, if possible, shall be complied with.

"Kappa." (1) The degree of M.D., Lond., does not give a right to practice as a physician in London. (2) We believe out of print. (3) Two Clinical Lectures, have been already published.

ORIGINAL LECTURES.

LECTURES ON THE RACES OF MEN.

By ROBERT KNOX, M.D., F.R.S.E.
Lecturer on Anatomy, and Corresponding Member of the French Academy of Medicine.

(Continued from page 193.)

HISTORY OF THE SAXON RACE OF MEN.

Having so frequently alluded, during the course of the preceding lectures, to this race of men; to their physical structure and mental disposition; to their geographical position on the earth, their past and present condition, and the probable future, as regards them, my remarks will be brief. The race merits a much more thorough investigation than I have time or space to bestow on it in this lecture. Great as they are as a race, their pretensions are still greater when *nationality* comes to be superadded to the pretensions of race, as I shall afterwards explain; they generally contrive to acquire the hatred and contempt of all other races of men. They form the type of the human character, which measures all things by their material interests. Like the other fair races of men, they have their good and bad qualities, using these terms in their usual acceptation.

If we trace authentic history back to the period of the Dictator, Julius Cæsar, we shall find, that a people called Germans had crossed the Rhine under their leader Ariovistus. The Celtic people of Gaul complained to Cæsar; the Roman General required Ariovistus and his Germans to retire beyond the Rhine, within the limits of their own territory, which they refused to do. A sanguinary action followed, in which the Germans were routed with great slaughter, and driven back across the Rhine into their own land. But Cæsar, although he followed them for a short distance, did not propose making any conquests beyond this part of the Rhine, limiting his views strictly to old Celtic Gaul.

Now, who were these Germans, who, under Ariovistus, faced the Dictator? They were, no doubt, the ancestors of the same race who now occupy the circle of the Rhine: the Westphalians; the Hanoverians; the men of Wirtemberg; of Saxony; the descendants of the same race who, long prior to that event, had poured down on Italy, and had been defeated by Marius and others. Probably at that time a much purer race than now; but on this point I feel disposed to speak with great caution. The effects of intermixture of race have been, as we have seen, greatly exaggerated.

The German, then, of classic authors, I view as the true type of the race of men, who, henceforward, will probably be called Saxon, wherever they are found; whether on Norwegian Alps, where they are called Norwegians; on the Alleghany mountains, where they delight in the name of States-men and Americans; on the Sneubergen or snowy mountains of Southern Africa, where the descendants of the skippers of Amsterdam claim for themselves the name of Africaaners, as if the being born in Africa could alter their nature, or cause them to be mistaken for anything but "richt Hollanders, Duychtmen, and Saxons;" or, lastly, grouped densely together in our sea-girt isle, where, secure from war's alarm, they are the manufacturers for the world;—all these nations, as they are called, are simply men of *one race*, mingled occasionally with others; but, still of *one race*, essentially; the Saxon; the fair haired, blue-eyed race; the fairest race on the earth; perhaps, the only absolutely fair race which has ever occupied the surface of the globe.

ORIGIN OF THE RACE—ORIGINAL SITE.

I disbelieve wholly in the Indo-Germanic theory of modern philologists and ethnologists. I believe it to be based essentially on some mistaken views respecting the origin and the formation of race; the Slavonian and other Oriental races have been confounded by the ethnologist with the *true Saxon*; and a jumble of races in Central and Southern Germany, by assuming the name of Teuton and German, have added still more to the confusion. When I explained this publicly in my lectures at Newcastle and Manchester, nearly four years ago, and prior to the occurrence of even a whisper of late events, my observations were wholly unintelligible to most, and doubted by others. But recent events have proved to the letter the accuracy of the first view I had adopted, and the denial made by me publicly, that there existed in Europe a place called *Germany*, and a *German* nation or people, must now be admitted by the natives of the Rhine themselves to have been, not a mere conjectural assertion on my part, but a simple fact, which their own proceedings at Frankfort, Berlin, and Vienna speedily confirmed.

By Saxon race, then, I mean the classic German of antiquity, now represented with more or less admixture by the Norwegian, Swede, Dane, Hollander. Saxony and the smaller States of Central Germany, the greater part of Western Prussia, a very small portion of Southern Germany, still boast of a few Saxons; but Austria is mainly Slavonian, as I originally stated. These, grouped together, orm the European Continental Saxon. The insular Saxon, an offset from the Continental, occupies England as distinct from Wales; the eastern coasts of Scotland and of Ireland. In America he is already paramount, lord of all its northern portion: there the Saxon, true to his nature, has changed his name; he calls himself an American. In Canada (Saxon Canada) he calls himself a Canadian; in South Africa he becomes an Africaaner; in Oceania he assumes the name of an Australian, forgetting the land of his birth, his parentage, his origin: a democrat in the strictest sense of the term, and the only true democrat on the earth,—so soon as he finds himself removed from the pressure of the three Estates and glorious Constitution, he tosses his mock loyalty to the winds, calling out lustily for self-government; equality before the law; no military despots as Governors; municipal reform; and liberty of trade. He is, in fact, by *nature*, a free man; the only race *virtually* free: the only race strictly understanding true freedom. Of this great fact I became convinced nearly thirty years ago; frequent visits to France told me, that the Celtic race, even the most civilized part of it, have not the slightest idea of true freedom. My reasons for so strong a statement as this, which my readers will, I trust, ascribe to no prejudices on my part, have been, in part at least, published some years ago; they need not be here repeated. Let any reflecting man think on the continuance of the conscript laws, the passport system, and the fortification of Paris, after and in despite of the first, second, third, and fourth Revolutions of France, and he must be convinced of the correctness of my view. Feudality, it is true, still exists in Britain; a presiding aristocracy holds the land, and most of the honours, privileges, and power; but the evil of this, enormous though it be, has been a good deal abated; and as the Saxon colonies which she sends out throw off her government so soon as they are able to do so, we may, in time, reasonably expect that "legal despotism" may also cease. Mr. Gibbon, in alluding to the free condition of England, as he was pleased to call the borough-mongering days of George III., threw out the beautiful idea, prophetic in a sense he never imagined, viz., that should continental despotisms ever so far prevail as to crush liberty in Europe by the overthrow of Britain, the race—the Anglo-Saxon race—emigrating to another land, another continent, would there refound their institutions; maintain the supremacy of the law to brute force; and carry out once more the destinies of the race. This beautiful dream of Gibbon has been realised; but in a sense the opposite, I believe, to his meaning. The Government of England is still Norman; America is free. The Anglo-Saxon in England stands on neutral ground. Anxious for the *status quo* throughout the world, he dreads continental wars. His fleets are ever ready to support the existing dynasties. As a merchant, he intermeddles everywhere: as a Saxon, his colonies continually threaten revolt. It is the same with Holland, also a thoroughly Saxon race—the twin-brothers, in fact, of the Saxon English. Let me consider the Saxon, wherever found, without regard to nationalities, which are accidental circumstances, merely bringing out various good and bad points in the character of the races; premising, that as the conquest of England by the Norman was the heaviest calamity the liberties of mankind ever sustained, so the arrival of the Saxon in England, and their expulsion of the Celtic race from the greater part of Britain; their subsequent career, as successively they regained their liberties from the Norman oppressors; the assistance they have occasionally rendered to their continental brethren of Saxon origin, in the great cause of civil and religious liberty; the example they have set the world of the powers a nation may acquire by industry, the accumulation of wealth, and the respect for property;—these valuable, most valuable, qualifications of mind lead, it is true, at times, to extraordinary results, and to problems and questions which time alone can solve,—political questions of surpassing importance, as involving the happiness, and even the existence, of countless millions. With these matters I have nothing to do at present: I am merely the historian, endeavouring to discover, in the conditions of a race, proofs of its physical distinctness from all others. From my notes, accumulated during many years, I shall offer an outline of the Lectures delivered by me on the Saxon race, in the popular Philosophical Institutions I have already alluded to. The chief object, indeed, of these outlines of lectures has been, to secure for my views, originally delivered some years ago, that right of priority with the public; a claim which the conduct of a portion of the London Press induces me to believe may be contested by them.

The section of the family or race called the Anglo-Saxon does not present the finest specimen of the race. For this we must look to Holland, Schleswig-Holstein, the southern shores of the Baltic, Sweden, Denmark, and Norway. There we find the pure Saxon race. From Silesia and Western Prussia, I have seen pure Saxons. But not having travelled over these parts of the Continent, I speak from a very limited experience. In England, as early as the reign of Diocletian, the Quadi and the Marcomanni, two German tribes, were rewarded with lands in Britain. Thus, then, the Saxons were in England long prior to their reported invasion. The Tungrian cohort seems to have been settled near Castle Carey in Scotland. On the northern or eastern coasts upwards of forty of these barbarian legions, some of a so-called Teutonic origin, and others—Moors, Dalmatians, Thracians, obtained settlements in Britain, chiefly along the line of the Roman Wall. The Saxon race in England is, then, an extremely mixed race; Celtic blood also prevails to a great extent: and our Continental wars have been mainly carried on of late years by the Celtic population of Great Britain and Ireland.

In person the Saxon is tall and robust; as he becomes older, his chest and arms not unfrequently acquire great size; his lower extremities fall off proportionally. He is a strong-handed, muscular man, fond of labour, of order, of method in action, but not in ideas; systematic in action and in labour; a hater and despiser of theorists, that is, of men who seek principles for action; idealists. In his writings reign confusion; his house is the pattern of all that is orderly and regular. A strict economist and lover of comfort, he dreads no labour to attain those objects he most affects. With a commercial and enterprising mind, he carries on a war, a peaceful war, no doubt, with all the world. It is the war of trade and traffic, and money returns. The predominating feature of his character is *self*; but it is a mistake to suppose him sluggish and inactive, as Mr. Barrow declared the Dutch boors at the Cape to be. This was a great error on his part. Sir John, then Mr. Barrow, drew a correct enough picture of the Boor in some respects; but he mistook for inactivity and indolence another grand feature in the Saxon character, namely, a self-esteem, a

self-confidence, a self-opinlativeness, exceeding all belief. Hence, be he Boor, or be he a civilized Saxon, English, Swede, Dane, American, you will never persuade him into a belief that any person, or race, or nation knows more or is better than himself, his race, or nation. It is this which Sir John Barrow did not understand. Accordingly, all advice is lost upon the Saxon; but *show him* a method superior to his own; give him but a hint of a superiority existing somewhere, and nowhere on the earth will be found a person so ready to adopt the new method, so admirably active and skilful in applying the discoveries of other races to his own pecuniary advantage. Inventive *genius* he has not, applicative *ability* is all his own. *Accumulative* desires haunt him everywhere; in Holland, England, America. See how in Holland he has stored up such vast treasures, that is, collections of all things, and how in England he imitated the Dutch Saxon. A despiser of art generally, he esteems pictures and statues by the money they cost him. He fixes on a few Scandinavian or northern airs, and calls them national: being without a musical ear generally, he even thinks them beautiful, as by habit people eat olives, and use tobacco. Soldiers and soldiering he despises, and his foreign wars are simply wars of aggrandizement. For commerce, trade, income, he seizes India: a portion of the same race, not over scrupulous, naturally, in the observance of treaties, endeavours to regain their ancient footing in the eastern Archipelago. Another portion seized lately on Texas, Oregon, California, and some other trifling bits of the earth. New Zealand did not escape. There is no harm in this; only let it be ascribed to its real causes.

A singular feature in the Saxon character is his contempt for the past; his regard to the passing hour; his look towards to-morrow. With him the past is nothing. He is the man of to-day and to-morrow. He goes back, it is true, on no ancient recollections; and for this, a reason might be assigned, that he has none to go back on. *In Tacitus' time the Germans were without letters.* What had the race been busy with since their first appearance on the globe? They had invented nothing; without arts, literature, science, they were mere barbarians; and such I found the Cape Boers to be on the frontier districts of Africa. Removed from the great stream of civilization, the Saxon, like other races, I presume, rapidly descends in the scale. The son of the comparatively polished Englishman and Dutchman becomes, on these wilds, a boor; the grandson but little above the barbarian. How should it be otherwise? Civilization is in itself an artificial system to a certain extent, and can only be supported by artificial means. Each race has its own ideas of civilization. There is no such thing as a general European civilization, in the sense spoken of by M. Guizot and other historians.

But I have still to speak of the Continental Saxon; the insular Saxon of Europe, (Anglo-Saxon,) and the American and present Colonial Saxons; branches of the great Saxon stock, spreading over the earth wherever a temperate climate enables them to climatize; or lording it over the Aborigines, as masters and tax-gatherers, aided by mercenary armies, skilfully drawn from the oppressed people themselves; or reducing these unhappy Aborigines to the most abject slavery. These, and other topics appertaining to this race, we shall consider in our next and concluding lecture.

ORIGINAL CONTRIBUTIONS.

OBSERVATIONS IN THE HOSPITALS AND MEDICAL INSTITUTIONS OF THE CONTINENT.

BERLIN.

By Dr. KIDD, of Limerick.

Crossing the Belgian frontier into Prussia, the ethnographic eye at once seizes the distinguishing features of both countries. To speak perhaps more correctly, it seems the nodal line where each mingle and mix, amid the fearful Babel of half a dozen languages—French, Flemish, Walloon, German, and Low Dutch—all national peculiarities being lost. Before leaving Belgium, the country breaks into a set of the most lovely valleys. It is here, and up on a rock, stands the little homeless and widowed town of Limburg, that has stood the brunt of all kinds of invasions, from the time of Louis XIV. down to the present—a "stranded wreck," as some one calls it, telling of battles, wars, and sieges.

Once across the frontier, however, at Aachen, (by particularly nice people called Aix-la-Chapelle,) you are told of Charlemagne, and shown his house or *schloss*. The *donane* gentlemen, previously so polite and French, talk desperate German—the *char-a banc* is now *eisenbanen*. Each stake and wooden bar is streaked with the most perplexing accuracy, in the Prussian fashion, and the Prussian eagle makes his appearance in that particularly painful situation of transfixion that you meet him everywhere else in Germany.

The traveller of the present wonderful epoch—in other words, crossing the frontier—finds himself in the land of "barricades and revolutions," cities in a state of siege, and hospitals groaning with the dying and wounded—Berlin, Dusseldorf, Cologne, Dresden, Vienna.

But, at present, it is quite fearful moving about on the Continent, to think of the amount of human suffering that the revolutions of last year have brought about; and no one, indeed, but a person who has sought the various hospitals of the Continent during that period, can at all conceive it. The multitudinous phases of human torture, the mental and bodily anguish of the thousand sufferers—the deep resentful passions everywhere at work—the mutilations and destructions of limbs—the dead—the dying—the agonies of the living—the blasted hopes of myriads—the blighted, withering thoughts of all! With such things we have nothing, however, at present to do. I allude to them merely to mention that I have been quite sensible of such terrible things, though for obvious reasons I have not allowed myself to dwell on them. They are matters for the future novelist and poet, perhaps, to study, in order to add to their fictitious horrors.

If I have taken advantage of the late events, it is in the devoutest hope that we of the present generation have seen the end of all such things, and that everything in the purely surgical way that may be gleaned from such frightful fields of study may be preserved. To many, perhaps, reading these papers I may have proved nothing—to myself, I must confess, I am in something of the same category. The waters, however, have been troubled, and our old rules of practice severely put out of joint. The "expectant" plan of our neighbours seems that thought highest of everywhere I have gone, and if the facts and figures I may be able to pick up shall further corroborate it, we must quite clearly modify our practice. To return, however, for the present, to the track of our journeyings.

If Belgium can boast of but few great men, Germany,—glorious old fatherland,—literally overflows with them. Here, within ten minutes' walk of the prælections of some of the greatest men that medical science has perhaps produced, one is completely astonished at the brilliant array of talent got together,—Link, Müller, Schultz, Schonlein, Ehernberg, Mitscherlich, Wagner,—who has not heard of each of these, the guiding lights of their several studies; and then in other branches of science,—Weiss, Rose, Enke, Ermann, Poggendorf, and the elder Mitscherlich, with a host of others equally great, inscribed in the long scroll of German medical science. Berlin, indeed, has reason to be proud of her great sons, and if Ghent, and Louvaine, and Mechlin have all their colleges, and can boast their multitudes of pupils and lecturers, no one has ever heard of their great men. The curious in such matters no doubt will light on the fact, that the inhabitants of the city of lace factories, once tried "to put out the moon," and that our friends in Ghent were once on a time compelled to wear halters round their necks, with other recondite things inscribed in old monkish Latin,—anything in the medical or general scientific way, however, is quite another matter.

Berlin, I have said, has great reason to be proud of her great men. I don't know that I have mentioned a tithe of them: yes, Humboldt, Grimm, Schelling, Ranke, Willdenow, are others who have thought, and mused, and matured their thinkings along the great strasse,—"Unter der Wilden." Berlin teems with medical institutions, and to this, of course, in a great measure, must be owing the opportunities of study these great men have had, with the world-wide reputation they have earned for themselves; in matters of natural history especially, I think they have done a great deal. Link, Muller, Schultz, Ehrenberg, and Weiss, are known wherever this interesting study is followed, their preparations and descriptions being almost one with the very science itself, and well worthy of attentive study.

It is next door to impossible, in a mere flying visit, to do more than direct attention to the chief things in the scientific way in this magnificent city; and chiefest among which I would mention the Anatomical Museum and the University itself; the former is, perhaps, the finest thing of the kind in Germany, the collection of human and comparative anatomy particularly good. The ornithological collection, got together by the celebrated Willdenow, is also of very great interest, as well as the fine series of minerals in another department.

The University, established only two years, has the reputation of being the best medical institution, after, perhaps, Vienna, on the Continent. The names I have already mentioned sufficiently testify to the excellencies of its teachers. The general average of students amounts to something like 2,000, and all its arrangements are quite in character. During the late eventful Revolution, the students turned out and fought quite desperately, many of them being killed, and many taken prisoners. Things, however, from all I can learn, are now settling down again,—the city is in a state of siege, of course, which merely meant that the guards are doubled everywhere, and troops innumerable forthcoming on the least emergency.

Of the little world of student life on the Continent, much, I need scarcely say, has been written; these gentlemen form one quite a distinctive feature in University life everywhere you go. For myself, I must confess, that I am not over-favourable to many of its peculiarities—the dress, the ever-fuming pipe, the eternal beer-jug, every little ricketty town with a College. Jena, Bonor, Heidelberg, for instance, actually swarm with our *Burschen* friends; every turn of a street, you come on dozens of them—mysterious-looking persons, with pipes like walking-sticks, very dismally off for soap, and living apparently among some wild traditions of all such things as brushes and razors! They are going, of course, when you happen to come athwart them, to have a duel, or *have had* one, which means all the same thing in point of danger; they stare at you as if you had just come out of a bottle, and are only anxious to inaugurate you into the next barrel of beer, or give you a gash through the ribs.

Their good nature knows no bounds, and, considering that there are not less than twenty-three of these institutions in the country, one can fancy the mountain of goodness you have to contend against, and the archipelago of beer mugs to avoid.

As to information from any of these gentlemen on things scientific, you are simply laughed at; a snatch of some song from Burgher or Wieland being all you get for your pains. You have to take off your hat for everybody, each of these gentlemen being, at least, a count (*Herr Graf*), or something more illustrious, (*Hoch geborner Herr,*) in his own right. Kissing and hugging each other are as common as fighting, possibly meaning the same thing; and dancing parties and *kirmes* the great business of life. To leave out describing these gentlemen, indeed, in a tour through the schools here would be the old story of Hamlet.

Note.—I have had heaps of letters to all the great magnates here. I am unwilling, however, to be "trotting out my lions," when I have been

able to make myself intelligible in the hospitals; and from what I have seen, the "expectant" system seems in no small favour. Every thing English has been asked after with curious interest, and the *Medical Times* with its inklings of German medical life, by our able friend Dr. Bushnan, pondered over with thoroughly German earnestness. Before I return, indeed, I hope to be able to plant our flag-staff in all the chief towns of renowned old fatherland; and have a monthly, or at least occasional review of everything going on from some one on the spot.

In Poland I find a new and fearful disease has made its appearance, that none of the journals that I am acquainted with make any mention of—a sort of purulent eruption—called there "*white small pox.*" The medical men have not been able to manage it at all, the mortality being perfectly incredible. I am inclined, from all I have heard of it, to think it has something to do with diet; these wretched people living for the most part on black rye bread, of the worst description, and uncooked cucumbers. The cholera has been quite frightful in its ravages at Hamburg also. The only thing I have been able to glean, however, is an opinion very general of its contagiousness, or capability, rather, of being made contagious under particular circumstances.

An agreeable feature about student-life in Germany consists in the fact, that high and low mingle together without distinction of creed or class. Indeed it cannot be well otherwise, when every one, by some pleasant fiction, enjoys sundry high and distinguishing titles,—some such as I have alluded to. All the north of Germany abounds with Universities; and one anxious to see what the great men of these schools have done, should repair thither. There is no country in the world, perhaps, where the means of instruction have been so widely diffused, or where we can so well study its effects. The *Burschen* gentlemen, indeed, in many parts of the country, form a very integral portion of the constituency; at Halle, Gottingen, and Jena, for instance, the students are quite a responsible body, and let themselves be known as such. The chief character of German medical institutions is wonderful precision and arrangement of details, nothing is slurred over; perhaps, indeed, German medical education is too mathematical, too much a matter of dry induction from abstract facts; in England, perhaps, we err on the other side.

In the *hospitals* everything is done with the precision of a stop-watch, so that it requires a long training to get into the system. Our friends, too, seem quite alive to everything going on in the world about them, the living languages being more studied than the dead—indeed, it is on leaving the university the German begins to learn Greek and Latin, their education, as it has been often observed, just ending where other people's begins.

Germany is known to this country perhaps less than half a century. The little songs of the "Niebeleigen" were, perhaps, the first thing that waked the people to a knowledge of her great men. Since when, I need scarcely say, we have had whole furlongs of books, on every variety of literary and scientific subjects. To go through the tithe of them would be the work of a Hercules, or, perhaps the expurgative work of the barber and priest in Don Quixote—one-half nearly deserving to be thrust out of the windows and burned. Of some of the more valuable, we shall have a talk before we conclude.

The preparations of the different museums, with their catalogues, are about the most interesting things one meets; and, considering that the major part of our physiology is built up on such *dijecta membra*, I must confess, they had a wondrous attraction for me; for, after all, though we have great men in England, which to name at present, perhaps, would not be lawful, our "*cell-formation*" *theories* and "*proteine*" discoveries, which have changed the entire aspect of physiological science, are due to Germany. We have our own grand triumphs of course,—the discoveries of Charles Bell and Marshall Hall; the able inductions of Owen, and our great school of palæo-zoöic writers; the discoveries of Faraday, and the great mystifications of the "Vestiges of Creation."

Berlin.

EPIDEMIC CHOLERA.

A SKETCH OF THE MEDICAL HISTORY OF THE 47th REGIMENT.

By G. SAUNDERS, Esq., Assistant-Surgeon 47th Regiment.

In the autumn of the year 1831 the cholera first broke out in England, and was then regarded by almost every medical man as the new epidemic disease, which committed such terrible ravages in armies in the north-eastern districts of India in the year 1817, where it was described as being like an invading army proceeding from town to town, and from village to village, (a) destroying thousands of inhabitants in its course, (b) in defiance of all natural and artificial barriers, (c) since which period its visitations to that country have been more frequent and destructive.

Early in January, 1832, the regiment arrived in Belfast from Glasgow, just before the cholera visited the latter place. On the 18th of March following, the Local Board of Health officially reported the existence of the disease in the town of Belfast, for on that day four of the inhabitants were attacked, two of whom died. Although the malady prevailed to a frightful extent beyond the walls of the barracks, not a single case occurred within them up to the 13th of May, the day on which the regiment commenced its march for Newry. Before the completion of this march, two of the men were seized with purging, vomiting, and muscular cramps of a very mild choloroid character, which were readily checked by a full dose of calomel and opium. This circumstance led to the prediction, that the disease, which was making rapid strides throughout the country, would shortly visit the regiment. On arrival at Newry, it was ascertained that the disease had commenced its ravages in that town a few days before, causing the utmost alarm to prevail among the inhabitants, each one thinking he had but a "short while to live;" and nothing tended so much to spread alarm as the death of the Staff-Surgeon, who was one of the first to have fallen a victim to the disease. It was not, however, until the 12th of July, two months after, before the first case of cholera occurred in the regiment; the subject was that of a delicate woman. In a few days after, four of the men were attacked, one of whom died. Among the children, one case occurred which ended fatally. The next cases occurred at Mullingar, when out of four men attacked, three died.

In April, 1834, the regiment arrived in Dublin, and occupied the Richmond barracks; the summer of this year was very unhealthy; scarlet fever of a malignant description, and bowel complaint prevailed to a great extent; soon afterwards the cholera made its appearance, first attacking some of the poor labourers employed on the Kingstown railroad, and about the Black Rock, from thence it spread to the Pigeon-house, and Beggar's Bush barracks; and after slowly, but steadily traversing Dublin, it at length reached the Richmond barracks, situated about half a mile west of the town, in the month of August; and, after attacking two of the officers, one of whom died, and one of the men, who also died, the disease passed away, continuing its north-western course.

The following Table shows the progress which the epidemic made in the regiment, while serving in Ireland, from its first appearance in 1832 to 1834, when it ceased to prevail. That part of the Table referring to the frightful visitation of the disease in Malta will claim a separate note.

Date.	Stations.	Officers. Cases.	Officers. Deaths.	Men. Cases.	Men. Deaths.	Women. Cases.	Women. Deaths.	Children. Cases.	Children. Deaths.	Remarks.
June and July, 1832..	Newry ...	...	...	4	1	1	...	1	...	Average strength in Ireland, 738 men.
September, 1833	Mullingar.	...	...	4	3	...	...	...	1	
Aug. and Sept., 1834	Dublin ...	2	1	8*	5*	...	...	1	...	* 2nd Detachment.
Total in Ireland		2	1	11	7	1	...	2*	1	
June, 1836.....	Gibraltar..	...	...	1	1	...	...	...	...	Average strength in Malta in 1837, 455 men.
June and July, 1837..	Malta	2	1	53	13	5	4	1	1	
Total in Mediterranean		2	1	54	14	5	4	1	1	

Cholera made its appearance in Malta about the 9th of June, 1837, on the western or Valetta side of the Grand Harbour, and attacked the regiment on the 25th of the same month, then stationed in the Cottonera district, opposite to Valetta. This outbreak of the epidemic, which was productive of considerable mortality among the troops and inhabitants generally, was most sudden and alarming in the regiment, for on the day of its visitation several of the men had fallen sick of the disease. During its prevalence, from the 25th of June to the 11th of August, both days inclusive, out of 455 men, comprising the service companies, 53 were attacked, 13 of whom died. There was no difference observed between these cases and those which occurred in Ireland—no more than what any peculiarity of constitution may have produced.

It very rarely happened that an attack of the more specific symptoms of the disease had set in at once without being preceded by diarrhœa, or a loose state of the bowels, depression of the spirits, vertigo, or a sense of weight in the head, and a general restlessness, dry state of the mouth, and often urgent thirst; these were regarded as the premonitory signs. The specific characters of a regular attack of cholera were—at first, sickness of stomach, frequent copious watery discharges, generally of a turbid whitish fluid, resembling rice-water, forcibly ejected from the stomach and from the bowels, having no fœcal smell, and containing no bile, followed by spasms affecting the muscles of the thighs, the calves of the legs, and afterwards extending to those of the abdomen, causing the utmost pain and suffering; a peculiar haggard change of the countenance; great prostration, or collapse; a small feeble pulse, and at times scarcely perceptible at the wrists; a burning thirst, and a total suppression of urine; surface becoming cold, blue, and thinner, and covered with a cold sweat; eyes sunk, and "death terminating the scene."

The most favourable symptoms were those where the vomiting, purging, and cramps, did not last long, where the general warmth returned, and where bile appeared in the discharges from the bowels; this latter circumstance insured a confident hope of the patient recovering.

The hopeless cases were those in which the premonitory symptoms had been unnoticed; uncontrolable, or profuse vomiting and purging, and,

(a) Observations on Cholera. By a Medical Officer of the British Army. Edinburgh, July 1831. P. 4.

(b) J. Mason Good, M.D. The Study of Medicine. London, 1825. Vol. I. P. 272.

(c) T. Watson, M.D. Lectures on the Principle and Practice of Physic. London, 1845. Second Edition, Vol. II. P. 464.

where rapid collapse and sinking had set in early in the disease. Predisposing causes: crowded and ill-ventilated habitations; scanty nourishment; constant exposure to wet, cold, &c., especially at night; uncleanliness; want of employment; circumstances which produce mental anxiety; and, more particularly, intemperate habits in the use of spirituous liquors.

The *post mortem* examinations added nothing to the scanty knowledge which we possess of the pathology of the disease.

Treatment.—In the premonitory stage of the disease, eight grains of calomel were given by placing the powder on the tongue, and washing it down with an ounce of the camphor mixture, containing thirty drops of laudanum, and, in about two hours after, the following draught:—

℞. Pulveris rhœi, gr. xxv.; magnesiæ carbon., gr. x.; pulv. zinziberis, gr. vj.; aquæ menth. pip., ℥ij. Misc. ft. haustus.

In this simple way a large number of cases have been warded off, which, if neglected, would have most probably assumed genuine cholera, the treatment of which will now be considered.

In all cases, at the commencement of an attack, where there were nausea and fulness, or a sense of weight in the region of the stomach, a mustard emetic was found very serviceable in unloading this organ, and in preparing it for the action of the more direct remedies; a full bleeding was of remarkable benefit when early employed in violent spasmodic cases, where the pulse was fully developed, both in mitigating the sufferings of the patient and in rendering the further progress of the case more manageable. "Soldiers who have been the subjects of this disease, have, with few exceptions, been young men, generally of full and vigorous habits of body. I have, therefore, the less hesitation in saying, that, on premonitory symptoms, even of the mildest kind, but indicating the probable supervention of cholera, the lancet should be freely employed.

I have myself witnessed, in a large proportion of such cases, viz., in men of full habit and tense fibre, the beneficial effects resulting from this practice. It ought to be among the first remedies in the order of our practice; and, as a measure of undoubted efficacy, I would earnestly recommend its early adoption, particularly with soldiers, where, moreover, it is both more applicable and practicable than in private life; and, even where it has not succeeded in preventing the disease, it has mitigated both its rapidity and malignancy, and afforded the practitioner time for after treatment in a more manageable form —the consecutive fever." (a)

Calomel was the remedy in which the greatest faith was placed in the treatment of this disease. From 10 to 30 grains were given every hour for the first two or three, the first dose always followed by an anodyne draught, containing from 35 to 60 drops of laudanum in an ounce of the camphor mixture, and the calomel continued in smaller doses every two hours afterwards, according to circumstances. Heat applied to the surface, by means of extra blankets, bottles filled with hot water, friction with spirits of turpentine to the feet, abdomen, &c.; sinapisms to epigastrium, along the spine, calves of the legs, &c. The burning unquenchable thirst was generally relieved by effervescing draughts, containing, in the stage of collapse, carbonate of ammonia. Rum and brandy, as internal stimuli, fell into disrepute, as they seemed, in several cases, to have caused much pain in the region of the stomach. The cold affusion was tried with ill success; acetate of lead, and opium, as recommended by Dr. Graves, of Dublin, were not found of much benefit; turpentine injections were also employed with questionable success. No remedy appeared to act so well as the calomel and opium. The latter must be given sparingly after the first or second dose; great care is also required not to introduce too much calomel into the system; no more of it should be given than what appears to be absolutely necessary after the more urgent symptoms have ceased; and this particularly has reference to tropical climates, where its injudicious employment has been followed by congestive fever, with much cerebral excitement, requiring leeches to the temples, blisters to the nape of the neck, &c.

It is interesting to remark, and strongly in favour of the rigid regulations(a) enforced upon all authorities in command of garrisons, individual regiments, and detachments, during the prevalence of epidemic cholera, that nearly twelve months elapsed since the first appearance of this formidable disease in Britain before a single soldier, soldier's wife, or child of the line was attacked.(b) As precautionary measures, the drains of the barrack-yards, dust-holes, &c., &c., should be kept in a state of perfect cleanliness, and all collections of filth, stagnant pools, &c., in the neighbourhood removed; overcrowding of the barrack rooms should be strictly prohibited, and free ventilation maintained; great care should be observed in the men's diet; sparing in the use of fruit; moderation in strong drinks, and everything avoided likely to produce debility of the system, and, above all things, to correct, as early as possible, any irregularity of the bowels.

(a) R. M. Peile, Deputy-Inspector-General of Hospitals. Official Correspondence on Spasmodic Cholera Ireland. Dublin, Oct. 20, 1832. Appendix, p. 15.

(a) Vide Instructions to Army Medical Officers, for their Guidance, on the appearance of Spasmodic Cholera in this Country.—War-Office, 1848. Printed by W. Clowes and Sons, Charing-cross.

b) Army Medical Department, June, 1832.

A SKETCH OF THE ASIATIC CHOLERA, AS IT BROKE OUT AT THE PAUPER ESTABLISHMENT OF MR. DROUET, SURREY HALL, TOOTING.

By J. GORDON BAILEY, Esq., Pentonville, one of the Surgeons sent down by the St. Pancras Committee, at the recommendation of the Board of Health.

In presenting the following sketch to the Profession it is hardly necessary to publish any information respecting the outbreak of this disease which has not a medical bearing, the daily papers having furnished reports which have, doubtless, been read by the majority of the readers of the *Medical Times*; however, it may not be known to those at a distance, that this establishment is the property of Mr. Drouet, who has, for the last twelve years, been in the habit of receiving pauper children from the various parishes of London and its vicinity. This system of "farming" out children originated in an endeavour to prevent the workhouses being overcrowded, and to enable the system of poor relief to be more extensive and useful. The children received at this establishment were both males and females, varying from eighteen months to sixteen years of age. Their health, up to the time of this outbreak, has been remarkably good, and, with the exception of an attack of measles about eight years back, which proved fatal in some of the cases, there has been no illness of any consequence which was attended with a large share of mortality. There has always been a medical officer connected with the Institution, whose duty it was to make a daily inspection of the children, and when a case of illness presented itself the child was isolated from its fellows and treated accordingly.

The epidemic broke out on the night of Friday, the 29th December, 1848. The first case in which this dreadful disease manifested itself was a little girl, Louisa Dell, nine years of age, belonging to the parish of Newington. The symptoms which ushered in the attack were diarrhœa and vomiting, without any other premonitory sign, soon followed by coldness and collapse, and very faint pulsation at the wrist, sunken eyes, pinched up nostrils, lividity of the lower eyelids and lips, with blueness of the finger and toe-nails. After the first vomiting, which consisted of the food, the matter next rejected consisted of a fluid resembling rice water, or, rather, as compared by the nurses, to "soapy water," the dejections having the same character. The thirst became urgent; the tongue was not dry, but coated with a brownish fur in the centre, clammy to the touch, but not cool. The vomiting was repeated every time fluid was swallowed, more being ejected than was taken into the stomach. At the same time there was pain at the epigastrium, and over the whole abdomen; headache was not complained of; the conjunctivæ were injected; cramps were not observed in this case; and, as the child was frequently called on to evacuate the bowels, the urinary secretion might have been voided at the same time; but, from the youth of the child, it was difficult to obtain any accurate information on this point.

Mode of Attack.—In the early cases of this dreadful disease, the symptoms of Asiatic cholera, so well described by Dr. Parkes and others, who witnessed it in India and Russia, were very well marked. The patient was seized suddenly, with either vomiting or purging; in some both took place at the same time, or rapidly succeeded each other; coeval with this phenomenon a diminution took place in the temperature of the skin, the heart's action became enfeebled, the radial pulse faltered, the countenance looked anxious and pale. In one or two cases the forehead was wet with a damp perspiration, (a very unfavourable sign,) and griping pains, principally in the epigastrium, were complained of; those were the symptoms present in many of the cases. In these that terminated fatally the following additional features were added:—The feebleness of the patient became increased; the temperature of the surface continued to decrease; the extremities of the fingers and toes, the borders of the ears and tip of the nose, became blue and cold; the lips assumed a livid hue; the tongue became cold and damp; the patient would moan with pain, and writhe under the distressing cramps which were then present. As the disease went on, the countenance gave additional evidence of the doom which awaited the unhappy sufferer. The cramps ceased—the eyes, sunk in their sockets, were turned upwards, being only partially covered by their lids—the vessels were full with congestion —the patient lay still and motionless—the heart's action being scarcely perceptible to the touch, and in some cases requiring the attentive application of the stethoscope to announce that the vital spark had not yet fled. Others would moan, and toss their arms, and twist their bodies round. In several cases, the child has been observed to place the forehead against the pillow, and bend the trunk, as in the emprosthotonitic phenomenon of tetanus; and, in one case, there was opisthotonos before death, a regular curve being formed from the occiput to the sacrum. The character of the evacuation from both stomach and bowels was that so well known as the "rice-coloured fluid." Patients have been observed lying on their backs in bed, and suddenly the sickness came on, when, without any apparent effort, a volume of this fluid would be "spouted" up from the stomach to some distance from the foot of the bed. In those cases the diarrhœa was not so great, a kind of antagonism seeming to exist, and those were the cases in which the characters of Asiatic cholera were best marked; the blueness of skin and coldness of surface being most distinct. Again, in those cases the evacuation from the bowels contained no trace of bile, while it happened that when the diarrhœa preponderated over the sickness, there were slight traces of bile, or rather flocculi, to be seen in what had passed from the bowels.

As to the relative value of cramp as a symptom, it may be observed, that its occurrence was best marked in the elder children; in a few cases the younger ones seemed to suffer, but, either from feebleness, or inability to speak, gave expression to it only by their twisting in the bed.

With regard to the suppression of urine as another symptom, there were very few cases in which there was any passed. Percussion over the pubic region afforded no evidence of any being contained in the bladder; and the difficulty of distinguishing it can easily be accounted for, as, in the several cases in which *post mortem* examinations were made, it was found perfectly empty and contracted.

In all the well marked cholera cases, thirst was present to a most distressing degree—even those fast sinking into eternity would utter a piteous cry, and ask for drink.

With regard to the symptoms which were present in the mild cases, which set in with diarrhœa, it may be remarked, that in many there was a degree of fever present, the skin was hot, the tongue slightly furred, and the radial pulse above the natural standard. Those cases, if not watched, would run on to a fatal termination in almost all of them. There was, if not a well-marked diarrhœa, an amount of uneasiness and tormina in the bowels, which was very significant to the medical officer. There were few cases which presented the corrugation of the skin which has been noticed by those who witnessed the disease in other countries, nor was cramp so universally an accompanying symptom of the disease; but there were, in all the severe cases, those indications which have been recognised by practitioners, and described by authors as giving character to the disease.

Post-mortem.—Nothing new has been revealed by the examination of the bodies of those who died during the present epidemic, that has not previously been recognised in former visitations. In all the *post-mortems* that I witnessed, the appearances were pretty uniform. There was a blueness of the surface of the body, best marked in the dependent parts from gravitation. The bodies generally were muscular and fat. On opening the abdomen, the omentum presented a healthy appearance. The stomach contained a small quantity of fluid, and in some cases its mucous membrane was infected—in others, natural.

The small intestines were generally pale, while the large ones, especially the ileum, were either dark-coloured or more vascular than natural. Some fluid was found in almost each case in the large intestines, varying in colour and consistence—rice-coloured and thin, or dark-coloured and more thick.

There was not any great amount of congestion in either liver or spleen, though the abdominal veins were full; the right side of the heart was distended with blood; the gall-bladder was gorged with bile, of the consistence of treacle; and in all the *post-mortems* of those who died in the collapse of cholera, the bladder was found empty and contracted.

[To be continued.]

HOSPITAL REPORTS.

MEATH HOSPITAL.

ON MORTIFICATION OF THE FEET IN TYPHUS FEVER.

William Courtenay, aged 21 years, admitted, under the care of Dr. Stokes, Regius Professor of Medicine in the University of Dublin, December 28, 1848, being the seventh day of his fever; he is a servant of Mr. Clarkes, of South Ann-street, who, previous to his admission, gave some medicine which affected his stomach and bowels; at present he complains of pain in the head and debility.

29th, the day after his admission, face flushed; eyes suffused, not injected, no sordes; tongue coated with a white creamy fur; skin hot, dry, dusky, and covered with healthy maculæ, which are of a bright red colour; chest resonant, vesicular murmur pure; pulse 104, and of great strength; heart's impulse good, both sounds proportional; abdomen soft, and without any tenderness; bowels regular; and passes water freely. No treatment.

Dec. 31.—Appears to be progressing well. Sleeps well at night; does not rave; and states that he feels better, and free from the pain in the head.

No remarkable change has taken place since last report. Tongue more brown and dry, and maculæ more general and darker in colour; resonance of chest good, but there are some dry musical rales mixed with the healthy vesicular murmur; pulse 108, and more feeble than last day; heart's impulse feeble, both sounds proportional; abdomen natural.

Treatment.—Ordered to be dry cupped.

Jan. 2, 1849.—Twelfth day of sickness. Spent an uneasy night, continually turning in the bed, without any inclination to sleep. Eyes slightly injected; tongue dry, and covered with a brownish fur; teeth slightly coated with sordes; skin dry, hot, and covered with a copious crop of dark coloured maculæ, which are quite livid within the circles left by the cupping-glasses; pulse very feeble, 112; no impulse of heart, both sounds audible, second louder and more distinct; abdomen slightly distended, but hot, tympanitic.

Treatment.—Wine ʒiv. and enema terebinth.

January 3rd.—Looks improved; slept pretty well during the night; no bed sores; bowels freed by the enema; pulse, 100—feeble; sounds feeble, but proportionate. Continue wine; fourteenth day of fever.

No remarkable change since yesterday. Maculæ still dark coloured, and general; chest resonant, and respiration freer; pulse, 100—feeble; no impulse of heart; first sound scarcely audible. Wine ʒviij. and mist. carbon. ammoniæ ft. ʒj.; tertiis horis.

January 6th.—Sixteenth day of fever. Looks much improved. Slept well during the night, and expresses himself much better. The maculæ are still general; pulse 98, and of good strength; impulse of heart feeble; both sounds proportional; no bed sores, or indication of them. Wine, &c., as before.

Seventeenth day. Looks much improved; countenance clear and bright; and sleeps well; maculæ are still persistent; pulse 92, and of good strength; impulse of heart good; both sounds proportional, and of good strength. Treatment—wine ʒiv., and continue mixture.

January 8th.—Is going on well. Pulse 89, and good strength; impulse and sounds of heart good; maculæ slightly faded.

January 9th.—Face greatly flushed, and there is much wildness in the expression of countenance; pulse, 100—full, but compressible; impulse of heart strong and irregular. In twenty minutes after this the pulse was up to 120, with a heaving impulse of the heart, the sounds being very irregular. The chest and abdomen were accurately examined for the change, but no unnatural phenomena were detected.

January 10th.—There is a melancholy change for the worse; he is apparently dying, being in a state of the greatest prostration. The feet and hands are cold; pulse so feeble as scarcely to be felt—so quick as not to be counted; the sounds of the heart are so feeble as not to be defined. At four o'clock I saw him again. He was covered with a profuse cold sweat; the trunk was still maculated. The nurse drew my attention to the left leg, which was cold and livid from the knee down. The integuments of the foot were hanging loosely. Some reaction had taken place; the pulse was quick, and the action of the heart so irregular that the sounds could not be defined. He complains of pain when pressure is made in the popliteal space when searching for the artery. The patient died in the course of the night.

Dr. Stokes, on exhibiting the morbid phenomena discovered at the autopsy to the Surgical Society of Ireland, said, that the case belonged to a class upon which little light had as yet been shed by the progress of pathological investigation. He alluded to those instances in which mortification of the extremities had occurred as a sequela in typhus fever.

Appearances found on Dissection.—The heart was very much contracted, but not all softened. The ventricles seemed as if they were the seat of a concentric hypertrophy, but Dr. Stokes believed this to be the result of a vital contraction during the last moments of life. The ilium showed some commencing hypertrophy of the aggregated glands, but there was no ulceration. The femoral artery was deeply coloured, but there was no proper evidence of inflammation, and it contained no coagula. The small branches leading from it did not contain coagula, but their coats seemed perfectly sound. Dr. Stokes believes that in these cases the progress of the disease is concentric, and not eccentric. He does not think that it is coagulation in the artery which produces the gangrene, but that it is the gangrene which causes the coagulation. After such a case as this, if he met with an instance in which extensive coagula were found in the femoral artery, he would still look on these as the consequence rather than the cause of the disease.

[From our Edinburgh Correspondent.]

EDINBURGH SURGICAL HOSPITAL.

OPERATIONS ON FRIDAY, THE 5TH INST., BY MR. SYME.

AMPUTATION OF THE ARM FOR AN INJURY, THE RESULT OF A BURN.

The patient, a respectable young woman, aged 22, had a severe burn of the arm when six years of age. From that time the bones of the fore-arm, (which is now bent at right angles to the arm,) had ceased to grow, and the cicatrix of the integuments had so contracted as to draw back the metacarpal bones of the hand upon the radius and ulna, leaving the knuckles in a line with the integuments, the fingers taking their origin, as it were, from the lower surface of the middle of the fore-arm, and within three inches of the elbow; thus rendering the hand of little use. But the operation was not performed on this account. There existed a large ulcerated surface over the end of the bone, at the elbow, which could not be healed; this had recently bled profusely; at times assuming a sort of vicarious character at the catamenial periods, and tending manifestly to the depravation of the patients' health. She, therefore, consented to have the arm removed, which was done by the flap operation, pretty high up, in order to secure integuments free from any trace of former lesion.

EXCISION OF THE MAMMA.

Mr. Syme next excised a carcinomatous tumor of the mamma from a woman aged 59. There was little remarkable in this case, but the firm adhesion of the tumor to the pectoral fascia.

EXTIRPATION OF THE TESTICLE.

————, a labourer, aged 40, began to notice a slight swelling of the testicle about a year ago, which latterly increased so rapidly as to become uncomfortable, from its weight and size. Within the last fortnight it had been twice tapped, and on both occasions a small quantity of clear fluid removed, with the effect, however, of diminishing the tumour in a very small degree. The testicle was removed in Mr. Syme's usual way, by an elliptical incision, embracing a considerable portion of the scrotum, and without previously securing the vessels of the cord, which showed no tendency to retract.

Chloroform was used in all these operations.

OPERATIONS ON SATURDAY, THE 6TH.

REDUCTION OF DISLOCATION OF THE HUMERUS, OF THREE WEEKS' STANDING, BY PROFESSOR MILLER.

The patient, a farm servant, had, three weeks previously fallen from a loaded cart upon some straw, dislocating the shoulder downwards. Reduction had been attempted on three several occasions, by practitioners in the country, without success. The patient having been put under the influence of chloroform to the fullest extent possible, extension was made by means of the pullies, and the bone, with some difficulty, replaced, owing to the extensive adhesions it had formed in its new position. He was dismissed on Monday, well.

AMPUTATION OF THE THIGH, BY DR. DOUGLAS MACLAGAN, ON ACCOUNT OF EXTENSIVE AND APPARENTLY INCURABLE DISEASE OF THE FOOT AND LEG.

About five years ago, abscesses formed in the thigh and lower part of the left leg of the patient, a woman aged 30, after childbirth, which became unhealthy ulcers of the areolar tissue, resisting all attempts to heal them. Six months since a slow phagedænic ulcer commenced at the base of the great toe, which gradually sloughed through all the textures, amputating it and the toe adjoining, in spite of every attempt to stop its progress. This ulcerating process continuing to extend, and the patient suffering great constitutional disturbance, amputation was performed at her own request, at the lower third of the femur. Chloroform was also used in this case.

OPERATION ON WEDNESDAY, 10TH.

AMPUTATION TO RESTORE HEALTHY ACTION TO AN ULCERATING STUMP, BY MR. SYME.

——, aged 18, an engineer, two years and a half ago had primary amputation performed about the middle of his left leg by the flap operation. The stump never healed properly, and when brought to the hospital the covering for the bones was found insufficient, ulceration having taken place. It was very painful, and the extremities of the tibia and fibula felt as if enlarged.

Amputation was performed on the same principle as that on which the two cases quoted in the *Medical Times* of December 30th were done, bringing the parts into nearly the same state as they would have been had the original amputation been made by a circular incision about two inches and a half higher up the leg. Sutures were introduced, but not tied, in order to prevent the necessity of undoing the stump, as in these cases of secondary amputation, the risk of the oozing of blood from innumerable small vessels is found to be very great. In this case, the propriety of this practice was proved, as in the evening a large clot of blood had formed in the wound, which, being removed, the parts were finally brought together, and will, no doubt, heal perfectly, as has been the case with the two stumps operated upon on the 22nd December, which are both now quite well.

OPERATION, BY MR. SYME, ON THE 12TH.

A large internal exfoliation was removed from the humerus of a strong young man, aged 17, who, about seven months before, injured his arm by excessive exertion. At the time there was pain and swelling of the arm, which continued for about a month, when an opening, formed on its inner side, through which small pieces of bone have been since discharged occasionally. The operation was difficult owing to the exfoliation being internal, the shell of new bone very thick, and the opening through it very small. Several large pieces of sequestrum were removed, and the patient is doing well.

OPERATION ON SATURDAY, THE 13TH.

AMPUTATION AT THE HIP JOINT, BY MR. SYME.

William White, aged twenty four, labourer, was admitted on the 7th September, 1848, having, a few hours before admission, received the following injuries, occasioned by a fall of earth while working in a railway tunnel. A very severe compound dislocation of the right ankle-joint, with fracture of the tibia above the malleolus, and another fracture a little above the middle; the lower end of the fibula was exposed for several inches, and very much comminuted. There was severe laceration of the soft parts—great effusion of blood, accompanied by the admission of a considerable quantity of air beneath the integuments. The tibia and fibula of the left leg were fractured above the ankle—there was great eversion of the foot, with enormous swelling and ecchymosis of the whole limb; so much so, that it was difficult to say which limb was the more severely injured. Under these circumstances an attempt was made to save both. The exposed portion of the fibula was removed, and proper splints applied. For the first ten days everything went on most favourably—the patient continued in good spirits—reaction was moderate—the discharge from the wound was healthy in appearance, and moderate in quantity; and the swelling in the left leg almost entirely disappeared; but, after that, he was seized with bowel complaint—lost his appetite—his urine became scanty and high-coloured; he had a heavy dingy appearance, and his whole body assumed a yellowish colour: in short, he exhibited all the symptoms of phlebitis. These, however, disappeared in about a week, and his health improved, but the discharge from the wound and from incisions made in different parts of the leg, increased to such an extent, that, as a last resource, —though at the time it seemed quite a hopeless one, —amputation was performed in the lower third of the thigh by the circular incision. Two circumstances worthy of notice occurred during the operation. The first of these was the greatly thickened state of the coats of the femoral vein; the other, the very dense and almost ivory appearance of the shaft of the femur. This was so remarkable, that several gentlemen who witnessed the operation declared that necrosis of the bone would in all probability ensue; and they were correct in their supposition. The wound at the end of three weeks was entirely healed, except at one small part, where the bone was felt to be bare; but the looked for exfoliation did not become detached. Three months passed over, during which repeated attempts were made to ascertain if the dead bone would separate. The femur got thickened, and the patient suffered much pain, more especially over the trochanter and neck of the bone. Abscesses formed in all directions, till at length there was such a profuse discharge, that the patient's health became seriously affected, and it was evident that, unless something was done for his relief, he would very speedily sink under the disease. At a consultation, held on the 12th of this month, it was agreed that the only method that could be followed with this view was the very severe one of amputation at the hip-joint. This was accordingly performed on the following day by Mr. Syme, by anterior and posterior flaps. There was very little blood lost during the operation, although the large number of twenty-one vessels required ligature.

PROGRESS OF FOREIGN MEDICAL SCIENCE, WITH REMARKS, BY DR. BUSHNAN.

GERMANY.

ALLEGED NEW SIGN THAT A CHILD HAS BEEN BORN ALIVE.

Dr. Virchow, in the transactions of the Berlin Obstetrical Society (*in die werhandlungen die Gesellsch aft fur Geburtshulfe in Berlin*) has proposed a new sign, and one, so far as it goes, of great value, to ascertain whether a child as born alive,—that is to say, whether the child has lived more than two days. Medical jurisprudence, even when best directed, and aided by the strongest circumstantial evidence, has failed to determine whether a child, found dead, had or had not been born alive. There is no certain sign with which we are acquainted, to determine this important point; for even the much vaunted hydrostatic test is very far from being conclusive; and that which I am now about to rescue from the pages of an obscure German journal is objectionable, since its presence only proves that a child has lived a certain time. However, this is a great advance, and in many cases may prove of much negative importance, since it is never found in children *who have been born dead.* The test to which I allude is to be found in the absence or presence of uric acid in the kidneys of new-born children. I shall proceed to lay, with a few remarks, before the readers of the *Medical Times*, the account given of this by Dr. Virchow, of Berlin, entreating the profession in general to give their serious attention to the subject; to repeat, upon every possible occasion, the examination, and to publish the results. Indeed, if the members of the profession will favour the Editor with the results of their experiences, they will be published, and afterwards reduced to a tabular form, a proceeding which may lead to important conclusions.

Dr. Virchow, then, wishes to show that the presence of uric acid in the kidney, which is at once to be detected by the naked eye, is a conclusive proof that the child found dead has been born alive. Let us see how far this is the case. The ancient anatomists remarked a red or yellowish substance coating the mammillæ of the kidneys of infants, and which modern science has found to be uric acid, and analogous to the calculi sometimes found in the bladder of children. Schlossberger treats of it under the name of "infractum acidi urici;" and it is easily discovered by making a transverse section of the kidney, when a considerable number of yellowish-brown, and sometimes light yellow rays of this substance, are seen ramifying from the tubular, and sometimes from the cortical substance to the mammillæ. Under the microscope, we make out sometimes solid cylindrical particles, of a yellowish-brown colour, though more frequently these cylinders seem to be not yet formed, or to be broken up into molecules of a darker colour, round or angular, and not unlike the crystals of urate of ammonia. A greater quantity is obtained by pressure.

It is not necessary, in this place, to follow Dr. Virchow through the cases he has enumerated; suffice it to say, that the following are the conclusions to which he has arrived:—

1. That the deposit is never found in children who have been born dead, or who have died within forty-eight hours after birth.

2. That the deposit is not found or does not occur until about forty-eight hours after birth.

3. That the deposit is not generally found later than the 20th day after birth.

There seem, however, to be some exceptions to these rules; for, the deposit was, in one case, found on the 29th day after birth; and, although there appears to be no question that children born dead have no such deposit, yet, at the discussion before the Society, it was remarked by Dr. Viecher, that he had not found it in an infant dead on the 10th day; in another on the 13th; and in a third on the 6th day. These, however, may be the consequence of disease; at any rate, the subject is now left in the hands of British observers, who, I trust, will soon determine the value of Dr. Virchow's views.

ITALY.

PURPURA TREATED BY REPEATED BLEEDINGS.

Dr. Lossettile, in the *Annali Universali di Medicina*, relates a case of purpura cured by several repeated bleedings. It is noticed in this case chiefly, because founded upon the case of the late Dr. Mackintosh, who lost a patient soon after she had been bled, and another of Dr. Fairbairn's, who died after a third bleeding. It is too much the custom of the routine practitioner to treat purpura as a disease of debility, to exhibit tonics and stimulants, and to prescribe a generous diet. Never was there a greater error; and it is lamentable to observe how often names, and not symptoms, lead to the use of remedies, and mere authority blinds the judgment of many otherwise excellent practitioners. Speaking of purpura, **Martinet**, in his pathology, has well observed, that "the external characters of the complaint have engrossed too exclusively the attention of observers, though these are of comparative little moment, and form no adequate basis either of diagnosis or practice, so long as the nature of the constitutional disturbance is overlooked." Bateman and Willan incline to the idea, that purpura is a disease of debility, and include it among the skin diseases. But that is not its place; it is evidently a disease of the circulating system, as is well evidenced in severe cases, where hæmorrhages take place from almost all the mucous surfaces. It will be well, then, for the practitioner to ascertain whether the heart's action may be so increased as to occasion this effusion from the capillaries; or, if these latter are so weakened by debility, whatever be its cause, as to permit a passive effusion. The former I believe to be the more frequent form of the disease.

FRANCE.

ON ATROPHINE.

Messrs. Brouchardat and Stuart Cooper, (*Gazette Médicale de Paris,*) have published some interesting remarks on the use of atrophine. An obstinate case of chorea in a man, aged 35, was cured by the use of this alkaloide, in doses of 1-5th of a grain per diem. The duration of treatment is not mentioned. In a severe case of pleurodynia, the same dose,—obliged, however, to be reduced to 1-10th of a grain,—effected a cure in six or seven days. It was applied on a blistered surface. The same result was procured in a case of splenic neuralgia. In a case of nervous aphonia, 1-16th of a grain daily, in a draught, effected a more rapid cure; and in a case of violent hysteria, 1-16th to 1-10th of a grain was followed by great melioration. The authors recommend several preparations. The tincture, composed of atrophine, 1 gramme; alcohol at 85° 100 grammes: dose, 1 to 10 drops. The syrup: Atrophine, 1 decigramme, dissolved in 10 grammes of water, with 1 drop of chlorhydricic

acid; simple syrup, 1,000 grammes: dose, 20 grammes. Collyrium in hernia of the iris and ulcerations of the cornea: Atrophine 10 centigrammes; distilled water, 100 grammes. It may also be given in powder, pills, and lozenges.

The practice now so general of using the active principles of vegetables in place of the vegetable itself is much to be approved; and, indeed, if we consider for a moment the difference that exists in the action of plants,—no one can have failed to have observed it in the belladonna for instance,—gathered in different years, in different seasons, and in different localities,—we must be convinced how necessary it is to obtain the means of administering the drug in a fixed and uniform strength.

ON PELLAGRA.

Monsieur Ph. Roussel (*Revue Médicale*) has travelled through the south western provinces of France to study this disease of the skin, or, rather, of which a morbid condition of the skin is a prominent feature. He arrives at the same conclusion as others, that the causes are poverty and dirt, to which, however, he adds, the use of maize as a chief article of food. For our knowledge of this disease, the "*mal de misère*," as Vaccari terms it, we are for the most part indebted to Dr. Holland, ("Medico-Chirurgical Transactions," Vol. VIII.,) who has controverted the opinion that maize is a cause, by his personal observation, asserting that it does not exist in the northern parts of Greece, nor in Spain, nor Portugal, where maize forms the chief part of the food of the peasantry. Maize, too, is extensively used in Brittanny, and there I have never met with the disease. In Belgium, where the condition of the peasantry was very similar to that observed by Monsieur Roussel in the south-western provinces of France, with the exception of the use of maize, I am told that, although pellagra is unknown, a disease somewhat similar to it,—an asthenic affection, a true adynamia, assuming a scorbutic form,—is very common.

BELGIUM.

MANGANESE IN CANCER AND CHLOROSIS.

Dr. Hannon (*La Presse Médicale*,) proposes the use of manganese, hitherto only employed to procure oxygen gas, or for fumigation, when mixed with common salt, sulphuric acid, and water, in the treatment of cancer and chlorosis. Of the former disease, of which little is known but the prognosis and diagnosis, he relates a case in which he used the proto-ioduret, apparently with much success; at least, so far that those terrible characters of this fearful malady, the state of cachexia with straw-coloured complexion, emaciation, and debility, which almost always result from the influence of the disease upon the system, entirely disappeared, and the patient fancied she would be cured; at any rate, the progress of the disease seems to have been arrested under the use of the manganese. It is more than a year since the woman commenced it, and, although she still suffers the usual lancinating pains of cancer, the constitutional symptoms have not re-appeared. For my own part, the remarks of Meckel, Béclard, Lobstein, Hastings, Gruithuisen, and Kaltenbrunner, on the progressive organization of new tissues, induce me to believe, that, although animals can create nothing, yet they can form, out of ultimate elements, certain new compounds endowed with irritability; and that thus cancer is a new secretion, deposited in the form of organizable lymph, containing from the first, within itself, the rudiments of its own future existence; and this, where a cancerous diathesis exists, or, in a constitution in which any inflammation of the several tissues has a tendency to this rather than to any other termination. In Dr. Carswell's excellent paper on the subject, he adduces very strong evidence, that the formation of the carcinomatous substance takes place in the blood; and Dr. Hannon, in the article before us, attributes the melioration of his patient under the use of manganese to the action of this new remedy upon the blood itself. Monsieur Millon lately read a memoir upon human blood, before the Academy of Sciences in Paris, in which he stated, that silica, manganese, lead, and copper, were always to be found united with iron in the blood globules. Dr. Hannon has repeated these experiments; and, although he failed in detecting copper and lead, he always found manganese. It will be interesting, and it may, perhaps, yield to important results—to follow out the views of Dr. Hannon, and to ascertain, by comparative analysis, the existence of manganese in the blood of cancerous and non-cancerous persons. Dr, Hannon also recommends this new remedy in chlorotic cases; and assures us, that, under its use, "in a short time, the patients regain their colour, their lips become red, the conjunctiva loses its pallor, and the bruit du souffle of the heart ceases."

EPIDEMIC IN FLANDERS.

At the meeting of the Belgian Royal Academy of Medicine, on the 30th December, a discussion took place on the epidemic now raging in Flanders. M. Merseman, of Bruges, read a paper, in which he described two varieties: one the typhoid fever, characterised by a hard and strong pulse, delirium, petechiæ, great hypersplenotrophia, tongue red, dry in the centre and moist at its edges. In the treatment of this variety, he always found antiphlogistics to be injurious, while under quinine in large doses the patient recovered. To the second variety he had given the name of "*fièvre de famine.*" the result of bad and scanty food, insufficient clothing, and inappropriate dwellings, and possessing the characters of anæmia, adynamia united with fever. His treatment consisted of an analeptic alimentation, progressively increased.

M. Guislain compared M. Merseman's experiences with his own at Gand, where the disease had not presented the same appearances as at Bruges. This was probably owing to the difference of locality. At Gand, the disease was purely adynamic: stupor, prostration, pulse small and irregular, tongue pale and moist, without symptoms of gastritis or ecchymoses. It could not be there called the result of famine, which was always slow in its progress, chronic, and easily cured by alimentation. The disease, as observed by M. Guislain was evidently a true fever, often carrying off the patient in two or three days. The sulphate of quinine was only useful in the second week, when the patient survived so long. He wished to give it the name of malignant fever, although that term was not acknowledged in the modern schools of physiology. In the many *post mortem* examinations he had made, he had generally discovered nothing but simple congestion of tissues, purely passive and insufficient to account for death; often there were no traces even of inflammation; and, moreover, there were none of those patches and ulcerations which are regarded as the result of typhus fever. The blood exhibited nothing remarkable: diffluence, absence of fibrine, microscopic alterations of the globules were not constant. According to M. Guislain, the cause of death was not to be found in any material lesion; in fact, none existed. It was to be attributed to "*malignity*;" that is to say, to some unknown quality, an *x*, which attacked directly the vital principle, and destroyed it. Unwilling to discuss the doctrine, I leave it, uncommented upon, to the judgment of the reader.

NEW OBSTETRIC INSTRUMENTS.

In the *Medical Times*, of January 13, of the present year, and at page 235, is a report of a meeting of the Edinburgh Obstetrical Society, at which Dr. Simpson had exhibited "a new obstetric instrument, which, when further perfected, he thought might prove useful in many cases where the short forceps were now ordinarily applied;" and the Belgian *Presse Médicale*, for Dec. 31, 1848, contains a lengthened article by M. Thiry on the forceps-saw of Professor Vanhueval, of Brussels. "This beautiful instrument," says the writer, "aided by the *geometric pelvimeter* of the same author, evidences not only a progressive advancement in the obstetric art, and the perfection of obstetrical operations, but establishes a complete revolution—*une veritable revolution*—which entirely overthrows the defective practices which have hitherto been so much praised in midwifery" (*dystochia*).

We are not likely to be accused of any desire to impede, or to sneer at, the progress of medical science; and, on the contrary, we flatter ourselves that the *Medical Times* has not been the least among the publications by which it is brought prominently forward and constantly forced upon the attention of the public. Still, we cannot help feeling the truth of the old adage, that "bad workmen have always bad tools," and asserting, without any disparagement to the learned and celebrated Professors, both of Edinburgh and of Brussels, that men of less pretension—Dr. Thatcher, for instance, of Edinburgh, and Drs. Waller and Rigby, of London—and a host of others, will do more, and that with less fuss and difficulty, with their old-fashioned short forceps, than others with all their new "appliances and means to boot." It is strange how very few instruments, and of what simple construction, are required by those who really know their business; but, unfortunately, the chief aim of the surgical-instrument maker and instrument designer of the present day seems to be, by an ingenious combination of wheels, and springs, and guides, and guards, to enable a bungling practitioner to play at operating with as little loss of life as possible. The safety of a patient should never be committed to the mechanism of an instrument. Of Dr. Simpson's instrument we are merely told, that it is a concave disc, made to adhere to the child's head on the principle of a school-boy's sucker. Professor Vanhueval's instrument is not described; but we gather from M. Thiry's memoir, that it is a contrivance for breaking up the cranium, and reducing the size of the fœtus in a deformed pelvis—no difficult nor dangerous matter, in the hands of a careful practitioner, even with the common instruments generally in use.

[To be continued.]

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

ACADEMY OF SCIENCES.

Meeting of January 8. M. BOUSSINGAULT in the chair.

EFFECTS OF CAUTERIZATION UPON THE INOCULATION OF MORBID POISONS.

M. Parchappe remarked, that in the experiments of M. Renault, cauterization had proved inefficient to prevent absorption, even one hour after inoculation of farcy, and five minutes after the inoculation of the virus of rot. These results appeared to M. Parchappe likely to diminish the confidence of the medical public in the efficacy of cauterization in rabies, and induced him to bring forward some experiments which he had made upon the same subject, and which had led him to consider cauterization in similar cases as even more advantageous than it was generally admitted to be. These experiments showed that the amputation or destruction of any part placed in contact with the extract of nux vomica caused the phenomena of intoxication to cease, although they had acquired a considerable degree of intensity, and after a contact of 17 or 18 minutes. Notwithstanding the differences which must be acknowledged to exist between morbid poisons and toxic agents of another nature, still it was, said M. P., impossible not to recognise a close analogy between these two classes of facts. Considering the long incubation which seemed necessary for the transmission of the virus of rabies to the central organs of innervation, and the analogous nature of the symptoms produced with those occasioned by poisons belonging to the order strychnos, M. P. looked upon the efficiency of cauterization or amputation, in one instance, as calculated to encourage surgeons in the practice of cauterization of suspicious wounds, to prevent the development of rabies from inoculation.

ACADEMY OF MEDICINE.

Meeting of January 9. M. VELPEAU in the chair.

CURE OF WOUNDS INFLICTED BY VENOMOUS SERPENTS.

The Minister of Commerce forwarded to the

Academy several samples of a species of bean, (cédrons,) employed by the inhabitants of Panama against the bites of serpents. MM. Chevalier and Bérard were appointed to report on the subject. M. Duméril offered the Commission some venomous serpents for the purpose of practically elucidating the question. The offer was accepted.

ANIMAL MAGNETISM.

M. Quentin, of Bernay, stated, that he was a mesmerist, and that he worked miracles. He trusted the Academy would kindly afford him the means of continuing to dispense the wonderful advantages of this method to suffering humanity, without being interfered with by a meddling magistrate. The Academy inhumanly rejected the demand.

CHLOROFORM.

M. T. Guérin, in continuation of the observations presented by him at a former meeting, stated his absolute hostility to the doctrines and conclusions of M. Malgaigne's Report. The object of the second part of that document was to establish certain scientific principles, and to deduce from them practical rules: now, the method adopted by the reporter to accomplish this two-fold object, had neither been the empirical method, which founds its deductions merely upon experiment, nor, again, the rational method, which, carefully investigating the causes, and the rules of production of facts, endeavours to harmonize the laws with the principles established; but the systematic method, which, starting from a preconceived theory, misunderstands the true causes, suppresses facts, or violently misinterprets them, and arrives at arbitrary conclusions. The preconceived notion which breathed throughout the Report was, that chloroform could not produce death if, from some accidental cause, asphyxia did not intervene. . . .

With regard to cases of death produced immediately by the inhalation of chloroform, the reporter had set aside those which did not answer his idea of asphyxia, and preserved only those which corresponded with this systematic pre-occupation. The greater number of instances observed, were, however, opposed to this doctrine; and many might have been found even in the hospitals of Paris. Thus, the allegations made before the Academy, that it was only in England that such fatal results had been met with, would have found a peremptory answer. M. Guérin was aware of three recent cases. One had occurred in Lyons, and was published in the *Gazette Médicale;* another, unpublished, had taken place in M. Roux's wards. It was that of a woman who, undergoing amputation of the breast, expired before she was removed from the amphitheatre. A third was observed at Bicêtre in September last, during a disarticulation of the thigh. M. Guérin might add, that very numerous instances of death had been met with,—occurring some time after the operations. These cases had not, from various reasons, been made public; but their existence could not be denied. The secondary accidents caused by chloroform also deserved a place in the report, and they were barely mentioned. . . . . Further, the Commission had not instituted any experiments upon animals for the purpose of elucidating the many important questions which were to be solved, and, when treating of the researches of M. Amussat, Sédillot, and others, had always endeavoured to show that death had been the result of asphyxia and not of chloroform; asphyxia was, therefore, the leading idea of the report, and M. Guérin had studied it with regard to its connexion with the rapidity of death, with regard to the conditions of its production, and finally under the aspect of its mechanism.

In his experiments on animals, M. Guérin observed, that 2 grammes of chloroform, completely inhaled, produced insensibility within seven or eight minutes, the arterial blood remaining unchanged in its colour, and anæsthesia spontaneously disappearing. In a second class of practical researches, the doses of chloroform were gradually increased from 2 to 10 grammes. When 6 or 7 grammes were inhaled, the arterial blood assumed a dark hue, and the subject frequently died in convulsions. Finally, when 10 to 14 grammes of chloroform were employed, death was brought on very rapidly,—in one or two minutes,—the arterial blood preserving its natural colour. Thus, when death was very rapidly produced, no symptoms of asphyxia were noticed: too much or two little chloroform did not occasion asphyxia, although a certain quantity of the agent might produce it. To explain the mechanism of asphyxia in these various sets of experiments, M. Guérin said, that in one series it resulted from insufficiency of air fit for respiration, and in the other from the absorption of a poisonous gas. M. Guérin might conclude, that small doses of chloroform did not alter materially the function of hæmatosis, that larger doses paralysed, to a certain extent, that function, and that exaggerated quantities occasioned a sudden depression of vital power, and an immediate suppression of life. Hence, it would be most desirable that a rigorous method be employed to ascertain accurately the precise amount of chloroform inhaled during operations; the sponge and handkerchief ought to be rejected as dangerous. It should be borne in mind, that 3 or 4 grammes, really inhaled, might occasion death; and the absence of all rule on the subject was much to be deplored. On these all-important points, the report had remained silent.

Secondly, the reporter did not say if any characters existed, indicative of the period when it might be dangerous to continue inhalation,—or rather guarded by the theoretical idea of the innocent nature of the action of chloroform, the report limited its indications to the most vague and consequently the most dangerous allegations..... The reporter seemed to be in ignorance of one of the most singular phenomena of anæsthesia, namely, the persistency of motion and of a certain amount of intelligence, together with complete abolition of sensation. The Boulogne patient, before expiring, pushed away the handkerchief, and said she was suffocating; the reporter concluded that the chloroform had exercised no action upon her; and yet, how many well-known facts might have spared him this error! M. Blandin had mentioned the case of a man who, during an operation, although he felt no pain, still was aware of the various stages of the operative process. This case was not exceptional; many similar ones might be adduced. * * * The abolition of sensation did not, therefore, necessitate complete muscular relaxation or suspension of intelligence; and if it were possible to produce the former without occasioning the two latter, would not the dangers of the method be considerably decreased? Of all this, the report said not a word; hence M. Guérin considered it proper, not to carry inhalation so far as the production of complete somnolency, but to suspend it immediately upon the appearance of insensibility,—a rule which could not well enter the minds of those who did not believe in the dangers of chloroform, but which was, for all others, an indispensable guide in its exhibition.

Thirdly, the very variable action of chloroform and the practical rules to which this diversity of action should lead, constituted a point of some importance, which had been overlooked in the report. Now that diversity of action was demonstrated by the history of the cases, and depended upon the doses, quality of the drug, the instruments used; and, on the other hand, upon the constitutions and idiosyncracy of the patients. These conditions the reporter did not deem it necessary to take into account, but to any but prejudiced minds they must appear of great import. The practical rules which they led to were the following:—The method should be used only with caution, and the peculiar susceptibility of the patient previously tested; the doses should be proportioned to the age, sex, constitution, and temperament; and inhalation should be risked in no instance when the patient had previously suffered from abundant hæmorrhage or considerable pain. * * * Finally, M. Guérin would point out an omission much to be regretted; it was the indication of the measures best calculated to remove the accidents occasioned by chloroform. To the various remedies already recommended in such cases, M. Guérin, from his own experience, would add one more, the efficacy of which he had various opportunities of ascertaining; it was the cauterization of the throat with diluted ammonia. In conclusion, M. Guérin condemned the report for not pointing out the rules which ought to guide the surgeon in the use of chloroform, and because it had, instead of establishing principles and rules founded upon observation and experience, built up a system prejudicial to science and dangerous to humanity.

After some short remarks of Professor Bérard, who agreed with M. Guérin in most respects,

M. Parchappe presented some remarks on the part to be ascribed to asphyxia in the phenomena of anæsthesia. The experiments already made by many physicians on ether and chloroform appeared to him to constitute sufficient data for the solution of the question. Whatever the mode of introduction, these substances produced, in succession, three orders of phenomena:—1. Intoxication and decrease of sensation; 2. Sleep and abolition of sensation; 3. Stupor, asphyxia, and death. Now, the asphyxia of the third period was the result of the mode of exhibition, which interfered with the penetration of air into the pulmonary cells. As to the sudden depression of vital powers producing rapid death, that was a new fact, requiring demonstration.

REAL AND APPARENT DEATH.

The doubts which were entertained, during several days, of the reality of death, in the case of the celebrated Professor Dieffenbach, induced Dr. Van Henger to seek for some positive method of ascertaining the fact, starting from the opinion, that the functions of the brain and of the spinal chord may be momentarily paralysed, whilst those of the ganglionic system persist, Dr. Van Henger concludes, that, although, to all appearance, life may have ceased, still, if death be only apparent, animal heat will continue to be generated in the organs placed more directly under the influence of the ganglionic system. These organs occupying the abdomen,—if it were possible to ascertain the persistency or the abolition of heat within that cavity,—the proof might be obtained of the reality of death or of the fallacy of external appearances. For this object, Dr. Van Henger has invented a sort of thermometer appropriate to such researches. The instrument consists of a caoutchouc tube, 60·75 cents. in length, (about two feet,) closed at one extremity, open at the other; to this extremity, a glass tube, resembling, in shape, a horse-shoe, may be adapted, containing a small quantity of mercury. In order to discover if any heat continues to be developed within the abdomen, the flexible tube should be introduced into the intestines as far as the cœcum, if possible: about six or eight grammes of sulphuric ether (ʒij.) are then poured into the tube to which the glass instrument is adapted. If any heat persist in the intestines, the evaporation of the ether will cause the mercury to rise in the glass;—under contrary circumstances the mercury will remain stationary.

M. Barth, who reported upon this communication to the Medical Society of Emulation,—added, that it was much to be regretted, that this attempt at the solution of an important practical problem remained still theoretical,—the author having made no experiments to test the accuracy of the instrument he proposed.

THE CHOLERA.

The French medical periodicals have been hitherto almost silent on the progress of the epidemic in this country. The motive of their reserve is thus explained by the *Union Médicale:*—"The editors of the Journal were requested,—if not officially,—at least, in a very pressing manner, to use much reserve in the publication of all documents concerning the appearance of cholera in France. The motive was, that French goods would become subject to quarantine, and, perhaps, might be altogether prohibited in many foreign ports, as soon as the news of the existence of the epidemic in France would be scientifically or officially promulgated. Such measures, at all times injurious, might become absolutely fatal under the present unfavourable conditions of foreign trade. The news can now, however, be no longer concealed. The cholera

exists in three departments, viz.:—Nord, Pas de Calais, and Seine Inferieure." In Fécamp, up to the 3rd of January, thirty-four cases had proved fatal. In all places, however, the prodromic appearance of cholerine, easily arrested by proper treatment, is a circumstance of a favourable import.

The New York Packet left Havre for New York on the 9th of November. The crew consisted of 33 men; and the total number of emigrants amounting to 352, of which 331 were steerage passengers. All were in good health, and remained so during the first fortnight. On the sixteenth day a case of cholera appeared, and proved fatal in four days, and six other steerage passengers died between the 25th and 30th of November. Nineteen persons were attacked after landing, and ten died before the 6th of December.

THE COMPLIMENTS OF THE SEASON.

(Union Méd.)

In one of our recent communications we gave a rapid account of the dissensions of the Faculty of Medicine of Paris. On the occasion of the New Year, the Faculty waited upon the Minister of Public Instruction to offer the compliments of the season. The *two* Deans—namely, M. Bouillaud, who had received no notification of his dismissal, and Professor Bérard, the newly appointed Dean,—both appeared as the representatives of the School of Medicine. A debate of a tragi-comical nature might have arisen, had not M. Bouillaud, with much good taste and moderation, withdrawn. At the Ministry of Agriculture and Commerce the scene was reversed. The Committee of Hygiene appeared for the purpose of paying their respects to M. Bixio, and were introduced to another gentleman appointed during the night to the Ministry. The two Ministers were present, and the new official received without a smile the compliments intended for his predecessor.—D. M'Carthy, Physician to the British Embassy.

IRELAND.

(From our Dublin Correspondent.)

SURGICAL SOCIETY OF IRELAND.

Saturday, Jan. 6.

FUNGOID DISEASE OF THE TESTICLE.

BY MR. TUFNELL, F.R.C.S.I., M.R.I.A.

Mr. President,—The case which I purpose bringing before the notice of the Society this evening, is a well-marked instance of fungoid disease of the testicle, occurring in a man 26 years of age, and who, up to the time of the accident which proved the exciting cause of the disease, had enjoyed perfect health.

I am indebted to my friend Dr. Mapleton, Surgeon of the 40th Regiment, for the opportunity of noticing the progress of this case, and of exhibiting the morbid structure to the Society. The patient from whom it was removed is a soldier of that corps, and has served in it for nearly three years, during which time he has never been in hospital. Prior to enlisting in the line, he served for five years in the rural police. He here suffered from a slight attack of typhus fever, and had chancres, followed by suppurating bubo. The sores were healed without mercury, and he had no secondary affection. These are the only diseases for which he has been under medical treatment since his childhood. He is a man of irritable disposition, with dark hair and eyes, but particularly active, having, for some years, been in the habit of running and jumping for wagers.

On the 10th of March, 1848, he was perfectly well. He was backed on that day to jump a high hedge into a wide ditch on the off side. He cleared the hedge, but alighted on the edge of the ditch, and, to prevent himself from falling back into it, used considerable muscular exertion. He immediately felt pain in the right testicle, succeeded by nausea and cold perspiration. He did not actually faint, but was obliged to lie for some time upon the ground. The pain gradually passed away, and he took no further notice of the occurrence. On the 24th of the same month, he was engaged in another match, and, in jumping, again injured the gland. From this date it began to enlarge. It became, he says, very hard, but caused him no great uneasiness, except when on guard, and that he then suffered from lying all night with his trousers on. He continued to do his duty until June, by which time it had acquired the size of a turkey's egg. He had not sought medical advice, and had himself done nothing for it but pour a stream of cold water over the scrotum morning and night.

In the beginning of June, however, the testicle began to be very painful, especially at night, when his rest was completely broken. He applied, therefore, to a practitioner, who was in charge of the detachment, who ordered him three blisters in succession to the scrotum, and some colourless medicine, which I conclude to have been hydriodate of potass. Not being benefitted by this treatment, he was removed to the head quarters of the regiment, and placed at once under mercury, his mouth made sore, and the gums kept gently affected for six weeks. He was confined entirely to bed upon his back, and leeches applied to the testicle every third or fourth day.

No improvement took place. He began to loose flesh rapidly. His countenance was sallow and careworn, indicative of malignant disease; he was constantly complaining of the confinement to bed, and had no rest at night, except from preparations of opium,—the pain, which by day was a dragging uneasiness, being greatly aggravated at night, assuming a lancinating character, shooting from the testis up the right side of the chest to the axilla, and from the anterior superior spine of the ilium, down the inner and fore parts of the thigh, in the direction of the inguino cutaneous and genito-crural nerves.

This state of things continued till the date of removal, Dec. 11, when the testicle presented the following appearance:—It was of an oval shape, measuring 13 inches in its long diameter in circumference, and 10 inches in girth. The surface was smooth, the ruge being obliterated. Its colour was natural, and there were no enlarged veins upon the surface. When handled, it felt obscurely elastic, like an old hydrocele, with very thickened tunics, but denser and more solid. It gave evident symptoms of fluctuation at its most superior and anterior extremity, where a cyst could be plainly felt. The chord was perfectly free.

On removing it, and dividing the tumor, by a longitudinal incision, it was found to consist of a mass of yellowish structure, honey-combed into cavities, containing a brain-like pulp. No trace of the original gland, or its epidydimis could be seen; the fibrous septa of the tunica albuginea were broke up and gone; the tunica vaginalis was exceedingly thickened, and adhered throughout, except at its inferior extremity, where it was circumscribed, forming a cyst, which contained six drachms of clear straw-coloured serum. The tumor had been punctured a few days before, immediately behind this point, with an exploratory trochar, when blood alone exuded through the canula. The puncture in the scrotum readily healed, but the passage of the trochar into the tumor was marked by a dark spot from extravasated blood, giving an appearance as if fungus would here have protruded first. The vessels of the scrotum were numerous, no less than eleven requiring to be tied.

On examining this tumor by the microscope, at a power of 250 degrees, it was found to consist, firstly, of cells, with very dense nuclei, and very refractive of light; the nuclei being rendered more visible by the addition of acetic acid. Secondly, of a granular matter, the result of inflammatory action. Thirdly, of a dense, irregular mass, possibly broken-down cells. And lastly, of oil globules, which exist in very great abundance. No healthy blood globules could be seen.

To the eye the structure of the tumor presents the appearance of genuine cerebriform disease, and such, in fact, it undoubtedly is. The position of this man as a soldier, renders his case valuable, from the certainty of being able to trace his future career, and to note the result of the operation, as well as, in the event of a fatal termination by this or other diseases, the power of obtaining an examination of those parts which in general become secondarily affected.

I mentioned, that at the time of the operation he bore a sallow, care-worn look. I saw this man today, and was much struck by the change in his appearance. He is now florid, and apparently in rude health, is walking about and taking exercise, exhilarated at his recovery and release from bed. The wound in the scrotum is nearly healed.

THE USE OF THE MICROSCOPE IN PATHOLOGICAL INVESTIGATIONS.

At the conclusion of Mr. Tufnell's paper, Mr. Carte said, that he had a few observations to make; but, prior to doing so, he trusted the Society would allow him to refer to some observations which fell from him at the last meeting, (see *Medical Times*, Dec. 30,) in connexion with what he conceived to be a very correct method of making sketches of microscopic objects, and one which, as far as he was aware, was very little followed in this country; and he was certain that the Society would grant him this permission, inasmuch as he was called out of the room on that occasion, and was absent from the subsequent debate. Since then, he had reason to apprehend that an incorrect impression had been made by his remarks, so that he had not been correctly understood. It was never his intention to decry the use of the microscope in pathological investigations; far otherwise; he trusted that he knew the value of the instrument too well; but he wished to put gentlemen on their guard who might be about to commence its study, and to prevent their falling into those errors so common to noviciates in the use of this delicate instrument. He feared that a prevailing opinion was, that all a microscopist had to do, was to take a slice of whatever substance was to be examined, and place it in the field of the microscope, and directly its nature would be ascertained. He wished to disabuse his junior hearers on this head. The practised microscopist is obliged to have recourse to re-agents, like the chemist, and in this way he can separate and ascertain the nature of morbid products. His hearers would find, upon consulting the best and latest authorities upon this subject, such as Dr. Hughes Bennett, Sibert, and others, that they insist upon the necessity of a thorough acquaintance with the microscopic appearance of the various healthy products, and the effect of appropriate re-agents on them, prior to undertaking to attempt the investigation of morbid structures, and the necessity of this is too obvious to need comment. Another source of error has arisen by not knowing the different forms the *fibro-plastic* cells of Sibert assume, and they have frequently been mistaken for cancer-cells, their form being sometimes caudate, at others fusiform, and again fibrous; but we now know that they are common to all healthy structures, although so eminent a pathologist as Müller has, according to Dr. Hughes Bennet, fallen into the mistake of considering them to be cancerous. If, then, so acute an observer could err, how necessary is it for others to be on their guard. On perusing the works of those engaged in microscopic investigations, it will be perceived that they invariably give the measurements of the different particles so examined; from which it may be fairly inferred, that their sketches were made by the aid of the micrometic scale. Dr. Carte here explained the nature of this delicate instrument and its use, and then went on to say, that it is a very essential help to enable the microscopist to determine certain elementary products by their relative size and shape, and without the aid of which, except to an experienced eye, and to which the hand of a good draughtsman is added, it would be difficult to give an exact representation of the heterogeneous molecules and granules often seen in morbid growths. But he hoped that the camera lucida would prove a valuable addition to this instrument, (and in introducing it to their notice he was quite aware there was novelty in it, but he believed its use in this country was not general,) inasmuch as by means of

it a *fac-simile* representation of the object under examination can be thrown on a sheet of paper, so adjusted as to enable the operator to trace, with the greatest accuracy, not merely with regard to outline, but likewise in their most minute details; and also, what is still more essential, their relative sizes. So high an opinion do microscopists on the Continent entertain of this simple instrument, that they have sought to combine it with the advantages presented by photography. Mr. Carte then referred to a drawing of the microscopic appearances presented by the tumor, which had been exhibited by Mr. Tufnell. It consisted of cells, with dense nuclei, becoming more apparent on the addition of acetic acid; 2ndly, of compound granular cells, so frequently found in the exudative softening of parenchymatose organs, as first described by Gluge, who designates them "inflammation globules," and Vogel, "granular cells;" 3rdly, amorphous molecular particles; 4thly, oil globules, particularly abundant in this specimen.

SCOTLAND.

TRANSACTIONS OF THE EDINBURGH OBSTETRICAL SOCIETY.

[Continued from last notice.]

TRANSFUSION IN HÆMORRHAGE.

Dr. Weir showed a new instrument for transfusing blood in cases of excessive hæmorrhage. The instrument had a very large cylinder, so as to contain at once the quantity to be injected.

Dr. Simpson stated, that he had seen transfusion tried in three cases of uterine hæmorrhage; but in none with success. In the first, the surgeon could not find a proper vessel into which to introduce the pipe. In the second, the injection produced no good result. In the third, which had occurred in the practice of Dr. Purdie last week, the injection roused the patient for a time, but collapse soon again occurred. In all these cases, the patients had been left in a collapsed, pulseless state, after sudden excess of hæmorrhage, and had survived for some hours after the bleeding, but never rallied. Such cases seem alone fitted for injection, but the results were not encouraging.

THREE EARLY CORPORA LUTEA.

Dr. Simpson showed three early corpora lutea from subjects who had died of cholera. In the three women the uterine decidua was beautifully formed, and one or two lines thick. It was, Dr. Simpson thought, evidently merely the thickened normal lining membrane of the uterus, and not a new membrane. The corpora lutea were large, plicated, and of a reddish yellow tint. Dr. Simpson showed other uteri and ovaries from cholera subjects dying during menstruation. He pointed out the series of changes occurring in one of the Graafian vesicles in connexion with menstruation, and showed the differences between these changes and true corpora lutea. The Graafian vesicle affected in menstruation becomes at first injected in its coats and lining membrane; the lining membrane becomes more and more injected; at last blood is effused into the cavity from these injected vessels, and this blood forms an unorganised clot, quite different in character, form, and seat, from the organized structure of a corpus luteum.

ULCERATION OF CERVIX UTERI.

Some uteri from cholera patients, with existing ulceration of the cervix uteri, were exhibited by Dr. Simpson,—the patients having suffered during life under leucorrhœa. Dr. Simpson particularly pointed out that the ulcerated state of the mucous membrane of the cervix did *not* extend upwards into the cavity of the neck or body of the uterus.

TRANSVERSE RUPTURE, AND PROLAPSUS OF THE MEMBRANES.

Dr. M'Cowan showed a portion of membranes, consisting of the whole of the lower half or segment of the fœtal membranes (chorion and amnion) which had been torn, and thrown off some hours before delivery. Something like a foreign body was felt at the os uteri, and on touching it the portion of membranes in question came off. The labour, in other respects, proceeded quite naturally.

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THE MEDICAL TIMES.

SATURDAY, JANUARY 20, 1849.

TREATMENT OF NAVAL SURGEONS.

"PALMAM qui meruit ferat," was the motto of England's greatest naval hero and commander; but the reverse appears to be the principle governing the conduct of those who have the administration of the affairs of our glorious Navy, at least in that department which, more than any other, is instrumental in maintaining the efficiency of the service on foreign stations and in time of war. As an instance of this, we direct attention to a paragraph in our last Number, on the illiberal treatment of a naval surgeon. It exhibits a case of most gross mismanagement, and of aggravated injustice; one which demands from us more extended remarks than we usually feel ourselves called on to make in cases of individual wrong, and this partly from the circumstances of the case itself, and partly from its being typical of a system which has been allowed to run riot for many years, and will, if not arrested in good time, eventually prevent the entrance of gentlemen into a service without which England would never have attained its present pre-eminence.

It would appear, that the Board of Admiralty prides itself on its numerous acts of injustice; that it is deal to claims arising from length of service and peculiar duties, voluntarily performed and reflecting credit, not only on the gentlemen who have performed them, but on the service also, for they have often given a completeness to expeditions, without which their value to science would have been greatly diminished. There is a remarkable obtuseness of perception with respect to rights, and a most marvellous facility of forgetfulness of claims at the Board of Admiralty; otherwise there would be no necessity for the exercise of our unfettered and willing pen in behalf of medical men who have done immense service to the State and to science, nor should we be called on, in discharge of an imperative duty, to demand a reformation of the medical department of the Navy.

In the case now before us, we find a gentleman, who has been twenty-one years in the Navy as assistant-surgeon and surgeon, fifteen of those years having been spent in active and arduous service, treated with the greatest contumely and injustice. The Profession knows, and the Board of Admiralty knows well also, that this gentleman accompanied Ross and Parry in their far-famed expeditions to the Arctic and Antarctic regions; that he performed the duties of naturalist in addition to that of surgeon; that he has increased our knowledge of the *fauna* of those interesting regions to an extent which has earned for him an European reputation, as a glance at Ross's narrative will show; and, moreover, was the discoverer of the coal measures in Kerquelen's Island, a discovery which may be of great advantage hereafter to the nation, and is deservedly held as a most important contribution to geology. On the return of the last expedition, the exertions of all the officers in the ships were rewarded by promotion, with the exception of the medical men. Certainly, if it was considered necessary to reward the Executive, and no one will say that they did not richly deserve that reward, it was also incumbent on the Board of Admiralty to have rewarded the medical officers, whose exertions had not only been instrumental to the success of the expedition, but, by their contributions to zoology, and by their investigations into the natural features of the islands and main land which were then discovered, also earned for it a great part of its laurels. No; instead of being rewarded they are treated with injustice, have their rights and claims set aside, are deprived of the chance of promotion to which they are entitled, and, to fill up the cup of bitterness, have younger men promoted over them. In the case referred to, no less than four juniors have been advanced a step over the head of him who had the highest claims for promotion; and one of those juniors we know to have seen ten years' less service than the gentleman who has been so grossly maltreated by the Admiralty.

We have said, that this case is typical of a system at present in active force. That system has been, and, perhaps, still is carried out in the Medical Department of the Army; but, for the credit of those who have the administration of the affairs of this branch of the public service, it must be said to be more free from abuse than that of the Navy. We happen still to have in vivid recollection, the shabby treatment of Mr. Marshall and Dr. Balfour by the Board at the Horse Guards, when those laborious and valuable Reports of the Army medical men were brought out through their exertions. We remember, that the one was promoted a step, and received an additional 5s. per diem to his half-pay; but the other, after fagging some ten or dozen years as a clerk, was placed in the First Foot Guards in his old rank of assistant-surgeon, while his fellow clerk, Lieutenant Tullock, soon after gained his Colonelcy.

We could give numerous instances of this system of injustice and gross maltreatment, both in the Army and Navy; but we prefer pointing out the necessity of thorough reform in the medical departments of the public service, from those cases which come more immediately under our notice, and which we feel ourselves imperatively called on to place in a prominent position. The Medical Profession can

expect no other than shabby treatment from the various public departments of the State, unless abuses are pointed out, and a firm stand and a reiterated protest made against them. There is one way, however, by which the profession can make the Executive feel that they must reform the services, and that is, by not entering either the Army or Navy until existing abuses have been redressed. Only very lately, Sir William Burnett, the Director-General of the Medical Department of the Navy, had not a single candidate on his list.

THE INEFFICIENT NON-MEDICAL BOARD OF HEALTH AND THE TOOTING CATASTROPHE.

In our last number we made reference to the amount of good that was likely to emanate from the present Board of Health; we also drew certain inferences from the limited evidence that had then been taken, as to the cause of the melancholy outbreak of disease at Tooting. Mr. Inspector Grainger's very lucid and able Report, subsequently made public, confirms our views, not only as regards the efficiency of the Board of Health, but also as to the cause of the Tooting catastrophe; while, at the same time, such Report reveals heart-rending truths disgraceful to a civilized community—horrible truths, sufficient to curdle the blood in our veins, showing the disgusting and highly culpable (to put the most charitable construction thereon) apathy displayed by all in authority previously to the outbreak.

With reference to the efficiency of the Board of Health, it would appear that it derives its authority from two Acts of Parliament—one, the "Public Health Act;" the other, the "Nuisance Prevention Act." The former gives considerable power to the Board, the latter very limited authority. The Bill delegating considerable power is found to be inapplicable to the Tooting case, inasmuch as the establishment does not come within its jurisdiction; the Bill of limited power is found to be equally inutile, as far as the actual remedying of evils,—the interference of the Board of Heath, by such Bill, being limited to recommendations and the institution of inquiries, *after* murderous acts have been committed. The Board of Health, therefore, as regards Tooting especially, is a nullity. But that which greatly aggravates and makes the occurrence at Tooting more outrageous, is, that significant warning (Mr. Grainger's own words) of the approaching outbreak was given fourteen days before a single case of disease occurred—*fourteen days!*—and then, had due and proper measures been taken, a large part of the evil which subsequently befel the unfortunate victims would have been averted. So much for the Board of Health. And now to the question which was mooted at the Inquest, as to the power of the Poor-law Commissioners. They evidently had sanctioned the congregating together such a large number of children; but, query—Should not common humanity, common decency have dictated to the Guardians of the poor, when farming out the children, to have ascertained the amount of accommodation, general treatment as to food, raiment, &c. &c.? But no—not one reasonable precaution appears to have been taken to insure these 1,500 unhappy children the common protection of cattle, much less human beings; for Mr. Grainger, in his excellent Report, thus speaks:—"As a medical man, it is my duty to state, that it is *impossible to conceive* a state of things more entirely unsuited, as the construction of the buildings and over-crowding of the inmates, the absence of all efficient nursing, and the want of the recognized means of medical and other treatment, than was presented in this establishment. The ventilation is most defective, and entirely incompatible with the maintenance of health, *even in the case* of a much smaller number of children than the above specified. Mr. Lovick, another functionary, informs us, that "no locality more unfit for the lodgment of a large number of children could possibly have been selected;" further, we find Mr. Popham, one of the gentlemen employed to assist in the treatment of the cases, "taking leave to observe," to the Coroner at the inquest, that "he was desirous of explaining one circumstance which was rather important, which was, that he had misled Mr. Grainger, by stating to him that he had seen four or five children in a bed, but that he afterwards *discovered* that a *board* had been placed between two beds, so as to make additional *room* for one patient." The import of this correction we cannot divine; certainly not to show that the children were less crowded, but the reverse,—confirming our assertion, that these wretched beings had been mercilessly crammed together.

Fancy five human beings, two in a bed, and one on a board between such beds, for accommodation! We say, fancy five mortals vomiting and turning about in agony, *in periculo mortis*, on two beds and a board! Can any scene more harrowing be imagined, and in a public establishment, too, where one would expect to find some security against such hard-hearted cruelty.

With whatever warmth we may be charged in giving vent to our feelings of indignation and disgust at the Tooting catastrophe, we feel ourselves justified, when recurring to such passages as the following in Mr. Grainger's Report:—"What but the most evil results could be anticipated by the collection of nearly 1,400 children in an establishment formed upon *no plan*, expanded hastily to receive the repeated influx pouring in from so many parishes, *supervised by no competent authorities*, and freed from the wholesome control deemed essential to the well-being of every parochial establishment in the kingdom."

THE MANIFESTO OF THE DUBLIN COLLEGE OF SURGEONS AGAINST THE QUEEN'S COLLEGES IN IRELAND—A CAUTION TO TRINITY COLLEGE AND THE SCOTCH UNIVERSITIES.

As we intimated to our readers, in the *Medical Times* of the 6th instant, the Irish College of Surgeons has taken the initiative in the campaign against the Medical Faculty of the Queen's University. It has forwarded a memorial to the Lord-Lieutenant, setting forth, that the Medical Profession has been taken by surprise, in this establishment of a nineteenth medical faculty in Great Britain; that it was never contemplated, by the originators of Colleges in Ireland for united education, to raise up a rival licensing body to enter into a bad competition with the medical corporations, (already too numerous,) at present existing. It alleges it to be a monstrous proceeding, that certain clergymen and other non-medical gentlemen should arrogate to themselves the right of prescribing, even with the assistance of a Secretary of State, a curriculum for the education of medical practitioners. It asserts, that the effect of establishing three new provincial Medical Schools in Ireland, in which the charges shall be less, and the patronage greater, will have the effect of destroying the Metropolitan School of Medicine,—a school which has been long distinguished for the educational excellence of its *elèves* and the scientific eminence of its professors; and it states, that the new Schools sought to be elevated on the ruins of the Metropolitan School can never be expected to produce medical practitioners equally useful to the public as those hitherto educated in Dublin, inasmuch as the opportunities for hospital practice and for dissection must be, comparatively, very trifling in provincial towns. Such are the principal arguments brought forward in the memorial, which has for its prayer, that no new medical faculty shall be instituted in connexion with the Queen's University.

The President of the College of Surgeons, who is also Professor of Anatomy to Trinity College, and, it is whispered, is likely to be an Examiner in the proposed Queen's University, and has, it is probable, in connexion with the latter expectation, a clearer vision than falls to the lot of ordinary mortals,—sees every possible kind of advantage to the School of Dublin in the establishment of the Provincial Colleges. By a curious train of reasoning he has been led to the conclusion, that twelve courses of lectures are a greater number than fifteen; that two years of hospital attendance is a longer period than three years; and that three pounds sterling, for a perpetual ticket, is a larger fee than six guineas for three sessions. It must be acknowledged, however, that some of the worthy President's objections are of a nature that even common understandings can reach. He says that, inasmuch as it is medical degrees that the Colleges propose to grant, he cannot comprehend how the College of Surgeons is interfered with; neither can we. He says, that the bodies, whose funds will be principally affected by the rivalry of the Queen's University, are the Scotch Colleges, especially those of Glasgow, Aberdeen, and St. Andrew's; those that are willing to receive extra-academical certificates. If this be so, let Trinity College learn a lesson from the example. Let her receive extra-academical certificates; let her lower her fees to the level of the other schools in Dublin; and let her join with the other bodies in that city to aid in providing a properly-educated class of general practitioners for the service of the Irish public. If these things be done quickly, Trinity College may be enabled to withstand the heavy blow and sore discouragement at present aimed at her.

THE COMING SESSION.

In less than three weeks the Members will be re-assembled within the walls of Parliament,

and we presume that, in the course of the Session, their reluctant attention will be called once more to the subject of medical legislation. The Government, Members of Parliament, and the Profession, will be equally glad to see the settlement of this perplexing question; and thereon we found a strong hope. The arrangement of the conflicting claims must not be longer delayed, for the present distracted state of the profession is ruinous to its true interests. Students hesitate about their *curriculum*, and are doubtful which qualification to obtain; the hard-working practitioner is elbowed aside by some impudent pretender, and the Great Unlicensed Vendors of Quackery, appropriate all the unattached patients by which the enterprising young practitioner may reasonably expect to establish himself in business.

Druggists' practice is another enormous evil, which must be checked in some way or other; for in many low and mixed neighbourhoods this class crowd the land like locusts, and make it a mere desert to the regular practitioner. The surgeon, perhaps, holding fast by the dignity of his class, for a year or two maintains a show of independence; but he must live, and he finds to his sorrow that dignity is a poor paymaster, and will not feed his lambs. He soon drops quietly to the level of his competitor,—detesting his style, but coveting its profit. What can he do? He is more sinned against than sinning. If he owe a duty to his profession, he owes a higher duty to his family. Though his more fortunate neighbour may reproach his fall, yet perhaps himself was not so strongly tempted. Every man would be "respectable" and drive his gig if he could. If there be any who can drive a gig and will not be respectable, we hand them over to the condign punishment which their neighbours may be disposed to inflict. The language of the foregoing remarks may be thought too plain; but, when every-day interests are concerned, it is necessary to speak home-truths.

We believe that the ensuing session of Parliament is more full of promise to the profession than any of its predecessors. There is every prospect that a Bill, founded on the evidence taken before the Special Committee of the House of Commons, will be presented to Parliament, and, in all probability, pass into a law. We shall take care to inform the profession of every step that is taken, and give them timely notice upon all subjects that may have any bearing upon their interests. Our past conduct constitutes, however, our best pledge.

It may be worth while here to advert to a notion that has been talked of, relative to giving the London University power to license practitioners in medicine for this country. Such a notion is simply absurd, because its realization is impossible. The general practitioners want a College for themselves, and to be enrolled in it as a distinct scientific body, with the exercise of the representative principle. To imagine the possession of this position and these rights in connexion with the London University, is folly, for, in order to convert the London University into a College of Medicine, the intention, scope, and objects contemplated at the establishment of that Institution would be wholly annulled,—a result to which neither the Government nor the Council of the University would consent. Then, too, can we account as nothing, the opposition of the old Universities and the existing Colleges? The scheme is so transparent, that, perhaps, our notice of it is needless; but our remarks may show that we attentively regard all shades of opinion.

MEMORIAL TO THE LATE DR. RENNIE. The College of Surgeons, Ireland, have resolved to erect a monument to the late Dr. Rennie, for many years chief of the medical department of the army in Ireland. A protest against this application of the College funds has been recorded by a certain Fellow whose talk is of bonds and securities; but, although no doubt the College has squandered much money on foolish speculations, — such as bolstering up a school which might very well be self-supporting, and endeavouring to obtain a monopoly of medical charities,—still it cannot be denied that the present vote was made in a grateful and generous spirit.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—Jan. 9, 1849.

J. M. Arnott, Esq., F.R.S., President.

The following papers were read:—

Observations on the Disease of the Skin termed Keloides with Illustrative Cases. By Erasmus Wilson, F.R.S.

In this paper, the Author, after considering the etymology of the word "keloide," and the manner of its employment by Alibert, the relation of the disease to cancer, and the opinions of writers upon this question, the rarity of the affection, its etiology, and the more remarkable characteristics of the morbid growth, proceeds to point out the distressing symptoms by which it is often accompanied, with the view of determining how far an operation for its removal might be considered desirable. In those instances in which operative procedure had been adopted, the disease had returned in the cicatrix, and in one case, also, in the smaller cicatrices left by the sutures used in the operation. The conclusion to which the author arrives is unfavourable to operative procedure; and, he observes, that in no case "is an operation warrantable until every chance of relief by other means has failed." The author then passes in review the treatment recommended by those authorities who had written on the subject, and concludes with the detail of three cases of the disease.

All the cases occurred in healthy looking men; in the first, the disease was developed on the presternal region, and also on the leg; in the second, on the shoulder and gluteal region; in the third, as in the first, on the sternum. It presented itself in the two forms designated by Alibert, *keloide radiciforme*, and *keloide cylindracée*; in the first and second cases it gave rise to extreme inconvenience and to much of the peculiar burning, stinging, and smarting pain, which is characteristic of the disease; but in the third, it was extremely reduced in size, having undergone a spontaneous cure.

On a Case of Keloidea, complicated with a large Tumor in the Occipital Region. Illustrated with Casts and Drawings. By Wm. Oliver Chalk.

The subject of these local affections was George Goodman, aged twenty-one, a native of Oxford, admitted into the Royal Sea Bathing Infirmary, August 9, 1846. The keloide disease was described as being of unusual interest, of rare occurrence, and as having escaped the observation of dermatologists in this country. After a description of the tumor, and a minute account of the number, form, situation, and appearance of the keloide formations, the Author observed that cheloidea was the name given to the disorder by M. Alibert, in his "Monographie des Dermatoses,"(a) and was first recognised by this Writer as being "*sui generis*," and classed by him under two heads, "*Kelis Genuina*," "*Kelis Spuria*;" the former, "a cancerous affection characterised by a single excrescence, rarely by more,—more or less hard when compressed by the finger; round or square; flattened in the centre, raised at the edges like a circular cushion, (*en manière de bourrelet*;) the latter, "the result of the inflammation of cicatrization after a burn or ulceration; for example, scrofula or syphilis." The chief interest in Goodman's case was derived from the number and variety of form of the keloide excrescences (which were singularly illustrative of Alibert's description of the malady), and the rapidity with which most of them disappeared, under the general treatment, directed to the restoration of the hepatic functions especially, by means of leeches, mercurial alteratives, tonics, &c., persevered in from Sept. 2 until Oct. 26. The author had no opportunity of seeing him after that period, but learned subsequently that he returned to the Royal Sea Bathing Infirmary in the spring of 1846, and was then suffering from jaundice and great disturbance of the sensorial functions, together with ulceration and hæmorrhagic tendency of the tumor, which had assumed a malignant character, and that he died in the October following, in London, on his way home to Oxford.

The discussion which followed was opened by Mr. Macilwain, who said, in the first paper there appeared to him to be a statement which had often been the source of great annoyance to himself, and he thought it right to make the remark, as it was very contrary to his own experience—so much so that he was much disposed to think that, in the present state of medical science, it ought not to be made unless the facts upon which it was grounded were also set forth. That statement was, that the patient was in good health. It was at variance with his experience of that class of disease, and he could not help thinking that it in general expressed a foregone conclusion, which was productive of much practical mischief. If a gentleman made up his mind that his patient was really in good health, where any kind of newly-formed deposit existed, he conceived it very likely indeed to give a very improper direction to his treatment of the case, or induce him to give up the task altogether. He thought it would very probably operate to produce despair. He was aware, that there was some objection to a general statement of this kind, and he would, therefore, observe more particularly the facts upon which it was founded. He would mention one of many instances which had come under his notice. A gentleman of fortune, about two years ago, was brought up from the country by his surgeon, and he might say that he was a very eminent man in his neighbourhood; and this gentleman laboured under new growths, which did not present themselves exactly in the form of tumors, but which, perhaps, might shortly be expressed by that name. He stated to him how long they had been in forming, and the means which had been taken, and so on, and then remarked, that it was a very extraordinary thing that the patient was in a good state of health, so that it was really a difficulty to know to what cause to ascribe these growths. That gentleman walked into his room: he was a man apparently in health, neither too fat nor too lean, and he had a good colour in his face, and he said himself that he was well. Of course, his (Mr. Macilwain's) business was to examine him; and when he had done so, he called the surgeon into the other room, and said to him, "I do not profess to do anything with these tumors, unless I have the evidence in favour of the organs being sound. You state your patient to be in good health, yet, if you were to put the question to me with regard to any one organ in the body, the evidence is against its being sound; and as to prescribing for him, it's a mere farce." That was literally a fact. He he had good reason to know, from his own experience, that the conclusion that the health was good, in these cases, was very often arrived at from very insufficient premises indeed. Of course, he was not for a moment presuming that the author of the paper which had been read had done so; but the case assumed so serious an aspect, that he thought it would be very de-

(a) P. 195. Second Edition.

sirable, in the present state of science, and not an unreasonable request, that a patient should not be stated to be in good health, unless the premises upon which it was assumed were stated also.

Mr. PARTRIDGE said, that he saw the patient referred to in Mr. Chalk's paper, and could bear testimony to the appearance which the different tumors presented. He saw the patient at two different periods—once at Oxford, and once at the Royal Sea Bathing Infirmary.

Mr. CHARLES HAWKINS said, a remark in Mr. Wilson's paper struck him as rather strange; viz., that cases of this kind were a very great rarity. Mr. Wilson stated, that he had only seen three such cases. From the great opportunities which he (Mr. Wilson) had, he was much surprised at this. Nobody had described this disease. He (Mr. Charles Hawkins) thought, that Mr. Cæsar Hawkins, in his published work upon tumors, had done so, and that there was also a paper on the subject in their Transactions.

The PRESIDENT said, no such paper was on their Transactions, it occurring in Mr. Cæsar Hawkins's published lectures.

Mr. CHARLES HAWKINS continued: He had seen several such cases, but could not recollect exactly how many; but certainly more than three. The latest was that of a young woman sent to him by her physician; and, as far as he was able to judge, in very good health. She was as handsome a person as he ever saw. She ate well, drank well, and slept well. She had had some disease of the chest, to which tartar-emetic ointment had been applied, and by which the skin had been removed; and in every part where it had acted these tumors appeared. He supposed there were some five or six all over her chest, varying in size from half-a-crown to a fourpenny piece. They had been healed up several times. One surgeon applied some caustic application—lotions, too, had been used,—and the only inconvenience which she suffered was that, whenever she approached the fire (she was a cook) they were troublesome. What distressed her most was, lest they should become larger and more painful. Never having seen any attempts at excision, he recommended her to leave them alone, and as Mr. Hawkins had done, advised some slight application of plaister. He remembered also the case of a man in which the tumors appeared upon the sternum, which were removed with the knife; returned, and were removed again; and, at the last operation, it required three sutures to bring the wound together. These were the only cases which he could remember, but he certainly thought that he had seen two more, and was, therefore, much surprised to hear of its rarity.

Mr. B. PHILLIPS did not rise because he thought that he could throw any light upon the subject, but simply to relate two cases, in his own experience, at the Westminster Hospital; one of which was singularly like the one described by Mr. C. Hawkins. It was the case of a young woman about sixteen or seventeen, and, he believed, in very good health. She had had tartar-emetic ointment used upon her chest; the skin was irritated, and, as a consequence, some of these growths were formed. He believed that he was the first who was consulted, for it was very soon after she came out of the physician's hands. She was a pretty looking person, and he believed that, though she complained of pain, she was much more sensible of the deformity than that. She pressed him much, and he applied some strong acetic acid. This produced an effect in removing some portion of the tumor, but was not sufficiently beneficial to warrant the continuance of its use. Somebody told her it might be removed, and she again pressed him to do something for it. He had at the time no experience, and he thought that it could very easily be removed by an operation. The whole tumor was removed. The wound did not heal by the first intention, but granulated in due course, and she was discharged as cured. Months passed, and she came back with similar growths, very much like the cicatrix of a burn, and of a cylindrical form. She was very pressing to have them removed, and ultimately he gave way, thinking that, perhaps, in the former case he had not left margin enough. The operation was performed, and a much larger margin left, and no attempt was made to bring the parts together. During the whole of this time, the young woman was in very good health. The result of the last operation was, that the wound was a considerable time in healing, and left a very small tumor, not more than a fourth or fifth of the size of those when the operation was performed. She still said there was pain, but he had not courage to go on, and she had it still. The other case came into his hands in the summer of last year. The patient was a young woman of twenty-five or twenty-six, and he believed that she was in good health. She had not only one tumor upon the sternum, but twelve,—seven on one mamma and five on the other. Some of these were as large as cherries, some smaller; there were different shapes and sizes. He tried upon one of these tumors chloride of zinc, and that destroyed it completely. He had one laid open by incision, and the inside rubbed with it. A third he treated with lunar caustic, in the same way, which resulted in complete destruction, and no pain. As soon as the surfaces healed, they exhibited signs of growing again. When he saw her last the points very much resembled fresh tumors, and he had little doubt that the operations would have no effect, as far as eventually removing the tumors was concerned. In each of these cases he had tried that remedy which Mr. Wilson had used (Donovan's solution) without effect. He had no doubt that the first case he saw was the one which Mr. Phillips operated upon.

Mr. LLOYD said: This disease does not appear to be so extremely rare as mentioned by Mr. Wilson, though it is by no means a common one. He could recollect many similar cases—one which occurred in a cook to a relative of his. The tumor was in the leg; and the pain which she suffered was so great, that she found herself incapable of attending to her employment. Various kinds of treatment were adopted without success, and Mr. Lawrence at length removed it, and years after there had been no recurrence of it. Another case, in which the growths were upon the sternum. Tartar emetic ointment had been used, and cheloid tumors formed. It was proposed that they should be removed, either by caustic or some incision; but the patient would not submit to any operation. He (Mr. Lloyd) was consulted, and recommended the patient not to undergo an operation. These tumors were very painful at different times; but, by simply applying a soothing application continually, in the course of a few years, the tumors almost entirely disappeared, and occasioned little comparative inconvenience. Another case he mentioned, in which they occurred upon the head; and in that case, it was impossible to say what was the origin of them. The man would not submit to an operation; and, as it did not appear to him (Mr. Lloyd) that they were of a malignant form, he did not recommend it. This went on for years; they did not appear to increase, and at last disappeared altogether, or, at most, seemed only like a dark skin, where before they had been hard tumors. He had seen similar cases of the kind in connexion with malignant disease of other parts of the body; and he believed that, in that case, it would go on from bad to worse, and would terminate fatally. But we have no right to class this disease exclusively with malignant ones, as it often appears without any malignant symptoms. He believed, that there was generally something wrong in the health of the patient, and that, in all such cases, it was a most important thing to attend to the health; he always had been particular to recommend attention to regimen and the state of the bowels. Looking at the means of cure in the vegetable world, we may well suppose, that attention to the dietary, &c., of the patient would have a great effect. When they saw fungi growing on trees, they took them up and gave them a new situation; under that new influence, the fungi disappeared, and they had healthy trees again. The analogy was complete, and it was, therefore, highly important, in this disease, to attend to the state of general health and the condition of the bowels.

Mr. MACILWAIN would make one observation in explanation. The high authority behind him, who had given two interesting cases in favour of the statements that one of these patients was in health, said, (he thought,) that he received her from a physician. He (Mr. Macilwain) rose to ask Mr. Phillips for what complaint she had been under the physician's care; and also to make this further remark, that his experience justified him in saying, that, if he wanted, in that room, to make a public demonstration of the difference which existed between the foregone conclusion, which he had before mentioned, and those conditions of the system which were called good health, he would choose the two individuals mentioned, the dressmaker and the cook.

Mr. LLOYD would just mention, that, in one case, pressure upon the tumor had been tried without effect; but, on making pressure all round it, it had entirely disappeared.

Mr. ERASMUS WILSON felt that the object which he had had in view in addressing his paper to the Society had been fully attained by the discussion which it had brought on. He regretted that his carelessness in writing had been corrected for "apparently" in good health; and, with regard to what had been said by Mr. C. Hawkins, he was sorry that he had not referred to Mr. Cæsar Hawkins's book. The man to whom he referred was now apparently in good health; goes about his daily occupation as usual; his appetite is good, &c.; but the growth which he has upon his chest is the source of perpetual uneasiness to him, gives him much pain at times, and he desires to have it removed with the knife. Mr. Major, of Canterbury, wrote to him with the patient to that effect; but, after examining him, he found that a large portion of skin would have to be removed, which it would not be easy to replace; and, as they had heard that evening, the disease is apt to return after excision in all the cicatrices. He was extremely gratified to meet with an instance of cure spontaneously, and he trusted, therefore, that if the case were left to itself, and only treated with some slight soothing remedies, in the course of time, when the man got into a better state of health, probably these growths would be removed. As far as that case was concerned, all the opinions harmonised, and all tended to the conclusion which, to his mind, was most satisfactory. That poor man was looking forward to the opinions of that meeting for his chance of getting rid of the tumors. They could form an idea of his uncomfortable condition when he mentioned, that he could not lie except upon his back, pressure upon the tumor, when lying on his side, giving him considerable uneasiness. Whenever he becomes heated in summer he suffers intense pain, as if the skin were pierced with a multitude of red hot needles. He (Mr. Wilson) thought that the discussion had proved another point, viz., that it is a rare disease. Of course, there were degrees of comparison with regard to it. He had said, that the French authors had given accounts of but twenty-four cases; and if the cases brought forward that evening were added, it would still appear that the disease was rare. He felt particularly satisfied with the observations which had fallen on the propriety of the course he had adopted.

Mr. O. CHALK could not but coincide in the opinion, that the disease must still be considered as rare, though rare in a degree. With respect to the general health of patients, he could not help also coinciding in the remark, that there is much derangement of the system connected with these disorders, though patients will frequently state that they are well. It was the case with Goodman, (the case referred to in his paper,) who said, at first, that his health was good. After the 21st of September, when he (Mr. Chalk) applied leeches to the epigastrium, and administered alterative medicines, Goodman said to him, that he had at first suffered a good deal of pain, but thought it of no consequence. Up to this period he had no alleviation; but his health then improved, and none of the kaloides were left on the face except one.

The PRESIDENT asked, if Mr. Chalk had a coloured drawing of his case.

Mr. CHALK regretted that he had not; but the

appearance was very similar to that which illustrated the other case. With regard to this, however, there were eight growths, whereas in general there were only a few.

The sitting was then adjourned.

REVIEWS.

The Animal Kingdom, arranged after its Organization; forming a Natural History of Animals, and an Introduction to Comparative Anatomy. By the late Baron Georges Cuvier, Councillor of France, and Minister of Public Instruction. Translated and adapted to the present state of Science. The Mammalia, Birds, and Reptiles by Edward Blyth. The Fishes and Radiata by Robert Mudie. The Molluscous Animals by George Johnston, M.D. The Articulated Animals by J. O. Westwood, F.L.S. A New Edition, with Additions, by W. B. Carpenter, M.D., F.R.S., and J. O. Westwood, F.L.S. Illustrated by three hundred Engravings on Wood, and thirty-four on Steel. London: W. S. Orr and Co., Amen-corner, Paternoster-row. Large 8vo. 1849.

The naturalist only, who by constant reference to the great text-book bequeathed to him by his illustrious master has become familiar with every page of that Work, will be able fully to appreciate the value of the important addition to our scientific literature now lying before us; although any person at all conversant with the subject upon which it treats will at once perceive the careful manner in which its Publishers have endeavoured to render the contents as complete and as accessible as possible.

"The present work," to use the words of the Preface, "is a complete Cuvier, as regards the essential part of the arrangement; and it is, in some respects, a new book embodying the original one. Throughout the whole of it there will be found original remarks, but these are always distinguished from that which belongs to Cuvier by being enclosed within brackets. This mode of arrangement was thought to be much better than the appending of notes, which always divide the attention of the reader and weaken the interest of the subject. Many of the classes and orders have been reinvestigated, and many new species added. This is most extensively done in the departments which were intrusted to Mr. Blyth and Mr. Westwood, but it runs, more or less, throughout the whole, and the publishers flatter themselves that this will be of great service to all students of this highly interesting branch of knowledge. The different sizes of the type, which bear some proportion to the comparative importance of the subject, will enable the reader to glean an outline of the system."

To these remarks, which were appended, in 1846, to the first edition, the publishers add a few words respecting the present reprint: — "It was not thought desirable to disturb the illustrious author's arrangement by the introduction of a more modern system, nor was it thought proper to overlook altogether, in a work professing to give a complete view of Animated Nature, the results of modern investigation. The publishers have, therefore, added supplementary articles to such branches as seemed to require it; Dr. Carpenter kindly supplying what was wanting to the Mollusca and Fishes, and Mr. Westwood performing the same to his own department of the work."

Such is the exceedingly judicious plan of the present edition of the "Règne Animal," and we have no hesitation in saying, that the manner in which it has been carried out reflects the highest credit on all parties concerned in the undertaking.

The first portion of the volume, intrusted, as we are informed above, to the care of Mr. Edward Blyth, and comprehending the Mammalia, Aves, and Reptilia, is executed with great taste and discretion; the translated portions are rendered with close accuracy, and, at the same time, in language generally both elegant and simple; the notes and introduced additional matter are highly valuable, clear, succinct, and unobtrusive; while all the strative figures are well chosen and well exe-

The same observations, indeed, are equally applicable throughout the work; so that the English reader has little left to desire, either as relates to the fidelity of the text, or the elucidatory remarks with which it is everywhere interspersed.

In the supplementary portion, much valuable matter is added in the way of copiousabstracts from the principal systems of classification, suggested by various labourers in different departments up to the present period. Thus the systems of Agassiz and Müller are superadded to the Cuvierian arrangement of Fishes. Professor Owen's distribution of the Cephalopoda, and Milne Edward's division of the Tunicata, are important appendages to the department of Mollusca.

In the Radiated division, the Echinodermata are classed in accordance with the views of Professor E. Forbes, while De Blainville and Eschscholtz supply the classification of the Acalephæ, and Dr. Johnston, of Berwick, that of the Bryozoa and Polypifera. Ehrenberg's views are adopted in the arrangement of the Rotifera; but the unfortunate Polygastrica, here reduced to a worse predicament than when the great microscopist of Berlin undertook their cause, are not only denied the privilege of having stomachs and bowels, but are handed over to the vegetable kingdom under the title of "Homogenea!"

In the appedix to the third division of the work (Articulata), Mr. Westwood has furnished a most copious bibliography to each order of insects, which cannot fail to be pre-eminently useful to the entomologist, but throughout the rest of the supplement we regret to find very few references made to the authorities whose labours have principally contributed to render its compilation necessary, so that the non-scientific reader, although abundantly stimulated to research, will be necessarily put to much trouble that might have been spared him had chapter and verse been given.

In conclusion, we feel ourselves justified in expressing our unqualified approbation of the work; it is beautifully printed and clearly arranged, so that the eye is at once mechanically directed to any family or genus of which the reader may be in search. The illustrative engravings are sufficient for all useful purposes, without unnecessarily adding to the costliness of the book; should, however, the more wealthy class of readers be able to place by its side "Guerin's Iconographie du Régne Animal," we shall consider them as having nothing more to wish for in the way of "a Cuvier."

Observations on the Larynx, Trachea, and Œsophagus of the Elephant; and on the Lachrymal Apparatus of the same Animal. By Dr. Robert Harrison, Professor of Anatomy and Surgery in Trinity College, Dublin. (Read before the Royal Irish Academy in April and May, 1848.)

The names of Drs. Jacob and Harrison, both of Dublin, are well known as distinguished cultivators of scientific, that is, of comparative anatomy. The present Observations by Dr. Harrison do credit to the school to which he belongs. Although the anatomy of the elephant was said, by Baron Cuvier, to have been better known to Aristotle than to Daubenton, (the laborious, painstaking, investigating collaborateur of the far-famed Buffon,) yet much remained, no doubt, to be discovered in the interior structures of the most gigantic of nature's terrestrial animals.

Dr. Harrison's recent observations show this to have been the case. He has described a new muscle running from the bifurcation of the trachea, posteriorly, to the œsophagus, or gullet. He points out, also, other circumstances in the anatomy of the trachea of the elephant in which it differs from other pachydermata, and more especially from the horse. The newly-discovered muscle is supplied by filaments of nerves from the pneumo-gastric.

The other mémoir is occupied with observations on the lachrymal apparatus—also of the elephant.

The elephant has no retrahens muscle of the eyeball, but he has a highly-developed middle eyelid or membrana nictitans, which Dr. Harrison thinks has not been correctly or fully described by authors. It is more, however, as regards the physiology or uses of the muscles moving the third or vertical eyelid of the elephant, that Dr. Harrison has corrected the errors of his predecessors, or of those who have written on the anatomy of the elephant. Of these we venture to submit to him, that the name of Camper alone merits his attention and respect. Dr. Harrison has, unquestionably, shown the illustrious Dutchman to be in error respecting the use of one of the muscles acting on the third eyelid. Camper did not clearly understand the power of elasticity as an antagonist to muscular force; and yet the mechanism of the claw of the lion, tiger, cat, &c., ought to have pointed this out to him. For the others, mentioned by Dr. Harrison as authors, or compilers, as they really are, they are persons who, we seriously believe, never dissected any comparative structure in their lives, and are, therefore, as anatomists, in no respect deserving of a refutation on the part of the Professor of Anatomy to Trinity College, Dublin.

DR. STEVENS'S SALINE TREATMENT OF ASIATIC CHOLERA.

[To the Editor of the Medical Times.]

Sir,—In common, as your columns show, with other medical gentlemen, my previous notions regarding the efficacy of Dr. Stevens's saline treatment of Asiatic cholera have been strangely mystified by the startling statements of Mr. Ross. Seeing, however, that there was another plan of saline treatment, which had proved as eminently successful as that of Dr. Stevens had proved disastrous, I have been anxiously watching for information as to the precise difference between the two. My desire for clearer light on this most interesting and important point has been greatly strengthened since I saw, in Mr. Ross's communications to you, (*Medical Times*, Dec. 23, 1848,) that Dr. Stevens's experience in Coldbath-fields prison has been summarily set aside as utterly unworthy of confidence, and that he is condemned without even being heard in arrest of judgment. The suggestions offered by Mr. Ross, in these letters, as to what he considers the most useful remedies, naturally lead to inferences regarding the nature of Dr. Stevens's treatment, that have thrown me still further out of my reckoning;—for I had never before heard it hinted, that the exhibition of saline medicines, as nearly as possible, of the same composition and density as the serum of the blood, and of as large quantities of cold water as the burning thirst of the patient demanded, were not *the most essential* features of that method of combating the Eastern pestilence.

But I waive discussion on these topics, as I find a much readier way of bringing the matter to an issue. The statistics of the Greville-street Hospital are admitted by Mr. Ross to be thoroughly trustworthy. Now, it strikes me, that categorical answers to the following queries would go far to dissipate the mystery that now hangs over this subject:—

1. Was not the saline treatment used in Greville-street Hospital *introduced* there by Dr. Stevens, with the permission, though not with the approval, of Mr. Marsden?

2. Was it not *in every respect the same* as that previously used by Dr. Stevens in Coldbath-fields prison?

3. Were not the ten cases, in which it was first applied, *in the stage of collapse*, selected expressly because they were so?

4. Were not the results, in these and other cases, so novel and startling as to lead Mr. Marsden to make a frank and manly avowal of an entire change of sentiment, and to express his determination faithfully to carry out the treatment that had answered so well in its author's hands.

5. If modifications were subsequently introduced, in what did they consist, and how did they appear to affect the rate of mortality?

May I hope that the importance of the subject will secure for this note a place in this week's *Medical Times*.

I am, Sir, yours, &c.,
A. P. Stewart, M.D.

74, Grosvenor-street, 11th January, 1849.

ON THE EMPLOYMENT OF CUPPING-GLASSES TO THE SPINE IN INTERMITTENT FEVERS.

[To the Editor of the Medical Times.]

Sir,—Having read, in the Number of the *Medical Times* (January 1,) the highly interesting lecture on Intermittent Fevers, by Mr. Macilwain, I

beg leave to submit to you a method, which, with me, has never once failed in curing intermittent fevers. It is as follows:—Apply eight or ten middle sized cupping-glasses on each side the spinal column, from the neck downwards, and let them remain on for about thirty or forty minutes, without scarification, or, in other words, dry cupping. The time for applying the cups, is the beginning of the cold stage, or, if it is possible, a short time before its accession, say, a quarter of an hour; and this not only prevents the attack, but, at the same time, the hot fit and the sweating. In most cases, one application of the cups is sufficient to cure entirely an intermittent fever; however, in cases of long standing, it only modifies the time of the attack, and requires, for a complete cure, to be repeated three or four times.

In my own private practice, for these last twenty-seven years, I have never once met with a case of intermittent fever which has not given way to this simple treatment. The *vacuum* produced along the vertebral column, operates, I think, as a salutary derivative, which is easily understood, by considering the different anastomoses which exist between the vertebral arteries and those of the cerebral, such as the vertebral arteries, the circle of Willis, the bronchial, the cardiac, the œsophagian, &c. I cannot affirm that this mode of treatment would succeed in your climate: at all events, the experiment can easily be made.

As to the seat of the disease, it is impossible to affirm, with absolute certainty. However, from my own observation, I am inclined to think that it is sometimes located in one organ, sometimes in another, and the treatment is based on that belief; thus, when there is headache, giddiness, heat, and heaviness of the head, I apply cups to the back of the neck, and sometimes take away one ounce or an ounce and a half of blood, which immediately relieves; if there is cough, difficulty of breathing, palpitation, &c., I apply them between the shoulders; and draw two or three ounces of blood, and so on. By following this plan, I always find the symptoms disappear in a short time.

I have the honour to remain, Sir,
Your obedient and respectful servant,
Z. F. GONDRET, D.M.P.
Rue St. Honore, 343.

Paris, 13th January, 1849.

THE ALLEGED CHOLERA AT THE FREE HOSPITAL IN GRAY'S-INN-ROAD AND AT TOOTING.

[To the Editor of the Medical Times.]

SIR,—I visited these establishments on Monday week, in company with Mr. Holmes of this University, in consequence of the reports that cholera existed in those places. At the Free Hospital we were attended by Mr. James, clerk to the Holborn Union. We first entered the ward appropriated to the boys, who were in bed, and requested the nurse to show us the worst cases. Three were pointed out, two of whom were labouring under itch. All the cases were doing well, with the mild treatment there pursued; in the girls' department, if possible, they laboured under still milder symptoms than the boys; and I was at a loss to discover what could have given rise to the supposition that their disease was cholera. One death had taken place that morning early; the body was in the dead-house, about one o'clock, still warm. Before I proceed further, I shall state what symptoms belonged to cholera in 1831,—namely, corrugation of the skin, more especially of the fingers and toes: rapid absorption of the cellular substance; the face early becoming altered in shape, and looking elongated; the voice harsh, but without power; the breath deadly cold; also the tongue, and its substance greatly diminished. These were symptoms attendant upon every case in a less or greater degree, according to the virulence of the attack; and I believe to exist in no other disease. The other symptoms, often observed, were suppression of urine, purging, vomiting, cramps of the greatest intensity, excessive, and often irresistible thirst; the body throughout much lowered in temperature; the pulse at the wrist feeble, and soon became imperceptible. As the disease advanced, all those first-mentioned, and as many of the latter as had presented themselves, increased in severity, and the whole body became of a bluish-red tint, and covered with a clammy exudation of a peculiar odour; and, ere death took place, the body was cold and stiff. I examined the cases in the Free Hospital with care, but was unable to trace any symptoms with those above enumerated; no one complained of pain; no one appeared to suffer any; no one asked for drink, and only one had an evacuation during our visit, and which was tinted with bile; no vomiting or distress of any kind to connect their disease with malignant Asiatic cholera.

I now come to the establishment kept by Mr. Drouet, at Tooting, from which the above children were removed the preceding Friday, and I have to thank him for the assistance and promptitude with which he favoured us in our inquiries. Two medical gentlemen who were in attendance upon the patients, accompanied us round the sick wards, and detailed in general terms the course they were pursuing, which consisted of brandy, opium, chalk, astringents, and a mixture composed of ammonia, ether, and compound tincture of cardamoms, and calomel. Here the scene was of a different character; numbers lying in a state of stupor, or comatose, with purple cheeks and livid lips; the hands and feet of many presenting the same hue, and venous congestion in those parts highly apparent. The extremities of many were cold; but in those who were fast dying warmth was perceptible at the chest, and the breath also warm. We were informed, by the gentlemen in attendance, that many of these cases had taken half grain doses of opium in conjunction with the stimulants before specified.

Notwithstanding the awful mortality which had ensued, and was still going on, I could not in any case find symptoms to correspond with those I believe to distinguish cholera, and suppression of urine was denied to exist by the attendants. To all our inquiries on this subject the reply was, that they voided as much urine, and as often, as children did. Here also was an entire absence of thirst, one child only asking for "*a little drink*," and the purging or vomiting neither numerous nor excessive. One new case presented whilst we were there. She was vomiting food recently eaten, complained of being chilly, but presented no uncommon symptoms. A dose of the ammonia mixture was given, and instantly rejected, with considerable force. In this department, six children lay dead, and a woman, who had been one of the attendants. In the former, there was nothing to denote that death had been caused by cholera, the features being unaltered, no discoloration of the body, no corrugation of the skin, no rigidity of the muscles, no absorption of cellular substance. The latter, although included with the deaths by cholera, was not maintained, and one of the medical gentlemen observed, that she might not have so died, as she had been ill some time, and had had head symptoms. Unfortunately, nothing more than the name and time the children were attacked were noted down, therefore we could not learn how or why they became in the state we found them. The quantity of opium, the regularity of its administration, as well as the amount of stimulants, were mere conjecture. The disease differed in the two places.

Among the same children, was it the removal or the difference of treatment, which caused the astounding difference in their appearances and mortality, require the most vigilant investigation.

Mr. Grainger had visited the Tooting establishment, and Dr. Gregory the Free Hospital, and both have, I am informed, pronounced the disease to be Asiatic cholera. This also requires explanation,—How is this conclusion arrived at? All the symptoms widely different to those we had previously, and the disease, which the most perfect military cordon was unable to confine, is now said to restrain itself within the limits, and to those who have occupied the house, not another case having occurred in the neighbourhood. Need a question be asked, how great was the effect of such treatment on children of tender age, and only used to the common necessaries of life? Again, in the previous visitation they were exempt from the disease, or nearly so, and now none but these, and the youngest amongst them, are its victims, is another question to be solved. I look forward with hope, that whatever the disease may be, and the cause of its outbreak, will be better elucidated than others which have occurred lately, for beyond its being called cholera, we know absolutely nothing. RICHARD SOUTHEY.

Cambridge, Jan. 11, 1849.

A CHILD POISONED BY DRINKING BRANDY.

[To the Editor of the Medical Times.]

SIR,—A child, aged four, accidentally drank about half a pint of Betts's patent brandy, early in the morning, on an empty stomach; insensibility took place in about five minutes, and the heart and lungs ceased to act in about two hours; no *post mortem* examination was made.

As the subject of poisoning by spirits seems likely to be discussed in your Paper, and as country practitioners have not the advantage of discussing matters in Medical Societies, perhaps some of your correspondents will state their opinion as to the most proper, or most likely mode of treatment to be used in such cases. I more particularly refer to your talented and experienced Correspondent, Mr. Corfe, whose opinion on this point I should deem of high value.

I am, Sir, yours most obediently,
F.

IMPORTANT TO THE MEDICAL PROFESSION.

Cox *v.* the Midland Railway Company.

Mr. Baron Parke recently delivered judgment in this case:—Professor Sands Cox, of Birmingham, had brought an action against the Company, for attending and operating on a man who had met with an accident on the railway. A verdict was taken for the plaintiff, subject to a motion for a non-suit, it being contended that the Company was not liable on the contracts of their servants. The Judge said, under the circumstances, the defendants were not liable to the plaintiff, as they had not authorised their servants to employ him. In all such cases, however, the party injured would be entitled to recover from the Company the medical expenses to which he may be put through the negligence of the Company.

GOSSIP OF THE WEEK.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of Medicine, and received certificates to practise, on Thursday, 11th January, 1849:—James Mitchell, Nottingham; Henry Edward Turnour; Charles Newth Foote, Sheffield; George Tootal Nicholson, Sheffield.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners, on the 12th instant:—Messrs. William Sproule Love, Dublin; Joseph Bull, Norwood, Surrey; William Bell, Garstang, Lancashire; John Adams Boulton, Newcastle-upon-Tyne; William Edward Jeffreys, Guernsey; William Briscoe, Bathford, Somerset; Arthur Grey Hesilrige Buckley, Tamworth, Staffordshire; and Thomas Wade, Dublin.

JOHN FLINT SOUTH, ESQ.—At a meeting of the Council of the Royal College of Surgeons, on the 11th instant, this gentleman was elected a member of the Court of Examiners of the College, in the vacancy occasioned by the lamented decease of Mr. Samuel Cooper, a pencilling of whom appeared at p. 185 of *Medical Times*. Mr. South is deservedly well known to the profession as the translator of "Chelius' Surgery," the valuable notes to which, by Mr. South, have given to that gentleman a European reputation; to the public he is also well known as one of the Surgeons of St. Thomas's Hospital.

ROYAL COLLEGE OF SURGEONS, IRELAND.—ELECTION OF MEMBER OF COUNCIL.—Mr. Stapleton, Surgeon to Jervis-street Hospital, was elected, this week, member of the Council, in the room of the late Mr. Auchinleck; the votes were 57 to 50, although the defeated candidate was supported by the whole force of the school party in the College.

WAR OFFICE.—January 12.—18th Foot: Assist.-Surg. Archibald Redfoord Ridgway, M.B., from the Staff, to be Assist.-Surg., vice Phillipson, who exchanges. 82nd Foot: Assist.-Surg. Grahame Auchinleck, M.D., from the Staff, to be Assist.-Surg., vice Finlay, who exchanges. Cape Mounted Riflemen: Assist.-Surg. William Stuart, M.D., from the Staff, to be Assist.-Surg., vice Allen, appointed to the Staff. *Hospital Staff.*—Assist.-Surg. John Crespigny Millingen, from the Staff, to be Staff-Surg. of the Second Class, vice Edwin Adolphus, M.D., who resigns; Assist.-Surg. Robert Marshall Allen, from the Cape Mounted Riflemen, to be Assist.-Surg. to the Forces vice Millingen, promoted; Assist.-Surg. Frederick Burton Phillipson, from the 18th Foot, to be As-

sist.-Surg. to the Forces, vice Ridgway, who exchanges; Assist.-Surg. George Thomas Finlay, from the 82nd Foot, to be Assist.-Surg. to the Forces, vice Auchinleck, who exchanges.

COMMISSIONERS IN LUNACY.—We learn, that among the appointments to the Commission of Lunacy is that of Dr. Cooke Taylor.—[We should be glad to know what qualifications this gentleman possesses to fulfil the duties of so responsible a situation.]

HOSPITAL FOR CONSUMPTION.—William Fergusson, Esq., the eminent Professor of Surgery in King's College, has just been elected Consulting Surgeon to this Hospital, in the vacancy occasioned by the lamented decease of Mr. Liston.

OBITUARY.—On Sunday, the 14th instant, at the residence of his brother-in-law, No. 10, Carburton-street, Portland-road, John Pratt, Esq., M.R.C.S., in the 57th year of his age, deeply lamented by his family and friends.—On Monday, Alex. MacFadzean, Esq., M.D., Ardrossan.

THE COST OF MAINTAINING HOSPITALS AND INFIRMARIES.—Mr. T. Goodman, one of the Committee of the Birmingham General Hospital, has compiled a fifth annual series of Tables on the comparative economy of the principal Provincial Hospitals and Infirmaries, from which the following interesting extract is made:—

	In-Patients admitted during the year.	Out-Patients admitted during the year.	Cost of each Out-Patient.	Cost of each In-Patient.	Cost of each In-Patient, without Furniture, Building, and Law Expenses.
			s. d.	£ s. d.	£ s. d.
Birmingham ...	2,078	14,467	1 6	2 7 6	2 2 5
Bristol	1,835	9,750	1 9	2 19 5	2 16 7
Exeter	1,252	792	6 1	2 16 4	2 9 3
Shrewsbury	1,095	3,858	2 2	2 10 4	2 8 6
Worcester	1,012	1,311	3 3	2 16 3	2 7 0
Oxford	938	1,452	3 1	4 14 8	4 6 9
Salisbury	913	1,195	4 4	3 2 4	2 14 4
Gloucester	687	541	4 10	4 4 8	3 10 0
Stafford	626	931	1 7	6 9 0	3 1 4
Hereford	547	651	3 8	3 4 11	2 17 4
Cheltenham	290	3,095	1 7	3 11 9	3 3 7
The number of Hospitals enumerated by Mr. Goodman is 34, and the averages are ...	923	3,108	3 5	3 8 0	2 18 6

In taking a review of the whole list of Hospitals and Infirmaries, it appears that no less a sum than 116,689*l.* has been spent by 34 institutions during the year; 34,377 in-patients admitted, and 99,660 out-patients relieved: thus affording benefit to no fewer than 134,307 cases of suffering.

THE ROYAL NAVAL HOSPITAL, PLYMOUTH.—DISMISSAL OF A MEDICAL OFFICER.—Dr. Robt. Armstrong, an Inspector of Hospitals and Fleets, has been *recommended* by the Admiralty *to retire from his situation.* It appears, from the report of a court of inquiry, that a clerk of the Royal Hospital charged the Inspector with having said that Sir William Burnett, the Director-General of the Medical Department of the Navy, had taken a bribe for giving away a lucrative appointment. As Dr. Armstrong could not satisfactorily show where he heard this report, which rested merely upon hearsay evidence, or upon the testimony of a dead officer, the charge fell to the ground, and the Admiralty have dismissed both the Inspector and the chief clerk, Mr. Dalton. Dr. Armstrong is known to the profession as the author of "The Influence of Climate and other Agents on the Human Constitution, with reference to the Causes and Prevention of Disease among Seamen," &c., besides contributions to the journals. Dr. Armstrong is also a Fellow of the Royal College of Surgeons.

CHOLERA.—EDINBURGH.—The new cases reported here since our last are:—Wednesday, 4; Thursday, 8; Friday, 5; Saturday, 3; Sunday, none; Monday, 3; and yesterday, 2; in all, 25. The number of deaths during that time has been 15, and the recoveries have amounted to 12. The total numbers now are:—Cases, 795; deaths, 456; recoveries, 203. On Friday there was one case in Duddingstone parish, and, on Monday, there was one at Carrington.

GLASGOW.—From Tuesday, the 9th instant, up to Monday the 15th inclusive, there have been 607 new cases here. During that time the deaths have amounted to 231, and the recoveries to 350, making the total numbers to be:—Cases, 3,561; deaths, 1,435; recoveries, 1,944; remaining, 1082.

OTHER PLACES IN SCOTLAND.—In Haddington, last week, there were 13 cases, and 9 deaths. In Cockenzie 8 fatal cases; and, in the neighbourhood of Falkirk, the cases amount to upwards of 30. In Doune there have been 21 cases, and 9 deaths. In the neighbourhood of Ayre there have been 7 cases, and 5 fatal. In Kilmarnock there have been 12 cases, and 6 deaths. In Pollockshaws the total number of cases up to 10th January was 72; deaths 48; recoveries, 9. In Carnbrae there were 21 additional deaths from Friday the 5th to Thursday the 11th inst. At the Eglington Iron works, near Kilwinning, there have been upwards of 70 cases, and about 18 deaths. In Cumnock one case has occurred; in Saltcoats, 8; and in Darvel, 1—all of them fatal. In Kelso, the total numbers were:—Cases, 128; deaths, 64; remaining, 14. In Jedburgh, the returns on Wednesday last represented the number of cases to be 34; deaths, 16; recoveries, 15. In Berwick, the number of cases has been 12; 7 fatal.

THE CHOLERA IN BELFAST.—On Saturday there were 10 cases, being the largest number yet reported in any day since its appearance; while up till the hour of making up the return, there were but three cases in all. The subjoined is the official report:—Saturday, remaining, 24; new cases, 10; deaths, 6; recoveries, 0; remaining, 28. Sunday—remaining, 28; new, 3; deaths, 4; remaining, 27. Of the new cases, 4 were relapses not hitherto reported.

THE New Orleans papers of the 16th publish an account of several physicians, stating that the cholera at the Charity Hospital was real Asiatic. Four deaths have already occurred, and several more cases are reported.

MORTALITY TABLE.

For the Week ending Saturday, Jan. 13, 1848.

CAUSES OF DEATH.	Total.	Average of Five Winters.
ALL CAUSES	1,448	1,169
SPECIFIED CAUSES	1,440	1,164
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	407	221
SPORADIC DISEASES:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	58	54
Tubercular Diseases	210	203
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.....	150	141
Diseases of the Heart and Blood-vessels.....	42	40
Diseases of the Lungs, and of the other Organs of Respiration	325	243
Diseases of the Stomach, Liver, and other Organs of Digestion	63	67
Diseases of the Kidneys, &c.	15	18
Childbirth, Diseases of the Uterus, &c.....	12	9
Rheumatism, Diseases of the Bones, Joints, &c.....	7	7
Diseases of the Skin, Cellular Tissue, &c.	3	1
Malformations	7	3
Premature Birth.....	18	23
Atrophy	24	15
Age.....	70	73
Sudden	3	14
Violence, Privation, Cold, and Intemperance	26	37
Causes not Specified	8	5

THE CHOLERA IN LONDONDERRY.—The pestilence has made its appearance in our workhouse. Only one case there occurred, and it, it is to be feared, will prove a fatal one, the patient being a young man of twenty-two years of age, and who had been previously healthy, and in the house for eighteen months. Two fatal cases have happened since in the suburbs on this side of the river; each terminated fatally.

WE hear of hospitals filled with the sick, and, besides, the fatigues and privations of the campaign have caused the cholera to break out among the troops. The disease has already spread up to Vienna, but the cases here have been in the military hospitals only.

"THE SERPENTINE."—At the Half-yearly General Court of the Royal Humane Society last week, it was incidentally mentioned, that, owing to the disgusting state of this piece of water, the number of bathers in the Serpentine during the past year had been nearly 100,000 fewer than in the preceding year.

TO CORRESPONDENTS.

"Dr. Dickson, Bolton-street."—From an unusual press of matter, we are compelled to postpone the publication of the letter on Cholera till next week.

"Dr. E. D. Doyle, Springfield, Co. Clare."—We have not heard that it is the intention of the Government to move in the matter at present.

"Dr. Gondret, Paris."—Communications received.

"D., Limerick," will see that we have made use of his interesting communication.

"Mr. Crummey, Stokesley, Yorkshire."—The letter shall appear in an early Number.

"Dr. Kidd, Berlin."—Two private communications have been forwarded.

"Mr. Alfred Fremlow, West Broughton."—The conduct of the coroner was very illiberal; but we fear the full fee cannot be obtained, under the circumstances, in a court of law.

"Dr. Freke, Holles-street, Dublin."—The letter will be published next week.

"Dr. John Davis, Uterard."—Mr. Robinson, the eminent Dentist, of Gower-street, has kindly forwarded the following, in reference to the use of Collodion and Asbestos as a temporary stopping for carious teeth:—

"Collodion can be procured of either of the following chemists:—Morson's, Southampton-row; Bullock's, Conduit-street; Taylor's, Vere-street, Oxford-street; and Hooper's, Pall-mall, as cheaply as preparing it one's self. Should the ether evaporate at any time, and the solution too thin to be easily applied, add more ether, the same as used for inhaling, spec. grav., 838. To one ounce of the above, add xx. gr. of Morph a. After excavating as much as possible the caries from the tooth, without coming in contact with the exposed nerve, allow the patient to wash his mouth with a weak solution of bicarbonate of soda, to remove any free acid from the saliva and in contact with the exposed nerve; dry the cavity with lint or cotton, as any moisture remaining would decompose the collodion, and the cotton be precipitated from a point-drop in the solution; in a few seconds apply the asbestos and saturate with the collodion, over which place a piece of bibulous paper folded; this stopping will remain in for several weeks, until the irritation of the nerve has subsided, in which case a durable stopping may be effected with either gold or platina foil; but previous to either being introduced, a small concave piece of the same metal should be placed at the bottom of the cavity, on the top of which a little asbestos should be put, and then filled in the usual manner. In many instances there is no necessity for the concave metal; merely interpose the asbestos at the bottom of the cavity, and metal used in stopping.

"Errata."—In the notice of Dr. Winslow's paper, read at the Brighton Medico-Chirurgical Society, page 245, column 3, line 11th from the top, for "improvement," read "impairment."——In last week's Number, page 231, column 2, line 22 from the top, for "Carsnell," read "Carswell." We are sure that the error will mislead not one of our readers, Dr. Carswell being so well known, and standing so high in public estimation. His absence from public life, at the present moment, is a matter of deep regret to his personal friends and to the scientific world.

"Mr. P. Brady, Harrow."—On the Celtic Race, received.

"Dr. Tripe."—The article on Scarlatina is in type, and will appear next week.

"Mr. T. Gordon Bailey, Penton-street, Pentonville."—The request shall be attended to.

"Mr. Robert Muir, Dumfries."—Communication received.

"Mr. James Kite, Lower Tooting," is thanked for his communication.

"Mr. Robert C. Gwydir, Mohill," "On the State of Union Workhouses," received.

"Mr. Fothergill, Darlington," "On the Pneumatic Tractor," received.

"A Member," writes: "Can you inform me if the Council of the Sydenham Society is defunct? We are now about to complete another year, and we have had but one Book. Surely some explanation is necessary from the Managing Committee for this protracted delay. A word from you would, I think, stir them up."

ORIGINAL LECTURES.

LECTURES ON FEVER.

BEING AN ATTEMPT TO DEVELOPE MORE DEFINITE VIEWS OF ITS NATURE AND TREATMENT, BY THE CONSIDERATION OF THE PHENOMENA, AS OBSERVED IN THE PRACTICE OF MEDICINE AND SURGERY; BEING A CONTINUATION OF "MEDICINE AND SURGERY ONE INDUCTIVE SCIENCE."

By GEO. MACILWAIN, F.R.C.S., Author of the abovementioned Work, "Unity of the Body," "Tumors," &c., &c., &c.

LECTURE III.

Collection of Facts continued.—Small Pox, very interesting in the Inquiry.—Immunity from Inoculation.—Its conditions.—Vaccination.—Measles.—Its tendency.—Scarlet Fever.—The Link it forms.

Small-pox is a disease of which the whole history is singularly interesting, in relation to the inquiry in which we are engaged. It impresses, at every step, the importance of examining subjects in every possible phase, and that nature is luminously clear, in one series of phenomena, on points which, in others, are but dimly shadowed forth, or entirely obscured.

In no disease are the phenomena of fever more fearfully developed. It may be doubted whether any fever has been more fatal. We read, indeed, of the hundreds and thousands which have been swept off, from various localities, by the plague; but small-pox has sometimes almost depopulated whole districts,—so devastating have been its ravages, that it seems doubtful whether the insatiate thirst of gold and conquest, and that accumulation of evils which they have usually involved, have been more rapid in exterminating the aborigines from the soil, than this ruthless pestilence. In the Spanish conquest of America,—a history scarcely less interesting in a medical than a moral point of view,—it seems, that not all the direct and indirect cruelties of the Spaniards were scarcely more destructive than the small pox. In less than a century after the arrival of Columbus, it has been computed, that it destroyed more than half the population; and in one year, (1590,) it so spread along the coast of Peru, that it swept away nearly the whole of the Indians, the Mulattoes, and the Mestichos, in the cities of Potosi and De la Pay, and yet not one Spaniard died of it. (a)

Even in our own island it has been extremely fatal. (b) Dr. Jurin, in making, about the year 1723, an estimate of its fatality, rather more than a century ago, extracted from the Bills of Mortality the number of burials in forty-two years, from all causes,—showing the remarkable result, that something more than a thirteenth part of the whole had died of small-pox.

It is useful that we should remember, then, in this disease, first, its extreme fatality. Now here we have an injurious influence, that we can see and touch in the form of matter; but we are not a whit better informed as to the principle on which its extraordinary power depends, than we are in regard to marsh miasma, or any other kind of malaria; indeed, we have a good deal of information on the chemistry of some kinds of mal'aria, but nothing that I know of as to the essential principle of the small-pox matter. This, however, does not make the study of its laws or habitudes the less interesting, or perhaps less useful, whilst having it in a tangible form, has enabled mankind to conduct their observations and their reasoning with a precision, and a successful realization of facts, very unusual in such matters; some of these, by-and-by, we shall find important to our inquiry. Small pox, whether occurring naturally or by inoculation, with rare exception, occurs but once in the same individual. The disease commences with chilliness, lassitude, nausea or vomiting, pain in the head, back, or loins, alternating with heat or flushes; there is often heat or dryness of the throat. In a few days, (sometimes having been preceded by a crimson efflorescence,) a pimply eruption appears, which pimples gradually become more elevated, developing at their summit a vesicle, and being surrounded at their base by a halo of rather vivid redness. In the course of seven or eight days, the lymph in the vesicles has changed its character,—in fact, has become pus,—whilst the cavity containing it has become enlarged, and the whole pock or pustule, having preserved from about the fourth or fifth day somewhat of a flattened form, is fully developed. They now begin to change colour, the matter exuding dries, forming a scab, which, about the twelfth day, or some days later, is thrown off, leaving a brownish red surface, in many cases pitted; which pitting is to be remembered, because it is the indication of loss of substance, (usually by a sloughing process.) Now, as the eruption becomes established, the fever begins to moderate, and in some cases all but subsides; whilst, in cases of a severe or confluent kind, though the body may be completely covered with pustules, the fever may be continued. It is very necessary to observe, that on the decline of the eruption, especially in bad cases, a secondary fever sets in, of various kind, degree and result, presenting some important analogies, which hereafter. Sometimes the disease is attended at its first access with vomiting and purging, or even hæmorrhage from the bowels, and there are other complications in different cases, usually affecting the mucous surfaces; in other cases, the viscera themselves, showing the great disturbance of the œconomy. In almost all cases in adults, there is a tendency to activity in the salivary glands, and this sometimes amounts to a copious salivation. The absorbent glands also are not unfrequently more or less affected. In some cases, again, and always in severe ones, there is a swelling of the face and other parts, suggestive of more or less effusion into the cellular tissue. In infants convulsions are not uncommon. The swelling of the face and eyelids sometimes prevents the exposure of the globe; pustules may form on the conjunctivæ, or the cornea may have been destroyed by a sloughing process, before there has been an opportunity of examining the organ. Pustules may form in the mouth, or even pharynx: it is even said, in the alimentary canal also; but on this there is some difference of opinion. In some, again, abscesses form in different parts, or the eruption may be accompanied with petechiæ. When the disease is to terminate fatally, patients die in a few days, some with coma, or delirium.

In other instances, they die suddenly, after appearing to have gone on well. Some, again, seem rather to die of the pneumonia, or bronchitis, or some other of the complications by which this too formidable malady is so variously accompanied.

Now, the first point to which I wish to draw your attention is, the extraordinary manner in which this monstrous malady may be made comparatively innoxious. Let us beware of suffering familiar facts to pass us unheeded. Is it not at first sight wonderful, that this disease should have been shown to be rendered comparatively innoxious by a series of proceedings, of which *one* is no less than bringing the matter in contact with the blood of a healthy individual, and that (on its first discovery) often by a manipulation so rude, as of itself enough to risk the production of serious disease? In fact, we shall by-and-by see that very grave maladies sometimes follow much more trivial mechanical injuries than those which were involved in the earlier modes of inoculation.

It seems that the practice of inoculation has been known from time immemorial in China, and that the giving, or (as the infected person generally got some remuneration—selling, as it was called), the small-pox had been practised in Wales for a very long period; but it was first introduced into this country from Turkey by Lady Mary Wortley Montagu, something more than a century ago, and, as it met with a good deal of opposition, the spirit of controversy led to that useful sifting of the facts, which so greatly assists us in appreciating their relations. In the first place, as to the innoxious nature of the malady when communicated by inoculation. You have already seen what was its generally fatal character, when occurring in the ordinary manner. Now, one of the *opposers* wrote to prove that, out of 182 inoculated, *one* had certainly died. You may be sure he would have made it two if he could have done so.

Now, the fatality of the small pox occurring in the natural way, had been differently computed by those who had collected materials for that purpose; and it seems to have amounted to not less than one in six. Then, again, the 1 in 182 of those inoculated, as we might expect from one who opposed the practice, was itself an exaggeration, small as the proportion of failure it might represent; for it was confidently asserted, that many thousands had been inoculated without a single fatal case; and now that all the exaggeration has ceased with the controversy which occasioned it, I believe Dr. Gregory (on this subject probably our highest authority) does not calculate the fatal cases, in those inoculated, at more than two in a thousand. To my mind, there seems nothing more startling than this in the whole range of medical science; and most instructive indeed is it, in every possible way, (as we shall in due time see) to inquire into the conditions on which this wonderful immunity from danger depended; for, be it remembered, the insertion of the matter was only *one* of them. Now, all the inoculators had certain modes of proceeding, which varied somewhat in their details, but which were in *principle* the same.

They prepared the person about to be inoculated by a simple plan of living for a week or two, and in administering such medicine as he appeared to require; we learn, that some highly successful practioners in Kent and Sussex, and in Essex, used to forbid their patients, previously to inoculation, the use of meat, fish, eggs, butter, cheese, and fermented liquors, which last it is added, (truly, perhaps, enough), "destroy more than the plague;" and they were ordered to live on bread, toast, tea, honey, rice, potatoes, and so forth; the meals were to be moderate, the supper like the breakfast, or, "better still, none at all." Then, again, a dose or two of calomel, with aperients, were given; and, if the opportunity were allowed, temperate seasons of the year were chosen, equally distant from extremes of heat and cold, another very important thing in many cases. We have no time for comment on these interesting facts, just now, but they will be of great interest to us as we proceed. The small pox became, under this management, so innoxious that, had it not been from its highly infectious nature, and the fact, that the mildest case of small pox will give to another individual, by infection, that which is the most destructive, just as readily as the severer forms; and thus, from the inoculated, though safe himself, becoming a sort of walking plague, we should hardly have stood in need of the discovery which immortalized Jenner, viz., vaccination. Now, it is curious to observe, that, although the small pox is infectious, although it contains in its pus something so disturbing to the economy, yet you cannot say that by exposure to an atmosphere, however loaded with contagion, nor even by bringing the matter in contact with the blood, that you can with certainty, *in any given case*, produce the disease. I beg you not to let this familiar fact pass unimproved. It is not that the disease, like many others, is not communicable, but a disease too certainly communicable in every way, is found, in *certain cases*, not to be communicable in any. At *another* time, the very same persons still take the small pox as readily in every way as any other individuals, and have it in any form. Again, there are certain still rarer instances, which are a sort of antithesis to each other. Some persons have been known to pass through life without having had the small pox at all, whilst not a few examples have occurred of the disease occurring twice in the same person.

At the commencement of our inquiry, I proposed only to register, as facts, that in which all reporters agree. I believe there *has been, at times*, some difference of opinion on the subject; but, that *now* I repeat correctly the general concurrence of all with Sydenham, that small-pox sometimes, though very rarely, occurs without *any erup-*

(a) Clench's History of: Letter from Ch. Ualano to Gonsalvo di Solans, July, 1590.

(b) Dr. Jurin: Letter to C. Cotesworth. London, 1723.

tion. Sydenham had no doubt of it, and he was a very accurate observer. I wish you to remember, that in all fevers, the eruption is very irregular as regards the rapidity of its development, and especially as to its quantity; and, of this last, small-pox itself is a striking example. Lastly, in regard to this, a very interesting question; the secondary fever, in small-pox itself, occurs without eruption, of which, I think, I shall, by-and-by, show you an analogous condition in the practice of surgery.

With regard to treatment of the small pox, the too extensive experience which mankind have had of this disease, has naturally corrected much of the ignorance and error by which it had been characterised, and, consequently, much of that variety of opinion to which imperfect acquaintance with subjects is certain to give rise. Still a good deal remained. Dr. Sutherland, writing in 1750, speaks of the great difference of treatment of small pox, and that is an important fact in our present inquiry, "Especially with regard to such powerful remedies as bleeding and purging." Quoting Rhazes and Avicenna of the older writers, and Friend and Pitcairn among the moderns. Dr. Friend, who showed a great inclination to evacuants, says: "Omni tempore mittendus est sanguis, dummodo adsint indicantia," which Sutherland, after some good remarks, happily enough turns into "*Omnia* sunt facienda dummodo *adsint indicantia*." In fact, the only point they seemed at that time to agree on was, "Ut ad exteriora, summamque cutim ferantur humores," of which more by and by. I have neither space nor time to go into the facts of vaccination,—they either consists of such as I trust we shall not find necessary or relevant, or such as, though highly interesting to us, are, in strictness, as yet to be regarded as involved in some uncertainty.

Thus much is certain, that a species of matter is obtained from the cow and horse, especially the former, which is capable of imparting a disease, by inoculation, which shall, in the majority of cases, confer a complete immunity from the small pox; that, in a certain number at which it fails to do so, the disease (small pox) occurs in a very mild, almost always safe, and much modified form; and that in a few, *comparatively very* few, the cow-pox fails altogether. I may add, that the whole of the facts seem to favour the conclusion, that the small pox and cow-pox are the same disease under modified forms; and I think any one will have this idea strengthened, who will compare a bad case of confluent small pox, a mild case of the inoculated form, and a well developed case of cow-pox together.

MEASLES

Is a disease attended with fever; it is very variable in its mode of access, and, like scarlet fever, occurs in all forms, from one so mild as to be scarcely more than a most trivial indisposition, up to a very serious and dangerous malady. Let us take Cullen's description of its access:—"It always begins," says he, "with a cold stage, which is followed by a hot, with the ordinary symptoms of thirst, heat, anorexia, anxiety, sickness, and vomiting. Sometimes, from the beginning, the fever is sharp and violent; after the first two days, it is obscure and inconsiderable, but always becomes violent before the eruption, which usually happens on the fourth day." He then goes on to say, that there is generally some swelling of the eyelid, lachrymation, hoarse, dry cough, sneezing, drowsiness, and so on. After three or four days, a pimply eruption appears, which, when fully developed, is scarcely prominent, but can be generally felt by the finger; at first, it is rather a vivid, but which gradually changes to a *brownish* red. This, after a day or two, usually going off with a "mealy" desquamation of the cuticle. It is seldom that we hear of well-authenticated cases of measles occurring more than once in the same form, but such cases do happen. We also see the same uncertainty in its distribution. From the disease being, under favourable circumstances, attended with little danger in the young, but, on the contrary, usually severe in the adult, many persons will send their children, when measles are rife, amongst those affected with the disease; but it by no means follows that children so sent shall take the measles. There is in measles a great tendency to affection of the lungs, which sometimes proves fatal by acute inflammation; at others, by the slow development of tubercular disease. This is a relation which is well marked, and suggests some very important considerations, which we may, perhaps, touch upon when we have to review the facts we are collecting. I should observe, that the eruption, as I have quoted it from Cullen, is not by any means always clearly developed, and that measles is one of those forms of eruptive disease which, like some cases of scarlatina, so merge into the characters of that multiform family of rashes, with some little febrile disturbance, such as imperfectly developed forms of roseola, urticaria, and the like, that many cases occur in which it is extremely difficult—I believe I might say, impossible—to say by what name the disease would be more properly designated, according to the conventional nomenclature we employ. The very salient feature in measles, presented by the lively tendency to pulmonary affection, is a valuable contribution to the facts of this difficult subject (fever); and it has, perhaps, rendered the treatment of the disease more uniform than that of most of the febrile affections. Usually measles is a mild disease; but, like any other fever, it may at once be accompanied by active inflammation, hæmorrhage, or of any other of the complications, and is more apt to be followed, when severe, than any other form of eruptive fever, scarlet fever alone excepted, by chronic disease; and especially of the respiratory organs. It is important to add that, in certain cases, the catarrhal symptoms are absent, and, more rarely, that measles sometimes occur without eruption.

SCARLET FEVER.

The link which scarlet fever seems to form in the chain of febrile phenomena is intermediate, as it were, between fevers whose ordinary characters comprise some form of eruption on the skin, and those in which eruptions, as they are called, are irregular or wholly absent, and in which the actions of the surface, though very striking, are simply manifested in alterations of temperature, and in the excretion of matter, which (however varied its nature may be) takes place in the form of perspiration. This seems the most convenient way of looking at it, for mere purposes of arrangement; and perhaps we may find it an aspect as auspicious as any for obtaining clear views of the relations of the morbid anatomy of fever. In scarlet fever, we begin to lose sight, as it were, of those manifestations which the pimply eruptions of measles offer, the more elaborate actions suggested by the pustules of small-pox, and perceive only a greater or less efflorescence of the surface of the body; but we find, *cæteris paribus*, a much *more active* tendency, if I may so speak, to determine to the *mucous membranes*, of which, however, be it remarked, we have types, and in bad cases, very active ones too, in small pox.

Like most other forms of fever, scarlet fever or scarlatina, as it is called, occurs in every degree, from an ailment of the slightest character to one that is rapidly and suddenly fatal. It occurs some times in a form so mild, that, although it may be very prevalent, hardly any fatal cases occur; at other times, it is so fatal that scarcely any malady is more so; whole families are rapidly swept off. One morning, some years since, a neighbour of mine told me that within three weeks he had lost his whole family (five children) from this complaint. If we take a case of moderately severe scarlet fever, we usually find a soreness and stiffness of the throat, accompanied by nausea, chilliness, loss of appetite, and perhaps some pain of the head. In a day or two, the exact period varying very much in different cases, a scarlet efflorescence takes place, which seems to begin in a number of smaller points, and to commence, like most febrile eruptions, about the head and trunk (which I beg you to recollect), extending more or less over the whole body. The patient usually experiences some relief from the appearance of the eruption, and I have seen the pain and uneasiness of the throat cease at once, on the full development of the efflorescence. Another significant phenomenon in scarlet fever is that, after the efflorescence has continued a certain number of days, the cuticle does not usually powder off, as in measles, but separates in large portions, or moulds of the part, like the skins of reptiles; and now, supposing the fever to subside, there occurs in some cases considerable effusion into the cellular tissue, of which you have some type in the swelling of measles, and rather more markedly in small pox. In scarlet fever this symptom is productive of some anxiety. In mild cases, the effusion is gradually absorbed as the convalescence progresses; and I believe some harm has been done occasionally by too much anxiety for treatment. More rarely, however, it is a much more grave affair; and only part of a more serious dropsy, in which the serous surfaces become involved.

There is in scarlatina a tolerably direct ratio between the tendency to extension of the cutaneous affection to the mucous surfaces of the throat and respiratory organs, and the prognosis as unfavourable or otherwise.

As regards fever, the red strawberry tongue is almost peculiar to this variety of fever, but I have seen it often enough without fever at all; neither is it constant in scarlet fever. The almost constant, and the frequently serious affection of the throat, is significant of the tendency of the complaint, and the serious requisitions on the economy which it implies.

When fatal, which it is in some cases, very rapidly, it is generally by augmentation of the mucous affection; the white or grey, half sloughy, half-ulcerative processes of the throat extending; great swelling of the parts; impeded or obstructed respiration, and exhausted power. If the patient succumbs more remotely after the subsidence of the fever, it is usually with general effusion into the serous cavities, the cellular tissue, or both; with albuminous urine, and the other symptoms usual in such states of system.

Amongst other significant phenomena, it may be remarked, that no fever requires more care in its convalescence than scarlatina, nor any which impresses more strongly the necessity in after life of that inquiry into the number and severity of the diseases with which a patient may have been afflicted, which I have elsewhere so strongly urged in connexion with maladies usually falling within our own province as surgeons. Scarlet fever is always occurring under circumstances which render it impossible to determine whether it shall have occurred from contagion, or otherwise; but there is no doubt that it is so communicable, nor can you ever predict that it will, or will not, attack a given individual. It usually occurs only once; but the exceptions to this are much more numerous than in small-pox, or, perhaps, measles. Though not restricted to them, children and young persons are most frequently the objects it attacks. Sometimes the mucous membrane of the bowels is seriously affected, and like all of the other fevers we are bringing forward, the fever may be either inflammatory, or rapidly depressing, or typhoid, as it is called. Much difference has here also existed as to treatment, and on points of the greatest importance. By some, bleeding has been recommended in certain cases, as the remedy on which all success depended; and yet, by others, in the same description of case, bleeding is spoken of in a tone manifesting the greatest distrust of its expediency or safety. There are various effects sometimes consequent on extended and violent inflammation and sloughing in scarlatina, which are not essential thereto, but which will be sufficiently alluded to in another place.

[To be continued]

MEDICAL AID SOCIETY.—A proposition for the establishment of a Society under this title has been circulated during the past week in Macclesfield. The plan has originated with the medical men, the whole of whom, it is understood, will be honorary members. The principal feature of the proposal is, that each member of the Society may select his own medical officer, and each surgeon is to be paid according to the number of cases he attends.

CLINICAL LECTURE DELIVERED AT ST. THOMAS'S HOSPITAL.

By CHARLES WALLER, M.D., Obstetric Physician to the Hospital.

ON LEUCORRHŒAL DISCHARGES.

Verrucous Growths, the Result of Inflammation, simple as well as Gonorrhœal, sometimes caused by Foreign Bodies—Dr. Blundell's Case—Treatment adopted to the particular Cause—Removal of Foreign Body—Escharotics—Constitutional Remedies—Small Polypoid Projection through Os Uteri—Leucorrhœa Infantilis—Diagnosis of its cause necessary—Irritation in the adjacent parts, Bladder, or Rectum—Dentition—Want of Cleanliness—Scrofulous Leucorrhœa—Treatment required—General and Topical—Leucorrhœa from Disease of Cervix Uteri—Inflammation—Symptoms—Treatment—Antiphlogistic—Bleeding—Laxatives—Diaphoretics—Mercury.

Gentlemen,—In my former lectures on leucorrhœal discharges, your attention was more particularly directed to the various forms of inflammation, as being in many cases the immediate cause of the flow. The continuance of this inflammation is sometimes followed by alterations in the texture of the membrane. Instead of forming a smooth and regular lining to the canal, it is found to be studded with a number of verrucous elevations, varying in number, consistence, and size, sometimes large enough to afford obstruction to, and pain on the introduction of, the finger, for the purpose of examination. These morbid growths increase the irritation previously existing, by which the sufferings of the patient are greatly aggravated. The discharge is very different to the naturally bland, unstimulating mucus of the part: it becomes highly irritating, and produces inflammation, or it may be excoriation, of the pudendum and surrounding parts, frequently extending to the upper and inner parts of the thighs, which become swollen, and frequently present the appearance of erisypelas; micturition is frequent, and attended with great pain; there is smarting and heat in the vaginal passage. On separating the labia, the growths are readily seen, unless they are occupying the upper part of the canal, in which case the speculum will be required, in order to bring them into view. They are sometimes few in number—at others, more numerous. They are not dissimilar in appearance to those malignant fungoid growths occasionally met with in the upper portion of the vagina. Their texture sometimes possesses considerable firmness, but generally it is soft and easily broken down; so that, if the examination be not conducted with gentleness, hæmorrhage occurs. Although in some cases these appearances may be distinctly traced to gonorrhœa, yet they are in other cases produced by common inflammation. As you value your own reputation, therefore, and the peace and happiness of whole families, do not, by giving a hasty opinion, run the risk of blasting the character of an innocent female, by deciding that the disease must of necessity be the result of impure coitus. The presence of a foreign body in the vagina, a pessary, for example, by exciting and keeping up inflammatory action, may produce the same result. In the course of my practice I have several times had great difficulty in extracting these substances, and in three cases could not succeed in removing them until they had been broken down by a pair of bone nippers, so as to allow me to withdraw them in separate and small portions. A similar case happened to Dr. Blundell, whilst lecturing at Guy's Hospital. In this instance, the growths I have been describing had projected into the little openings at the top of the pessary. These were necessarily torn through, when the pessary (which had been previously cut into fragments) was taken away, and free hæmorrhage was the result, the vagina being necessarily lacerated to a certain extent. A female applied at this Hospital some years ago, who was labouring under severe inflammation, with very fetid purulent discharge, which was occasionally bloody. I found a pessary imbedded, if I may so speak, in the vagina, or, rather, closely embraced by it, rendering its removal, after being cut to pieces, exceedingly difficult and painful. The smell was almost intolerable; the vagina was not only inflamed but ulcerated. Every unpleasant symptom subsided in a few days. The female was directed to keep the parts clean by frequent washing, and the injection of warm water.

Treatment.—The treatment must necessarily depend upon our knowledge of the cause which has produced the inconvenience. If a foreign body be present, that body must be removed, whether it be a pessary or anything else. This operation is sometimes attended with great difficulty; I have several times been obliged to use a midwifery vectis for the purpose of obtaining a firm hold where the loop attached to the pessary had been broken off. After the removal of the substance which has caused the irritation, the female should be confined to the recumbent position for a few days, and the parts freely washed with warm water, or with warm decoction of poppies. On the subsidence of inflammatory action, a weak solution of sulphate of zinc should be substituted for the poppy decoction, and a cure will speedily be effected. In some cases ulceration occurs, and the cicatrix formed by the healing process causes a contraction of the vaginal canal, and this greatly relieves the prolapsus, by affording to the descending womb an additional support from below, but would nevertheless greatly increase the difficulty in parturition, should pregnancy unfortunately occur.

When these growths are the result of simple inflammatory action, unconnected with any foreign body, powerful escharotics are required, such as argenti nitras, potassa fusa, or concentrated nitric acid. The two latter are not so easily manageable as the former. I have also found a powder composed of equal parts of powdered savine, verdigris, and the red oxide of mercury, of great service; a small quantity should be sprinkled over the excrescences every night.

As the health commonly suffers, constitutional remedies are required. After the exhibition of one or more mild laxatives, alteratives and tonic medicines should be continued for a considerable period of time; the diet and general regimen should also be attended to; every auxiliary likely to increase the tone of the system being put under requisition. On examining a case which lately came under my care, in which obstinate leucorrhœa was the prominent symptom, a small fungoid projection was seen projecting through the os uteri; its size was about that of a large pea, and looked like a little polypoid enlargement of the soft kind. There was not the slightest stain of blood in the discharge, but rather a thin, irritating fluid, which caused a certain amount of inflammation of the vagina. This growth was doubtless the effect of irritation of the lining membrane of the inner part of the cervix uteri; it was destroyed by the repeated application of nitric acid, and afterwards the discharge ceased. I saw this lady and examined her with the speculum some months after she had ceased to attend as a patient, and had the satisfaction of seeing a very healthy state of the os and cervix uteri. The absence of hæmorrhage in this case was peculiar, for although the substance may be of very diminutive size, free hæmorrhage is usually present. I have known the bleeding to be considerable where the excrescence was much smaller than in the instance related.

LEUCORRHŒA INFANTILIS.

By this term I do not intend confining myself to vaginal discharges in the infantile state only, but shall include those so frequently met with in young girls from five to seven years of age. It is highly important for you to be acquainted with this variety of vaginal flow, as it is always a source of great anxiety to the parents of the child, who are apt to consider it as the result of impure contact, whereas, in an immense majority of cases, it will be found to be entirely unconnected with local violence. In many cases, it is the result of irritation existing in the neighbouring organs, especially the bladder and rectum; or it may be caused by dentition; sometimes it is a consequence of want of cleanliness, some mothers deeming it unnecessary to wash the pudendum of their children from one month's end to another. Nothing, however, contributes more to the healthful condition of a child than thorough ablution of every part of its body *once at the least* every twenty-four hours. I am fully persuaded, that carelessness in this respect is a very fruitful source of infantile disease. Many of these cases are clearly referrible to a scrofulous diathesis, and in truth may be considered as strumous inflammation of the inner part of the labia, and of the vaginal membrane. The parts swell, and are turgid with blood, the colour sometimes bright, more commonly of a dusky red colour, exhibiting marks of venous congestion. The discharge is at first mucous, becoming afterwards purulent, and at length, if the disease continues, unhealthy ulceration, or even sloughing, may take place; and, unless the constitutional powers can be supported by suitable nourishment and medicine, the child will sink. On examination, you often find unmistakeable marks of scrofula, general debility, probably enlargement of the cervical or other glands, delicacy of cutaneous texture, bright blue eyes, &c., &c. When these are present, you may be assured the case will be one of difficulty.

In the treatment of this malady, the cause producing it must first be ascertained, and then the appropriate remedies selected. If, for example, the child's general health be good, there being no sign of debility, it is reasonable to presume, that there is some local annoyance, and the locality of this annoyance must be inquired into: carefully examine the condition of the intestinal canal, and, if you discover irritation in the rectum, marked by tenesmus, and itching around the verge of the anus, desire the nurse to show you the evacuations, when you will probably find, that there are ascarides passing off with the motions. Remedies designated as "anthelmintics" are here indicated, which may be administered by the mouth or in the form of enemata: a strong solution of aloes, or a quantity of ol. terebinthinæ may be effectively employed by way of injection; either of these remedies will destroy the vitality of the little parasitic animals which then act as foreign bodies, and, by producing irritation in the bowel, secure their own expulsion, and thus your object will be obtained without subjecting the child to the inconvenience of swallowing nauseous medicines. See, also, whether the discharge be the result of simple inflammation, and treat it accordingly. Should vesical irritation be present, let the quantity and quality of the urine be examined; and if stone be suspected, let the bladder be carefully sounded.

If dental irritation be the cause, free scarification of the gums will afford relief, afterwards giving salines and aperients. From whatever cause the discharge may proceed, local applications, in addition to the remedies recommended, should always be had recourse to. Where the inflammation runs high, and this will be characterized by a vividly red colour of the parts, soothing lotions are required; simple tepid water may be used, or a very weak saturnine lotion used warm. Moderately astringent solutions are generally the more serviceable, and none is superior to the sulphate of zinc. In scrofulous inflammation, as I have already observed, the case will not so readily yield: you will often be perplexed for a length of time, making use of one local application after another, with probably little apparent benefit. The disease is here constitutional, though outwardly manifesting itself in the local affection; the whole system is vitiated, and, until it be restored to a more healthy state, you must not expect to stop the discharge. For the purpose of removing the debilitated condition, various remedies of a tonic nature have, from time to time, been recommended. Two very useful preparations are the following: either a weak solution of bichloride of mercury in compound tincture of bark, a formula much recommended by the late Sir Astley Cooper; or a mixture, containing equal parts of steel wine, and the fluid extract of sarsaparilla: the latter possesses the great advantage of being rather pleasant to the taste, and there is, consequently, no difficulty in its administration. One or two grains of hydrargyrum cum cretâ, with the same quantities of pulvis rhei, should be given every night, or every other night, for the purpose of correcting the alvine secretions, and of obviating constipation. When steel is exhibited, the little patient's friends should

be informed that the medicine will render the evacuations of a black colour, or they would probably be alarmed at its appearance. Food of a nutritious quality should be given, the quantity proportioned to the digestive capacity of the stomach; animal food is to be preferred to vegetable, and a small quantity of good Burton ale, or port wine and water may be allowed daily. The amelioration of the local symptoms will correspond with the improvement in the general health; the discharge will be less in quantity, and of a more tenacious consistence, and, on the subsidence of inflammation, will gradually disappear. Whilst employing your tonic remedies, you must not neglect local applications; the parts ought to be thoroughly washed with tepid water thrice, or four times each day, and afterwards stimulating lotions, composed of sulphate of zinc, alum, or nitrate of silver (two grains to an ounce of distilled water). Should little specks of ulceration occur, the surrounding parts presenting a livid and unhealthy hue, a solution of chlorate of potass, in the proportion of from five to ten grains to the ounce of rose-water, will often stimulate the parts to more healthy action, and greatly accelerate the healing of the ulcerations. If there be sloughing, the more powerful escharotics will be necessary, and, at the same time, the more condensed form of tonics should be administered internally. The diet and general regimen must correspond with this plan of treatment, and nothing neglected which is likely to improve the general health. After the sloughs have separated, the ulcers should be dressed with a stimulating ointment, care being taken to keep the parts asunder during the process of healing, that the canal of the vagina be neither contracted nor closed: tents of sponge, or pledgets of lint of sufficient size will effect this purpose.

LEUCORRHŒA ARISING FROM DISEASE OF OS AND CERVIX UTERI.

We have already described leucorrhœa as arising from an inflammatory condition of the membrane, covering the os and cervix uteri: it will, however, frequently be found, that the deeper seated tissues are involved; the entire neck, and probably the body too, will, on an examination, be felt to be larger and heavier than usual. If the inflammation be seated principally in the cervix uteri, the glands there situated will be stimulated to an increased secretion, which is peculiar in its nature, presenting an appearance widely different to the mucus of ordinary leucorrhœa; it is white, and not transparent. Sir Charles Clarke designates it the "white mucous discharge," and he describes it thus:—"This discharge is opaque, of a perfectly white colour, and it resembles in consistence a mixture of starch and water made without heat, or thin cream; it is easily washed from the finger after an examination, and it is capable of being diffused through water, rendering it turbid. A morbid state of the glands in the cervix of the uterus probably gives rise to this discharge; at least the cases in which it comes away are those in which the symptoms are referred to this part; and, when pressure is made upon it, the woman complains of considerable pain." ("Diseases of Females," Vol. I., p. 37.) In a former lecture I observed to you, that the secretion from the glands of the uterine neck is small in quantity, and, when it passes from the vagina, is generally mixed with the mucus of that canal; so that it is seldom seen in a pure and unmixed condition: moreover, should the inflammation continue, a yellow purliform secretion soon takes the place of the white mucus just described as characteristic of the disease to which we are now directing attention. You must see it in its early stage, therefore, or you will derive but little information from the colour of the mucus discharged. It is, nevertheless, worthy of notice, that discharges of a colour and consistence similar to the "white mucus" of Sir Charles Clarke, never occur under any other form of uterine disease; when, therefore, you have an opportunity of seeing it, you will at once know the source from whence it proceeds. In this disease there is usually a considerable amount of vesical irritation. Micturition is frequent, and attended with pain. The close and intimate sympathy existing between the bladder and uterine neck is well known. In the general course of obstetric lectures I have particularly mentioned two facts as illustrative examples; first, when these glands are in an extraordinary state of activity, pouring out an increased quantity of their secretion, for the purpose of sealing up the os uteri during the period of gestation, you often find the female complaining of bladder irritation, which subsides when the work is done, and the os closed: secondly, at the full period of gestation, when labour is first coming on, and the os is beginning to open, the same symptoms will recur. Pains and weight in the lumbar region are complained of, with a sensation of weight and bearing down. Should there be much enlargement, the increased size of the uterus will cause it to fall lower into the pelvic cavity, inducing prolapsus to a greater or lesser extent. Tenesmus is another distressing symptom which may arise either from sympathy, or mechanically, by the pressure of the enlarged cervix upon the rectum.

On making a digital examination, the labia of the os uteri will be found enlarged, puffy, and very tender to the touch; the enlargement and tenderness frequently extend to the body of the womb, rendering the whole organ heavier than usual. The speculum should always be used, in order that your diagnosis may be correct. By its use you ascertain whether it be a case of inflammation simply, or whether it be complicated with ulceration, as many cases of the latter occur which are not discernible by the finger alone. The four-bladed speculum sold by Mr. Millikin, of the Strand, has been before recommended as being peculiarly serviceable in those cases in which you wish to examine the entire uterine neck; for, when dilated to its full extent, the whole portion of uterus which projects into the vagina, although enlarged by disease, is distinctly brought into view. This enables you to discover, whether the inflammation be chiefly seated in the glands, or whether the general tissue be also involved. The glands may be either simply enlarged and inflamed, or they may be found in a state of suppuration, or even ulceration.

The consequence of neglected inflammation may be serious, especially in a woman not past the age of child-bearing. Interstitial deposit takes place within the deep seated tissues, and a permanent thickening of the cervix is the result; this condition greatly interferes with the process of dilatation at the time of parturition; great pain and difficulty are the natural results. I have known patients suffer positive agony from this cause, the head of the child feeling as though constricted by a thick cartilaginous rim, which did not give way until after a lengthened period of suffering.

Treatment.—The treatment I am about to recommend is applicable to cases of inflammation not combined with ulceration; the latter affection is too important to be hastily passed over, and must, therefore, form a subject for consideration at a future period. The intensity of the inflammation is marked by the degree of pain which the patient experiences, and, of course, the measures employed must be either mild or severe, in proportion to the nature of the attack. If it be mild, and of recent date, you will be enabled to overcome it by very simple means; the antiphlogistic plan, to a moderate extent only will be necessary. If, on the contrary, the attack be severe, involving a portion of the body of the uterus, and producing general constitutional disturbance, then your measures must be more active. Bleeding in one form or another is always necessary. I have never, in my own practice, found it necessary to remove blood from the arm; nevertheless, I should not hesitate to order venesection to the amount of ten or twelve ounces, should there be much inflammatory febrile disturbance. Cupping from the sacrum, or the application of ten or a dozen leeches to the vagina, will be generally sufficient to accomplish your purpose. The tepid hip-bath should be early used, and the bowels kept soluble by any mild aperient. The mist. potassæ of the hospital, in ounce doses, three times a day, is a very unirritating and useful laxative. Twenty or thirty minims of tinct. hyoscyami may be added to each draught, if there be much pain, conjoined with general excitement of system. These remedies should be repeated according to the urgency of the symptoms, and the effect produced, taking especial care not to push the bleeding too far, so as materially to depress the powers of the system. Local injections of warm decoction of hemlock should be frequently employed. Should the stomach sympathise, and there be nausea or vomiting, five minims of dilute hydrocyanic acid, in a weak bitter infusion, should be given. Determination to the skin is always useful; the particular diaphoretic to be selected according to the degree of inflammation present. If severe, the potassio-tartrate of antimony in operative doses must be employed; if more mild, small doses of the compound ipecacuanha powder should be repeated every few hours: either of these medicines may be given in a draught containing liquor ammoniæ acetatis. The recumbent position must be strictly enforced, and the diet sparing in quantity and unstimulating in quality. By the continuance of these means the symptoms will be alleviated, the fever subsides, the pain lessens, and if, upon careful examination, both digital and specular, you find the cervix presenting its usual appearance, both as to size and colour (there being no preternatural redness); the cure is complete. You will, however, often find that the part is enlarged, and hard to the touch; and, if this be the case, it will be necessary to give mercury in small but repeated doses, until slight ptyalism be produced. In some cases this state must be kept up for a week or two, before the part is restored to its normal condition. A portion of the following ointment should be introduced daily into the vagina, carried up to the os uteri, and prevented from escaping by a plug of lint, viz., potass. iodidi, ʒi.; ung. hydr. mitius, ʒi. m. The best form in which mercury can be exhibited internally in these cases is pilula hydrargyri or hydrargyrum cum cretâ, in doses of one or two grains night and morning, combined with five grains of extractum conii. Three table spoonsful of decoct. sarsæ compos., with four or five grains of the iodide of potassium, should be taken with each pill. It is of the utmost importance not to discontinue the mercurial plan too early; it should not be given up until the unnatural thickening has been removed.

ORIGINAL CONTRIBUTIONS.

OBSERVATIONS ON THE HOSPITALS AND MEDICAL INSTITUTIONS OF THE CONTINENT.

By Dr. KIDD, of Limerick.

(Continued from Page 249.)

The question originally proposed in the French Academy, by the experienced Baudens, seems about as unsettled as ever, among the best authorities on the Continent. Multitudes of figures, it is true, of no little value, have been brought to bear on it—facts of the most startling character arrayed at either side, and conclusions often the most opposite too quickly arrived at. It is yet, however, one of intense interest. The question, I need scarcely say, refers to the nature of those wounds that require instant amputation, and those in which we are called on to trust to the all wondrous resources of Nature. The question of *debridement*, as well as that of the external appearances of the wound of "exit and entry," seems also open to very considerable discussion, the whole matter being one about as unsettled still as any in the wide domain of operative surgery.

It is of the nature of all new truths, perhaps, to come to the light out of a vast heap of error. The human mind would seem to be so constituted, that it must go through all possible phases of doubt and uncertainty before it arrives at any great law. The infant creeps and stumbles before it walks: it is the same with science. Opinions require to be tried in the fire before they are received as such. The multitude of facts with which the particular subject under our consideration actually teems, is no exception to this rule, requiring to be put into shape and

comeliness before they are recognised in practice. The deductions from such a concurrence of little atoms of opinion must, indeed, be for a time crude and indigested. They require this annealing process in the furnace of experience.

As we are still delaying between Berlin and Leipsig, perhaps a short review of the subjects, as discussed by the men of Paris during the last session of the Academy, may not be entirely without its use, putting us in possession, as it must do, of the little chaos of opinions of the chief members of that Institution, at and since the time I referred to the matters before in the pages of the *Medical Times*. To many, possibly, the work I have undertaken may appear a work of supererogation, or something like that of the unfortunate Psyche, if I remember my old classicalities, set to work for life to separate black and white seeds. It is neither, however, one nor the other. To begin, then, at the beginning, The appearance of "gun shot wounds" externally.

Up to the period of the late fearful events, I think I may say, with a certain amount of accuracy, we were all satisfied with certain definitions of gun-shot wounds, and sundry distinctive marks, whereby we were to recognise the wound of *entrance* of the ball, and that of its *exit*. We were very religiously taught to believe, by our various surgical lecturers, that the one differed very widely from the other, as it does. That the former, that of *entry*, was characterised by being a clean wound, not unequal about the borders—that it was always more or less contused, and was invariably smaller; the opening of exit, on the contrary, being larger, projecting outwards, and differing from the former in some other little peculiarities. In a medico-legal point of view, I need scarcely say the question is one of the most essential interest, and, even, as a matter of treatment, one deserving all possible study. Over two hundred wretched beings, during the fearful days of June, were found at the Morgue, and sixteen hundred found their way to the hospitals,—a wide field for studying the matter. MM. Huguier and Devergie, accordingly, have treated of the subject with some detail. M. Nelaton was amongst the first, I believe, that impugned the old and generally received opinion, agreeing in the main points, but contending, among other things, that the *period* at which a wound was seen after its infliction influenced in a very remarkable manner its general appearances. Professor Roux, the great surgeon of the Hotel Dieu, made the very remarkable statement, that, in his cases, he observed the appearances to follow no specific rule whatever,—the phenomena usually stated as belonging to one kind of wound, being just as often found in the other; for myself, I must confess, I was not a little staggered at the *dictum* of this great experienced surgeon of half a century of barricade-firing in the streets of Paris; and looking deeper still into the matter, into the opinions of Blandin, Amussat, Malgaigne, Velpeau, Begin, and Jobert, it was impossible to resist the conclusion, that we should remodel our faith in the ancient doctrine, or at least add some new, distinguishing marks to the old tradition of the schools. Every additional inquiry I have made on the Continent has helped to confirm this impression. Whether it is of the nature of street-firing to inflict wounds different from those in the field of battle, is a thing, however, not unworthy of consideration, and one about which there can be no doubt at present. The men I have met seem about equally divided on the subject, M. Devergie having lately laid down the following law —a sort of *juste milieu* arrangement of the matter. The wound of entry in gun-shot wounds being sometimes larger, and sometimes smaller than that of exit,—it is found, "*in the first portion* of its course, the ball produces a wound of entrance large; in the second division things being reversed, the wound of exit being that so characterised." It remains, of course, for future inquirers to test the truth of this arrangement. As far as experiments, however, go, it seems, I think, well established.

Devergie was, I believe, the person who suggested the experiments on the *dead* body undertaken by Matthysens and Gonzée, of Antwerp, that I spoke of before; he himself, with rare pertinacity, has tried the thing on men made of leather and all sorts of things, planks of wood, &c., with, he says, a full confirmation of his opinion; for myself, however, I cannot help thinking, that a gentleman of "Prunella," of this sort, differs in something from the ordinary run of mortals made of flesh and blood.

Looking through the hospitals here, I cannot say that I have discovered anything very remarkable on this particular point, or anything that we had not been familiar with already. The number of wounded, however, at Berlin, has not been at all equal, I believe, to that of Vienna. In *Rust's Magazine* (Vol. VII. p. 337) are some useful remarks, however, on amputation and the appearance of wounds.

The chief surgical authorities here would seem to be, Rust, Heyfelder, of Erlangen, Hellft, and, I think, Schmidt. Hellft appears to have some singular fancy for English authorities, and I do not know but it was pleasant in old Fatherland, to find a man thoroughly conversant with the writings of Marshall, Hall, Underwood, Shaw, Carmichael, Stokes, Graves, H. Kennedy (of Dublin), Charles Bell, and Howship. Schmidt's "Jahrbücher der in und Auslandischen—GESAMMTENS MEDICIN," the most readable, perhaps, of all the German journals, seems quite familiar also with everything going on in England; contributions by all the old familliar names being ranged in goodly array with those of the great magnates of the "thousand and one" schools of the Continent. Indeed, Müller and Rust, and Casper, and one or two others here, seem to know more about us almost than we ourselves. Casper's little "*Wochenschrift*," also chiefly taken up with papers on practical medicine and physiology, sufficiently indicates his intimate knowledge of everything English. Talking of the journals here, it would be unfair by the way to leave out Poggendorf's able "Annalen," in which I was glad to find papers by Dr. Andrews of Belfast, Faraday, Sir David Brewster, in company with others; by Cauchy, Rose, Melloni, Schonbein, Von Baer, and the other chief men of the Continent. One of the last numbers contains an account of Professor Callan's battery; so catholic the character of true science, garnering up every new idea with the most jealous care. This interchange of new ideas, indeed, is one of the highest privileges of science, one of those things that social and political disturbances cannot at all interfere with, the great and wonderful secrets of nature being open to those of every land that sedulously look into them. I find that I am wandering, however, from the subject on which I set out. I am anxious, however, we should become more familiar with our excellent friends at the other side of the Rhine, and that the English reader should know where to find some little inklings of what is going on in old Fatherland. Those anxious for matters of more abstract science, things a little too hard of digestion for the general medical reader, perhaps, I may add, will find them in the "Monatsbericht" of the Academy of Berlin; while Walter and Ammon's Journal will enlighten him on matters of Ophthalmology, almost a distinct science in Germany. Siebold and Busch's new "Zeitschrift" on things obstetrical, and the little penny "Medicinische Zeitung"—a very heavy production by the way, of late taken up nearly entirely with returns about the cholera—tell him a little of everything. The men of Germany are wonderfully pains-taking in all they set about, and I know no people that go so thoroughly to the bottom of a thing when they set about it; we should try, therefore, and know more about them.

The hospitals of Berlin are almost beyond counting. Indeed, considering its immense population, something about 400,000, this is not to be wondered at. At present, the city swarms with Jews and soldiers,—gentlemen not the most elegant in their deportment, especially in Germany, where no one ever thinks of cleanliness. The city itself, I need scarcely say, is perched, by some accident, in the centre of a flat piece of country, as flat, indeed, as though it were a slice of Belgium; and from want of drainage and other sanitary arrangements, about as unhealthy as any in Germany. A pleasant legend exists somewhere, that Frederick the Great, first built the walls of the city—some twelve or fifteen miles in extent—and had the houses then filled in; the scattered appearance of everything would seem, indeed, to strengthen such an opinion—all save the beautiful cluster of buildings about the Palace and Brandenburg Gate. The Library of Berlin is very fine, containing some 500,000 or 600,000 volumes. The little hemispheres of metal by which Otto de Guerick discovered the air-pump are also preserved here as a scientific spoil, and one, indeed, of no little interest. A Bible of Guttenberg's, the first, perhaps, ever printed, as well as one of Luther's, with the hand-writing of the great Reformer, are also shown the curious in such matters,—things of quiet intrinsic interest, that reflect no little credit on the great men of this wonderful capital. An anencephalous monster, preserved by Geoffrey St. Hilaire, is another of the many relics of the illustrious that interest one. The Museum, however, is full of preparations, and, amongst old recollections of some of the great things Berlin has done. Amidst dim and mystical shadows of the doings of such men as Hufeland, Dieffenbach, Theden, Schmucker, and the wonderful relics of her "glorious army of martyrs," in the physiological cause, one cannot well escape without a little world of fresh knowledge. As such, indeed, the Berlin school is particularly to be recommended.

JOHN HUNTER ON HYDROCELE.

We have been favoured by Mr. T. M. Stone, the respected librarian of the Royal College of Surgeons, with the following copy of an original letter in the handwriting of the distinguished physiologist, addressed to the Count Bruhl:—

"An hydrocele is, perhaps, one of the most innocent diseases that can afflict a human body, or, more properly speaking, is an effect of one of the most innocent causes; it is productive of no evil; it can only be an inconvenience, and that inconvenience can only arise from size.

"There is a relief called the palliative cure, which cannot be called a cure, only a temporary relief, as it commonly occurs again; this is simply letting the water out; for the sac which contains the water is the same as before.

"To perform a cure would be, to hinder the accumulation of the water; but, as we are not in possession of such powers, we are obliged to have recourse to the next best method, which is an obliteration of the sac which contained the water. To effect this, more methods probably have been proposed and put into practice than in any other disease in surgery. There are two ways in which this effect may be produced; one, and the most simple, is, to produce such inflammation on the sac as will make the sides of the sac adhere to each other, and if this adhesion is complete, then no hydrocele can ever take place in this part afterwards. Another mode is, to expose the sac in such manner as to bring on suppuration; this a more severe method than the above, because the inflammation must exceed the adhering stage, and it is more tedious, because suppuration must go on till the whole sac is consolidated by granulations.

"To produce the first method, it was proposed by the first Monro, of Edinburgh, to make a puncture with a trochar into the bag of water, and let it out; then to inject, by the same trochar, some wine to excite inflammation, and to let this wine out; thus inflammation commences, and the sides of the sac adhere; if it was certain that this effect would always be produced, and that every part of the surface of the sac and testicle would adhere, then no more is necessary; but I am told that these adhesions are not always perfect, which subjects the person to a relapse, and which has taken place, and it is probable that this was the reason of its being laid aside. Mr. Earl has again taken it up, and, from his account, it would appear to succeed as well as one could wish; but I have been informed, that it does not always succeed, and that there are cases where, from experience, it does not, which I can easily conceive.

"To produce adhesions of the sac by means of

suppuration and granulation, four methods have been recommended; one, the most simple in the operation, was to make a small opening and let out the water, then into this opening put a tent or a little lint; this excited inflammation over the whole sac, and the whole sac suppurated, and the whole was obliterated. To produce the same effect one recommended a caustic to be applied, about the size of a sixpence, and either to cut through the eschar, or let it slough off. Another method was to pass through the sac a seaton, which was an old practice revived by Mr. Pott; and the fourth was to open the sac from one end to the other, which is the most severe operation of the whole.

"Every one of these modes produced the same effect, and the same quantity of inflammation or suppuration succeeded; the only difference was, in the operation itself; but none of these four methods were at all times perfect; the disease recurred again in some or all of them. An accident happened to a patient of mine at St. George's Hospital, which gave me an opportunity of finding out the cause of these relapses, which was, that the sac had not wholly inflamed and suppurated; therefore, to effect an universal suppuration over the whole surface of the sac, I have taken care that no two parts of the sac shall come into contact till it has suppurated, and, to effect this, I put into the opening made into the sac (which is about two inches long) some flour, which I spread all over the inside with my finger, and then a little lint on the cut edges of the wound, and a poultice over the whole; then allow suppuration to take place, and the whole heals. If this flour is well introduced through the whole sac, every part must suppurate, and every part must unite, which makes the complete cure.

"In whatever way the cure is effected, there is no danger."

The above letter was enclosed in another, of which the following is a copy:—

"To Count Bruhl, Dover-street.

"Mr. Hunter's compliments to Count Bruhl, he has drawn out a short sketch of the different cures for the hydrocele, which, he hopes, will be perfectly understood by the surgeons in Germany.

"Leicester-square, Saturday Evening."

NITRATE OF SILVER IN CHOLERA, AND ITS MODE OF APPLICATION.

By J. W. GARLIKE, Esq., Rickmansworth.

Although, at the present moment, medical literature is inundated with papers from all quarters, each putting forth some new theory, or arrogating to himself the attributes of a universal remedy, I feel no diffidence in appearing before the medical public, seeing that the outbreak of cholera in my own district has enabled me to carry into practice those sentiments, with regard to the treatment of this fatal disease, at which I hinted, when speaking of the efficacy of topical treatment, through the medium of injection, in dysentery, in a paper published in this Journal in May last.*

All writers seem agreed, that it is absolutely imperative (if it can be effected by any just line of treatment) to stay the enormous demand made on the vital powers by the undue discharge of serum from the bowels, by which means, the blood, robbed of its saline principles, becomes of a grumous consistency, and incapable of stimulating the brain and heart; and this explanation of the stagnant condition of the blood appears highly probable, seeing that the discharge from the bowels and stomach is always alkaline, and hence, in Mr. Ross's Tables, the saline treatment appeared most successful; but, though adopting these views *in toto* would be most favourable to *my* theory of treatment, still, from the opportunities which I had of seeing cholera in its most frightful forms when last it visited England, in 1832, and having vividly impressed on my mind the great prostration of nervous energy which characterised the very ushering in of the worst cases, I cannot but believe that the brain and spinal chord are the parts primarily affected. What but a loss of supply of nervous energy can induce the nerves so completely to lose their dominion over the capillary system, and thus allow it to pour out the serum of the blood in a manner so instantaneous, as to destroy life in a few hours? I am the more convinced of this, from the circumstance, that all persons affected with this disease have (when closely taxed) admitted some slight disturbance of their health previously to the attack, although, at first, they have denied any deviation from the most complete harmony of the system, and the symptoms they have described have been faintness, flatulence, and weight about the hepatic region; but, whether it be the blood or the nervous system that is primarily at fault, the demand most urgent in the treatment is, to stay the bowels; and, so far as my experience will serve me, this cannot be accomplished in a severe case of cholera by any means so effectual as by topical agency, for there is a great fear, that, before a sufficient quantity of any remedy can be absorbed into the system, the case will terminate fatally.

Very little has been said on the subject of injection, in this disease, by any writers that have come under my notice; those who have included topical treatment have spoken in favour of oak-bark and alum, describing them as most valuable adjuncts and highly astringent, and these have been chiefly army surgeons whose practice has been confined to tropical climates.

Whatever may be the intestinal region diseased, I am nevertheless impressed with the idea, that, as in dysentery, so in cholera, the large intestine is either itself mainly in fault, or may be made, by continuity of tissue, to forward remedial impressions communicated to it from without; and if so, this will again help to explain my views of the value of topical treatment by means of injection.

In dysentery I never omit local treatment, and invariably select the nitrate, having with very few exceptions found it productive of the greatest good. Here it exercises a power over the enfeebled exhalents by active contact such as I should be most anxious to command when treating a case of cholera. I have never been able to effect it so completely with any other agent, for the nitrate may be said to possess the maximum of astringent power; and now, having arrested the immoderate action of the bowels, time is gained to adopt other treatment; and all practical men know the value of this pause, since, at a certain period of such frightful disease, one more copious dejection will depress vital energy to a point from which it never can be rallied.

My opportunities of practically testing the efficacy of these principles, as yet have not been extensive; but, as the administration of the nitrate of silver has been successful in the only three cases I have used it, I shall give an abridged account of them and show the mode in which I applied it.

Case 1. William Miles, aged fifty years, farmer's labourer, of sound constitution, residing in a rural district, was seized with violent purging and vomiting, attended with severe cramp, on the 16th December, at 10 a.m. I gave the case my attention on the earliest intimation, which was about twelve a.m., the patient living at a distance of from two to three miles from my house. On my arrival I found the man suffering from all the symptoms of cholera; the stools had the appearance of rice water, with white flocculi intermixed, alkaline; the matter vomited answering to precisely the same description; countenance already sunken; pulse, thirty-five, intermittent and laborious; suffocative voice; profuse cold sweats. Ordered two grains of opium, two of calomel, every half hour, with a mixture of ammonia, chloride of sodium, and potass, between each dose; cold water, as a drink, to any extent to allay thirst, and frictions of turpentine over the abdomen and extremities.

Having followed up this plan for six hours without any benefit, I determined on using the nitrate of silver in the manner I have been advocating, and for the purpose I dissolved 16 grains of the salt in 4 ounces of distilled water, which I injected into the large intestine with as much impetus as I could command; ten minutes after I threw up 6 ounces of gruel, with half an ounce of laudanum. Whilst preparing the injections, which did not occupy the space of twenty minutes, my patient lost, I should imagine, from two to three quarts of the rice-water secretion, and was, to all appearances, sinking rapidly.

The introduction of the nitrate produced a heavy pain, which continued for two days after, but my patient described it as being totally different to cramp. A little of the second injection was returned a few minutes after its introduction; with this exception, the bowels were not moved for forty-eight hours; sickness, however, constantly showed itself, and cramp in the extremities, and that sunken state of vital energy, the frightful feature of the disease, remained the same, requiring all my watching and care to carry the case to a favourable issue.

At the expiration of forty-eight hours, the bowels were again moved, and the stools put on the same appearance. I waited to see if they should manifest any disposition to relapse into their former condition; but this was not the case, although they evinced, at different periods for ten days subsequently a great disposition to an irritable state; under these circumstances, I confined the remainder of my treatment to constitutional means.

In the other cases, I have resorted to precisely the same plan of treatment, and, in the same strength, with equally happy results: and, seeing the cases presented, in essentials, the same features, the relation of one will explain the others.

Before closing these few remarks, I wish it to be clearly understood, that I am advocating a principle. I do not lay stress on the quantity of the salt of silver used, as the most judicious strength, or as adapted to every case; of course such details would be regulated according to circumstances, the age and temperament of the patient being considered; at least, I should bear this in mind myself when using the salt, but I am contending for the necessity of instantly stopping the destructive flow of saline matter from the bowels, without which, in urgent cases, I cannot believe the disease to be amenable to any line of treatment.

* Vide *Medical Times*,—paper headed, "Nitrate of Silver in Dysentery, by J. W. Garlike."

HOSPITAL REPORTS.

[From our Dublin Correspondent.]

RICHMOND HOSPITAL, DUBLIN.

POPLITEAL ANEURISM—AMPUTATION—RECOVERY.

Under care of Mr. ADAMS.

John Flood, aged 50 years, a man of colour, born at St. Vincent's; has spent his life much at sea; he has acted as cook on board a vessel trading between this and North America; the greater part of the time occupied by his last voyage he was unable to get out of his berth, in consequence of his having had a swelling in his right ham, which compelled him to keep his limb always flexed, and, lying on the outside: he could not straighten, nor attempt to lay any weight on it; he found himself daily getting worse, and was admitted into the Richmond Hospital, on the 4th of January, 1849, a few hours after the arrival of the vessel in the port of Dublin.

As the patient lay in bed, the right limb was semiflexed, and lying on its outside: the swollen condition of the popliteal region and œdematous state of the right foot and leg, as well as the knee-joint itself, was accurately represented by a cast which was exhibited to the Pathological Society. The popliteal tumor felt remarkably tense, and was tender to the touch; upon a superficial examination no pulsation could be felt in the tumor; but when firm pressure was for some moments made by the fingers, these last had a movement and impulse communicated to them, corresponding to the patient's pulse; when the stethoscope was applied with some pressure on the swelling, a distinct, but rather muffled *bruit de soufflet* was audible. The tumor, as before mentioned, was tense and shining; however, when the femoral artery was compressed, as it passes over the horizontal branch of the pubis, all pulsation and *soufflet* ceased, the shining tension of the skin over the tumor was

last, and the popliteal swelling became flaccid and soft. There was no pulsation to be felt at any time in any of the arteries of the limb below the popliteal region. From these signs no doubt could be entertained, that aneurism of the popliteal artery existed. Besides this aneurismal swelling, the corresponding knee-joint was evidently the seat of inflammation; the patella was raised up, and at each side of it a fluctuation from effusion of synovial or other fluid existed. There was pain felt in the joint, and much increase of temperature could be perceived by the hand, not only of the swollen surface, but also of the whole limb. We must not omit to mention, that a projecting ridge of bone could be felt along the inner edge of the femur, just above its inner condyle. The popliteal swelling was of a rounded and oblong oval form, its longest axis being, from above downwards, about nine inches; it completely filled the popliteal space; its superior and inferior extremities were remarkably well defined. The measurement of the circumference of the knee, and popliteal swelling inclusive, amounted to seven inches more than that of the opposite limb. He complained of severe pain in the posterior part of the tumor, and extending thence down the limb; his pulse, 84; skin, hot; tongue, white and loaded; bowels, free; urine, natural.

Previous History.—He states, that it is now four months since he accidentally discovered a swelling in his right ham, something smaller than a hen's egg, for the origin of which he could assign no cause; it did not then give him any uneasiness, or embarrass his movements. In about fourteen days after this, during the first week of his voyage from America to this country, the tumor became very painful to him, and the uneasiness has daily increased ever since up to the present moment. He sleeps none, and describes himself as being greatly wasted. He did not seek any advice in America, and, during his voyage, as there was no surgeon on board, had no one to consult. On his arrival in Dublin, he found himself so very ill, that he immediately sought admission into the hospital.

On Friday morning, January 5th, the day after his admission, a consultation was held, and, although it seemed to most to be a case which had, unhappily, been permitted to advance so far, that nothing could be done but to amputate the limb, the proposition was conceded, that pressure should be tried, and compression was attempted with variously constructed instruments, but the patient could endure no pressure, not even that of the hand, on any part of the artery, for a longer space of time than a few moments.

January 7th, he got an opiate to aid him to bear pressure, but it proved ineffectual for this purpose. However, the anodyne procured some sleep on this day, and the following, the tumor seemed more tense and hot, and two ecchymosed patches appeared on the inner aspect of the tumor. By measurement, the circumference of the limb had been found, on the two last days, to have increased on each day one quarter of an inch. Amputation was proposed to the patient, who immediately consented.

The operation was performed while he was under the influence of chloroform, on Monday, the 8th of January. He has been going on well since.

Observations by Mr. Adams on the Case.—Some may ask why have we applied the operation of amputation to the case of popliteal aneurism, and thus, as it were, to have gone back for half a century in the treatment of aneurism to Mr. Potts' time, who was known to have expressed his preference to amputation in the case of popliteal aneurism to the treatment then in vogue, before the period of Hunter's operation? The reply is: Because I feel persuaded that neither pressure nor the Hunterian operation would succeed, and that the patient's safety would be compromised by a fruitless attempt to cure the popliteal aneurism. Unfortunately, the man did not apply for advice until the disease attained what I consider an incurable size. I have seen many cases of large popliteal aneurisms, and in these cases the ligature of the femoral artery has usually been followed by gangrene of the limb.

I may here remark, that the portion of the arterial system of the lower extremity, which is called popliteal from its situation, is by no means so favourably constituted to be the seat of an aneurismal swelling, as other portions of the arterial system of the limb. If the popliteal aneurism be small, matters may be expected to go on very well after the ligature of the femoral artery, according to Hunter's plan, has been effected; but, on the other hand, if the aneurism be allowed to attain a great size, there is great danger that the anastomosing channels, through which blood is to pass from the femoral into the arterial system of the leg, may be either obstructed at their orifices or compressed in their course, and become obliterated, and, in such cases, gangrene may be expected to succeed the ligature of the femoral trunk. We know that a great many arteries arise from the popliteal in a very short portion of its course, and if the aneurism be allowed to extend much downwards, very soon will the inferior articular arteries be implicated, and the services they might render as anastomosing channels be annulled. If the femoral artery, on the other hand, were the seat of an aneurism, a much larger space would be allowed for the aneurism to enlarge without any vessel becoming obliterated. The argument, therefore, against delay, in reliance on the milder treatment, by compression or ligature, becomes stronger when the popliteal is the seat of the disease, than when the disease is situated in the femoral artery. However we may attempt to account for it, the fact appears to be established, that gangrene of the limb is very apt to follow in cases of large popliteal aneurisms.

All this should induce us to infer, that, if the curative measures be applied before the aneurismal tumor is permitted to attain a large size; or it shall involve the origin of the five anastomosing branches which spring in the popliteal region from this artery. On the contrary, I have frequently seen the ligature of the femoral artery fail to cure popliteal aneurisms when these have been permitted to attain a large size; and, in these cases, the life of the patient will be in great danger of being sacrificed, in consequence of the gangrene of the limb, which, almost invariably, I have seen follow the Hunterian operation in such cases. From my experience of these cases of large popliteal aneurisms, either diffused or on the point of becoming so, I would, certainly, always recommend the surgeon at once to have recourse to amputation in preference to the adoption of any other expedient, because I believe the life of the patient is less compromised by this desperate resource than by others. This opinion is in such accordance with the experience of one of the best practical writers I am acquainted with, namely, Baron Boyer, that I will take the liberty of reading to you his sentiments, and you will perceive their applicability to the present case:—

"Mais il est des anéurismes de cette artère dans lesquels, on n'a d'autre ressource pour sauver la vie du malade, que l'amputation de la cuisse. Tels sont les anéurismes tres volumineux, accompagnés des symptôms imminens de rupture, de grand tuméfaction, d'engorgement œdémateux, et de peu de sensibilité à la jambe et au pied, sur un sujet d'un âge avancé, avec douleurs violentes, dans la tumeur et des sonpçons fondés de carie du fémur et du tibia. Il est évident que dans le cas de cette espèce, l'opération de l'anéurisme ne peut avoir aucun résultat avantageux, et que l'amputation est le seul moyen par lequel on puisse espérer de conserver la vie du malade."

ANATOMICAL EXAMINATION OF THE LIMB.

When the integuments were dissected off the limb, the popliteal tumor was exposed. In its longest diameter, it was fully nine inches; transversely, five. The tumor was covered posteriorly by muscular fibres, below constituted chiefly by the heads of the gastrocnemii muscles; on both sides, and above, by the hamstring muscles and their tendons, which were flattened and spread out over the tumor. On the inner side of the swelling there was an opening, about the size of a shilling, through which some blood had escaped, and become diffused beneath the skin—a circumstance which accounted for the ecchymosis seen before the amputation had been decided upon. Ranged along the posterior and central part of the swelling, longitudinally, lay the great sciatic nerve and its fibular branch. Here, too, was seen the popliteal vein and artery, all these structures having been thus placed on the posterior aspect of the tumor, even somewhat arched and stretched, having their concavity in front. The aneurism of the popliteal artery was found to spring from the *front* of this vessel. Here an oblong opening, about an inch and a half long, existed, through which opening communicated the cavity of the aneurismal sac, and tube of the artery. The posterior half of the cylinder of the artery existed, but this portion of the vessel seemed stretched. Upon introducing the finger into the aneurismal sac, it was found to contain coagulated blood, and the finger could readily pass through this into the knee-joint, through an opening which corresponded to the centre of the ligamentum posticum. The swelling, therefore, of the knee-joint was proved to have been caused by bursting of the aneurismal tumor into the cavity of the synovial sac of the knee-joint. When the interior of the knee-joint was examined by an opening made in front, it was found full of coagulated blood and yellow serum. The synovial and subsynovial tissue showed strong evidence of inflammatory action having existed here in an early stage; and the preparation was, in this point of view, interesting; the cartilage, where it covers the patella, was soft, and ulceration had commenced in it; the anterior portion of the sac was identified with the periosteum, covering the back part of the femur, which was here thickened; and the ridge near to the inner condyle was proved to have been formed by thickened periosteum, and when this portion of the sac was separated from the back part of the femur, the latter was found remarkably rough, as if corroded, presenting much the appearance we have observed the sides of the dorsal vertebræ to present when an aneurism of the aorta has pressed against them.

PROGRESS OF MEDICAL SCIENCE.

GERMANY.

By Dr. Bushnan.

PROSTITUTION IN BERLIN, AND FOREIGN EDUCATION.

A work upon the first of these subjects ("*Die Prostitution in Berlin, sittlicher, medicinisher in polizeilicher Beziehung beleuchtet*) has lately been published in Berlin. It is anonymous, but it bears much internal evidence of having been written by some high police authority, and emanating from official sources. In the preface, the "*Zweck und Tendenz des Buches,*" the author declares "his desire to expose clearly and impartially a state of things that has already taken such deep root that it threatens gradually to break through and to corrode all social and family ties, and this in order to propose a remedy."

The First Chapter, containing an historical sketch of prostitution in different countries, is freely compiled from the pages of Parent-Duchatelet, of Paris; Potton, of Lyons; and Tait, of Edinburgh. Chapter II. gives the special history of prostitution in Berlin. Early information upon this subject appears to be very scanty; there were no brothel police regulations before the year 1700; and even these were not enforced until 1792, when there appears to have been about 300 prostitutes in a population of 150,000 souls. In this year a fund was collected to meet the expenses of the treatment of venereal cases; but this not proving sufficient, a sort of Income-tax was imposed upon prostitutes,

who were actually rated according to their professional emoluments, and divided into three classes, —the first paying, every month, one thaler; the second, sixteen groschens; and the third, eight groschens: or, in English money, three shillings, nineteenpence-halfpenny, and ninepence-three-farthings. Later, these rates were doubled, and the brothel-keepers made to pay a heavy tax. In 1806, prostitution and syphilis seem to have raged fearfully in the city, and the latter to have assumed so grave a character, that out of 200 girls under treatment, 20 were pronounced incurable. In 1846, the public brothels of Berlin were altogether suppressed, a measure the prudence of which the author agrees to; but the physical consequences of which have been, that the unfortunate women, no longer obliged to submit to medical inspection and treatment, have been the means of propagating venereal diseases to a very alarming extent; and the moral results, that seduction has been negatively encouraged, and clandestine prostitution rendered of every day and almost universal occurrence; and this to such an extent, that Laing, I think it is, who tells us, it is no uncommon event for the heads of respectable Berlin families to find their daughters unexpectedly presenting them with grandchildren. Quincke, indeed, has endeavoured, by statistical tables on the treatment of syphilis in "La Charité," at Berlin, to prove that venereal diseases have decreased in that city, and Baltz agrees with him; but the number of diseases that are found in a hospital are not always proportionate to the number existing in the town, and therefore cannot be relied upon in a statistical point of view. Besides, Ebers, another Berlin authority, differs in opinion; and, in the "Transactions of the Silesian Society for the Improvement of the Fatherland," expresses himself warmly against the suppression of brothels, both in a moral and bygienic point of view.

Chapter III. exhibits a most degrading spectacle of the moral state of Berlin at this time. The author says, that young schoolboys keep their mistresses; and that even among young girls of the higher classes moral corruption is most alarmingly disseminated. He refers the cause of this evil to the schools, especially the industrial schools, where needle-work is taken in; to the dancing schools, and, lastly, horrible to say, to the schools for religious instruction, and in which children are prepared for confirmation! All of which, he asserts, exercise a very baneful influence upon the morals of young people.

Chapter IV is devoted to the question, "From whence do the prostitutes come?" The original causes are virtually the same as are assigned by Parent-Duchatelet and Lucas for Paris, Potton for Lyons Tait for Edinburgh, Wardlaw for Glasgow, Rosenberger for St. Petersburg, &c., &c. The former of these authorities mentions cases where young girls in a state of virginity have applied to be admitted into brothels; and it is not unlikely that the same may occur in Berlin, where the author informs us that mothers, for some trifling advantage, will offer their daughters for prostitution, and use their maternal authority to force them to debase themselves. Such instances, he tells us, are of daily occurrence; and that it not unfrequently happens that mother and daughter, at the same time and in the same room, will prostitute themselves and excite each other to debauchery. The author relates a case of a young girl, a virgin, who, of her own free will, sought admission to a brothel. She was a little, thin, ugly, pock-marked girl, not seventeen years old, one among the many female servants of a nobleman, each of whom had a lover except herself, and by whom she often, in consequence, was greatly ridiculed. Here offended vanity induced the unfortunate creature to take the step she did. Religion, or rather bigotry, or perhaps a still better term, that hysterical monomania which assumes the appearance of devout piety, is a frequent cause of prostitution; and there can be no doubt, that —I was going to say in Catholic countries only— many fall under the "fine frenzy" of confessional consolation—may I not, for the love and honour of womankind, call it a mesmeric influence? Moreover, it is well known, that to raise money to visit some favourite shrine, or to perform some pilgrimage, said to be "good for the soul," many a weak and feeble-minded priest-ridden woman has sacrificed herself. This was well illustrated at the time of the Trêves absurdity, in 1846, when it was no secret in Germany,—I know it occurred at Coblentz, on the Rhine,—that mothers offered their virgin daughters for sale to acquire the means of visiting the so-called coat of our Saviour. It is needless, in this place, to enumerate the inducements held out by wily priests, or to translate the lists of "indulgences" published and promised to those who looked upon the coat, and paid their pence. The reader will believe that these were not slight that led to such abominations. But, it may be asked, why publish, why import these disgusting details from Germany? The answer is, simply in the hope that they may be copied into every newspaper, and read by every parent in the land, so that they may be induced to pause before they consign their daughters, unprotected by parental care and English hearts and eyes, to foreign education and the contamination of an atmosphere where such foul things exist. I believe the vice to be found in some boarding-schools for either sex on the continent, to exceed all that the most peccant and lascivient English imagination can conceive. Of course, I speak not of all educational establishments, for there are exceptions, and happily many; but nearly in all, and even in the last, there exists a laxity, a carelessness, an indifference to many points that most English mothers would think to be of essential importance.

Even in the best educational establishments, as in all others, and in every part of Germany, the Sabbath is most indifferently observed, and the strictness of our Sunday universally laughed at—a strange contrast to the rigidness with which these people regard feast days and other ordinances of *man*. Sin is among the most infectious of diseases; and if, even with the best intentions, our countrymen are gradually seduced into an utter disregard of the Sabbath, and to do and say *abroad* what they would never think of saying and doing at *home*, how much more easily must a young and inexperienced child, unprotected by parental watchfulness, fall into careless and disreputable habits! One of the most distinguished clergymen of the Church of Scotland told me, at a German watering place, that he must leave it, because he found he was becoming habituated to the desecration of the Sabbath, and that it ceased to fill him with the same horror and affright as of old; in fact, the disease had infected him. Again, if the Sabbath is disregarded in Germany, the third commandment is as little observed, and thus a child soon acquires a habit, which, with us, is only found among the lowest and most uneducated classes, of using, and even upon the most trivial occasions, such expressions as "*Ach Gott*," "*Grosser Gott*," "*Allmachtiger Gott*," "*Herr Jesu*," &c. &c. How do these terms sound to an English ear, especially the latter "*Mister Jesus*"? And yet there is scarcely one English girl, at any one German boarding-school, to whom they are not familiar, and by whom they are not used almost as household words! But, if parents will not listen to the injury the *heart* may sustain by foreign education improperly pursued, let me appeal to them through another, and often, I fear, a more influential organ, I mean the stomach. The food at a German boarding-school is of the most scanty and detestable description, and of this sour bread and chicory coffee form a large proportion. In very few schools children have animal food every day. The Germans say that English diet is too concentrated, too stimulating, and they endeavour to improve it by villanous compounds of fruits and vegetables, greasy soups, and putrid cabbage. The meat, generally speaking, is very bad. Calves are killed at six days old, and veal is a cheap and favourite dish; the greatest proportion of beef in the markets is the product of old cows; mutton cannot be had at all seasons; and pork is dear and badly fed. The beef that is eaten is generally in the form of *bouilli*,—that is, boiled to rags; but then there is always "*wurst*" for dinner,—that is, sausages,—and he is a bold man who eats them. At Neuwied, on the Rhine, which abounds in schools patronised by the English, a pickled horse was found in the cellar of a sausage-maker; and, by the way, the most esteemed of foreign sausages, the variety called *Salemi*, is always made of the flesh of young donkeys. And then the drink—do not fancy it is the product of the famous Rhenish vineyards, and which falls so pleasantly upon our palates. No, it is either mawkish beer, or the sourest stuff that ever put to pain and torture the bowels of unhabituated man. And this is not done on a Do-the-boys-Hall system of making money. The Germans fare the same; and the consequence is, there is scarcely a woman of thirty whose teeth—if, indeed, she has any—are not black and rotten, and her breath offensive and polluted; and as for the men, suppose one attacked by acute disease,—pneumonia, for example,—how are you to treat him? Certainly not, as with us, by extensive bleeding; for if you do, such is the weakness of his constitution, that he will never rise again. Still, with all this, foreign education is, in many respects, very desirable; but the only way to gain all its advantages, with as few of its evils as possible, is for the parent to accompany the child, and employ the various masters *under his own eye and personal superintendence*; or, if circumstances compel the child to attend a school, then let it be merely as a day scholar, and even then, not on any account permitted to remain at the establishment during the hours of play and relaxation.

IRELAND.

(From our Dublin Correspondent.)

SURGICAL SOCIETY OF IRELAND.

A Meeting of this Society was held in the Examination Hall of the Royal College of Surgeons, on Saturday, the 20th instant.

Professor JACOB in the Chair.

MALIGNANT DISEASE OF THE PYLORUS.

Dr. Henry Kennedy read the following Paper on a case of malignant disease of the pylorus.

If the question were asked, in what direction medicine has advanced the most, within the last twenty-five years, the answer, as it appears to me would be, in that of diagnosis. The great majority of the works which have issued from the press bear out this remark; whether we take diseases of the brain, chest, abdomen, or uterus. It is not to be wondered at that such should be the case; for, truly, it is scarcely going too far to assert, that a knowledge of the disease we have to treat, is half the cure. It is for the purpose of directing attention to a point in the diagnosis of diseases of the stomach that the following case is brought forward. For the opportunity of seeing the patient, and being able to exhibit the specimen, I am indebted to the kindness of my friend Surgeon Neville. The case was briefly this:—

Case.—A man, about 46 years of age, was attacked with fever two years since. He was a tailor by trade, though, certainly, one would not have guessed so from his height, for he was a man of six feet three inches. He was thin in person; of a well-marked nervous temperament; and of more than ordinary intelligence. He had always been a very temperate man. The fever he suffered from was of such a type as one would expect to meet in such a constitution. One year after it, that is twelve months ago, he began to complain of a series of symptoms referred to the stomach; he suffered from a sense of uneasiness after his meals, attended by distension. The uneasiness soon amounted to pain, and this he described nearly always as of a burning character. This, again, was shortly followed by vomiting, at first occurring now and then, but in a very short time becoming most obstinate and severe, so much so, that he had to desist from taking all solid food, and even fluids, except in

mouthfuls, would not lie on the stomach. At this time he was judiciously ordered, by Mr. Neville, to use nourishing enemata, which were found to be very useful, and were continued, nearly without interruption, for the long period of nine months. In the course of this time a tumor came to be developed in the epigastric region, at first doubtful in its character, but ultimately unequivocal. When I first saw it, it gave me the idea of being the size of a small hen egg; the long axis was transverse, and the tumor lay above and a little to the right of the umbilicus. This was about three months before the patient's death. His suffering was of the same kind as at the commencement, the pain being always described of a burning character. With it he had now all the other symptoms of malignant disease of the stomach, including the coffee-ground vomiting, and one of the forms of hectic fever. The treatment was purely palliative, but for some weeks the patient got very marked relief. About a week before his death I saw him again, when the tumor had diminished somewhat in size. His chief complaint, at this period, was of the sourness of his stomach, and of a sort of salivation, which kept him incessantly spitting; and from which, if he could be relieved, he thought he would get well. I should have stated, that, all along, the tumor had a very marked pulsation given to it. On opening the abdomen, the omentum was observed to be very much contracted and puckered up; the tumor occupied the pylorie orifice of the stomach; but had contracted no adhesions whatever to the parts in the neighbourhood. The stomach itself, and a part of the duodenum, I now present. As a morbid specimen it is worth noting, that it offers an example of both soft and hard cancer; the soft occupying the stomach itself in the form of a distinct ring,—the hard being found in the pylorus, and ulceration existing here to a considerable extent. The liver and pancreas were healthy. Circumstances prevented the examination from being carried further.

Of the three great cavities, the head, chest, and abdomen, the diagnosis of the diseases of the latter would appear to be by far the most difficult. This applies to all the organs contained in it; but to none in a more marked degree than to the stomach itself. It would be a very easy matter to illustrate this by reference to a great number of cases scattered through the works on the subject. But this would be leading us into a wider field than is my wish at present. I shall, therefore, merely glance at three or four cases which have come under my notice within a comparatively short period. Thus, one case occurred in which the patient made complaint of symptoms referred to the stomach; but only for a few days preceding death. He took food regularly, appeared to digest it, and had no vomiting; and yet on *post mortem* examination, the stomach presented one uniform sheet of fungoid disease. In another case, an individual went into hospital labouring under diarrhœa, which no remedies appeared to control. On examination, the intestines were found perfectly healthy, but the stomach was affected with cancerous disease. In a third instance, a gentleman, who had been in the army, suffered for weeks and months from very severe symptoms referred to the stomach. I assisted Dr. Kirkpatrick to make the examination; and yet, if we except irregular thinning of the coats of the organ, —a state which Andral speaks of,—nothing else appeared to be wrong with it. In a fourth instance, which occurred to Dr. Shannon, within the past month, a man of 50 was seized with very violent symptoms referred to the stomach, which proved fatal in nine hours. On examination, an immense rent was found in this organ, which had its origin in a cancerous ulcer. Yet this patient had not been known to have made any complaint of his stomach. The specimen was brought before the Pathological Society by Dr. Lees. (See *Medical Times*, Jan. 13th, 1849.)

In this way I could go on giving cases, each and all different from what followed or preceded, and only agreeing in the one point of their constant mortality. But enough has been stated to show the great degree of uncertainty which even yet hangs over the diagnosis of these affections. In point of fact, they present an endless variety; and which not only applies to the subject of diseases of the stomach generally, but to any particular symptom. Thus, pain may be constant, intermitting, or may never occur at all; or again, the vomiting may, or may not exist. Some have thought that this latter symptom depends chiefly on whether the pylorus be affected or not. I have seen many cases exceptional to this; sometimes obstinate vomiting, with this opening free from disease; or, again, no vomiting, while extensive disease existed here. In the case given this evening, vomiting was very constant, and yet the pylorus, though involved, was quite open. In truth, we only know in part what are the causes of vomiting. The most obstinate cases of it I have ever seen occurred where there was no organic disease of any kind.

The diagnosis of the case which has been given did not present any marked difficulty, at least within the last three months of the patient's life. But, at an earlier period, the question did arise, whether the case was not one of aneurism. I have stated already, that a very marked pulsation existed in the tumor, and to the touch there was not enough to say that it was not an aneurism. In some of these latter cases, too, symptoms referred to the stomach have led the practitioner entirely astray. I have seen such, and even in cases where the aneurism existed within the thorax, the stomach symptoms were so marked as to lead to error in diagnosis. This man's general appearance, however, and the presence of all the signs which are looked upon as most characteristic of malignant disease, led us to a correct opinion of the case.

Whilst the patient was under notice, there were two points observed, neither of which, as far as I am aware, has received the attention it appears to deserve. The first was the diminution of the tumor within the last three months of the patient's life. Now, it is quite possible, that, in cases like the one given, the very fact might be the means of diagnosing a tumor of a doubtful character, situated in the epigastric region, or, indeed, in other parts. Thus it might help to distinguish an aneurism from a cancerous growth, or from gall stones. The observation, however, is not an original one; for, if I recollect aright, Abercrombie notices the fact, though casually, and not as bearing in any way on the subject of diagnosis. The explanation, of course, is, that the ulcerative process diminishes the bulk of the tumor. It could, however, only apply to those cases in which ulceration was going on; in other words, it is a symptom which will not always exist. But of how few symptoms of this, or any other disease, could this be predicated?

The second point was, the mobility of the tumor, not from manual examination, for, in this region, such, I believe, would be nearly impossible, but from the ordinary effects of respiration. In the case given, this was a very marked feature indeed, and had, I rather think, been observed by Mr. Neville before the patient was seen by myself. At each inspiration the tumor was moved downwards at least an inch, and again resumed its place during expiration; and when a forced inspiration was taken, the movement was still greater. Whether it was a more than usually well-marked feature of this man's case, and caused by his remarkable stature, I shall not take on me to determine, for I have not observed it in any similar case. It is quite clear, however, that it is a symptom which, when present, would at once induce us to say, that such a tumor could not be aneurismal. Physiologists, I believe, have ascertained that the organs close to the diaphragm and beneath it, are moved more or less by respiration. Hence, this symptom is only what we should expect. It is, in fact, physiology applied to the elucidation of disease. For both these points, then, —neither of which it strikes me are very usual,—I have thought this case worthy of being brought under the notice of the Society.

SCOTLAND.

[From our Edinburgh Correspondent.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

PATHOLOGICAL MEETING.

Wednesday, January 17, 1849.

Dr. Begbie, Vice-President, in the Chair.

1. Dr. Geo. Paterson read the case of Patrick Macguire, aged 5, who was admitted into his ward of the Royal Infirmary on the 5th December, 1848. After passing through relapsing fever, he was seized (on the 31st December) with sickness, accompanied with wheezing and cough; and, at the same time, became covered with an eruption similar to measles. This eruption soon assumed the character of small pox, not fully developed. He had diarrhœa, which, on the 4rd January, changed into the passing of frequent bloody stools. There was also present, occasional hæmorrhage from the nose and gums. He died at 3 p.m. of the 3rd January. Dr. Paterson exhibited a drawing of the remarkable appearances which were found after death in the colon. There had been pustules, greatly resembling those met with on the skin, and superficial incrustations, most abundant in the lower part of the intestine. Although most medical authorities were opposed to the opinion, that small pox could exist upon the mucous membrane of the intestines, the contrary was maintained, and cases in support of it recorded by Sir Gilbert Blane, Froviep, and others. In Dr. Paterson's opinion, there seemed no good reason to doubt the occasional occurence of such cases; and their rarity might, probably, be accounted for, when it was considered, that the external air could have no influence upon the mucous membrane of the bowels, while the various matters passing along the intestine might readily destroy the characteristic appearance of a small-pox pustule.

Dr. W. T. Gairdner agreed with Dr. Paterson in his view of the nature of the case, and was satisfied that this lesion of the intestine could not be confounded with inflammation and ulceration of the solitary glands of the colon. He described the structure of the variolous pustule in which infiltration of the superficial textures took place, showing its distinction from ulceration of the glands, in which case the infiltration was into the deeper-seated textures. He had carefully examined the parts taken from the body, and found that the disease did *not* extend below the outer surface of the mucous membrane, whereas, had the disease been seated in the solitary glands, it was well known that its progress would have been from beneath the mucous membrane towards its surface.

Dr. Bennett observed, that the experiment of inoculation with the matter taken from the pustules, in such a case, would be the most satisfactory evidence of its true nature.

Dr. Seller requested to know, if anybody who had seen the intestine had doubted the nature of the pustular appearance?

Dr. Gairdner replied, that the character of the pustule was well marked, and that all who had seen it agreed in thinking it that of small pox.

2. Dr. R. J. Mackenzie, in Mr. Syme's absence, showed a dissected preparation of an arm, which had been amputated by Mr. Syme a fortnight previously. (See the description in the *Medical Times* of the 20th inst.) The dissection showed the bones of the fore-arm dislocated at both ends, from the humerus and carpus. The use of the fingers had been so far preserved, that the patient found the deformed hand of great service, especially in knitting, in which she constantly employed herself. Mr. Syme considered the case as particularly interesting in this point of view, as showing what an amount of deformity may exist without the limb being rendered useless, proving how reluctant we should be in performing amputation of limbs, the usefulness of which may be partially preserved. The arm was ultimately removed on account of an intractable sore which had formed over the elbow, from which bleeding frequently took place, more particularly during the menstrual period,—the dis-

charge of blood at that time entirely taking the place of the catamenia.

3. Dr. Halliday Douglas presented to the Society a specimen of aneurism of the left ventricle of the heart. There were two aneurismal sacs, both near the apex of the heart, and communicating freely with the cavity of the ventricle. Each sac was about the size of a chesnut; one empty, communicated with the ventricle by an orifice, having a diameter of three quarters of an inch; the other sac contained a decolorised fibrinous clot, and communicated with the ventricle by an orifice less than a quarter of an inch in diameter. The margin of the orifice of this sac was firm, almost cartilaginous, and perfectly smooth. In several other points of the ventricular surface, there was the appearance of commencing formation of similar sacs. The heart was increased in bulk; its weight was not stated. The ventricles, especially the left, were dilated; the endocardial surface was opaque and indurat The valves were competent. Chronic adhesions of the pericardial surfaces existed in different situations, more extensively on the surfaces of the left ventricle and of both aneurismal sacs. The state of the other organs was not described, except that the kidneys were granular, and the liver healthy.

The patient was a female, aged 30, who had been admitted into the Royal Infirmary under Dr. Douglas's charge, in November, 1847. The symptoms of cardiac disease had not been distinctly developed till within a year of her death. Previous to this, she had suffered from chest symptoms, arising from chronic bronchitis, and she had worn a tracheotomy tube for twelve years.

She was under the care of Dr. Douglas only for ten days previous to death. At that time there was general dropsy, the signs of intense general bronchitis, and a much enfeebled circulation. The cardiac signs were chiefly referrible to the dilatation; but a murmur accompanied the first sound, which was uncertainly more distinct at the apex. The urine was exceedingly scanty, and had been so for a length of time; it was ascertained to have been free of albumen till shortly before death.

Dr. Spittal remarked, that the case was a rare one, and asked if Dr. Douglas had formed any opinion as to the mechanism by which such sacs were produced? Was there ulceration of the membrane lining the ventricle, and a consequent yielding of its parietes during the contraction of the heart?

Dr. Douglas did not think that there was any ulceration—certainly there was no attenuation of the substance of the heart where the sacs were formed. He conceived it quite possible that chronic inflammation of the endocardium had been the primary lesion, followed by loss of tonicity and mechanical expansion of a portion of the heart.

4. Dr. Douglas also produced a specimen of aneurism of the circle of Willis. The sac involved the internal carotid artery, where it divided into its terminal branches, and was about the size of a field bean. It was removed from the body of a woman aged 39, who was not seen by Dr. Douglas during life. She was reported to have been attacked eight days before death with headache and vertigo on ascending a stair. She afterwards became suddenly insensible, and died in the course of two hours. She was stated to have suffered from headache fourteen years previously, when a seaton was introduced and other treatment employed. There was found on dissection a layer of blood effused generally on the surface of the arachnoid, but to a greater extent on the base of the brain. No calcareous deposit existed in the cerebral or other vessels.

Dr. R. J. Mackenzie related a similar case which he had seen some years before in the Infirmary. The aneurism was seated in one of the communicating arteries of the circle of Willis, and was suddenly fatal by rupture.

5. Dr. Wm. Robertson showed a specimen of extensive extravasation of blood beneath the mucous membrane of the colon. The patient had died of cholera, fatal in the stage of collapse; there had been no unusual symptom in the case, except the discharge of reddish brown fluid from the bowels. Stools of the same appearance had been observed in other cases during the present epidemic, but were not always associated with the ecchymosed condition of the mucous membrane.

Dr. W. T. Gairdner spoke as to the very general appearance of ecchymosis in many situations in patients dying of cholera, and instanced the posterior part of the pericardium as a not infrequent locality. In answer to a question by Dr. Spittal, he stated, that, out of twenty subjects he had dissected with that view, he had found one with distinct ecchymosis of the pneumo-gastric nerve,—a condition stated to have been of very frequent occurrence during the former epidemic.

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THE MEDICAL TIMES.

SATURDAY, JANUARY 27, 1849.

THE COLLEGE OF PHYSICIANS AND GENERAL PRACTITIONERS. — VALUE OF A DIPLOMA.

SOME Medical Mecænas in the College of Physicians has sounded a note which has brought up a genuine Triton. Hector's trumpeter paid dearly for his temerity; and we verily believe, that the ancient Corporation in Pall-mall has provoked a warfare in which it will suffer a defeat.

For a series of years, no one ever suspected that it was capable of performing a generous act; but this stigma the College wished to remove, and, within the last quarter of a century, it has endeavoured to find favour in the eyes of the profession by, at least, a show of liberality. Time was when none but Oxford and Cambridge Graduates were eligible to the Fellowship; but now, physicians of other Universities may aspire to this privilege, and even General Practitioners are taught to believe, that, when mellowed by experience, they may, if they please, rise to the dignity of London Physicians. These acts, so apparently liberal, secured for the College some degree of applause, and prevented its sinking into that contempt which useless institutions always deserve. For generations, it had not only ceased to patronize medical science, but it had despised and persecuted its disciples; and it is questionable, whether pride or a wounded conscience urged the flight from Warwick-lane to Pall-mall. In the former temple, many of the children of science had been immolated on an altar erected to Mammon; and it may be, that, in that antiquated building, fancy had conjured up strange forms,—the *manes* of the victims which required to be appeased. We cannot wonder, therefore, that the ancient aristocratic College should migrate; but, as it left behind bag-wigs and gold-headed canes, so ought it also to have relinquished its persecuting spirit.

In our advertising columns, last week, there appeared an announcement of the publication of a pamphlet, entitled, "The Examination of a Rejected Candidate of the Royal College of Physicians of London. By Edwards Crisp, M.D., &c." This gentleman was a General Practitioner, and had become known to the Medical Profession by various works which he had published, and especially a Treatise "on the Structure, Diseases, and Injuries of the Bloodvessels." For this he obtained the Jacksonian prize at the Royal College of Surgeons.

Prior to Dr. Crisp going up for the license of the College of Physicians, he obtained the degree of M.D. at the University of St. Andrews; he, moreover, possessed the Surgical diploma and the Apothecaries' license. If diplomas, therefore, go for anything, he must have been a gentleman of good professional education; but of this we shall speak presently. What we shall now more particularly refer to, is the bearing which this matter has upon the interests of General Practitioners.

In one of the College by-laws, provision is made for the admission of qualified medical men who have not followed the course of education prescribed by the Corporation. The Clause to which we refer runs as follows:—"Quando-quidem fieri potest ut viri sint quidam de arte nostrâ optime meriti, qui tamen disciplinæ medicæ studia non omnino secundum normam a nobis injunctam prosecuti fuerint; statuimus et ordinamus ut, non obstantibus præmissis, siquando horum aliquis, peracto anno ætatis suæ quadragesimo, in Permissorum numerum admitti petat, is imprimis testimonia quàm plenissima de doctrinâ et moribus suis proferat Comitiis minoribus."

From this passage, it is evident the College wishes it to be understood, that General Practitioners, having arrived at forty years of age, may, if they please, present themselves for examination, in order to obtain the College license. This is an excellent regulation, if properly carried out; but the "*is imprimis testimonia quàm plenissima de doctrinâ et moribus*," &c., can, as we shall see, render the "regulation" at any time a dead letter. When Dr. Crisp first applied to the College he was informed that, unless he could prove satisfactorily that he had attended the physicians' practice of a General Hospital, containing 100 beds, during three years, there would be difficulties in the way of his being admitted to examination. Now, we maintain, that all the College should require of a General Practitioner is, in addition to his certificate, or diploma, proof that he is forty years of age, and has been engaged in his profession during the time he has been qualified to practice. With his course of instruction it has nothing to do, as his diploma is a sufficient guarantee that it has been regular and professional.

The College having, at length, consented to admit Dr. Crisp to examination, what was his surprise, on being required to translate into

Latin a passage from a Greek medical author? This he accomplished: but how many gentlemen would be able to do so readily, after having been engaged in medical practice for some sixteen or eighteen years? A youth just fresh from the schools may have Greek and Latin at his fingers' ends, and but little practical experience; twenty years alters the state of things,—and, while he may have forgotten how to decline the Latin article without stumbling, he may be eminently qualified to treat, in the most scientific manner, human diseases. We say, by all means let the young medical practitioner receive the best education, both general and professional; but we would not have the veteran mocked, by placing before him a language to translate with which he was once acquainted, but now, from want of opportunities to study, has almost forgotten The examination of the veteran *must* be different from that of the tyro,—and the man who can treat diseases in the best manner will shed more lustre upon the College than the best classical scholar a University ever produced.

The examination of Dr. Crisp further proves, that the rejection of a candidate is no proof of his want of professional knowledge. Overrun, as we are, by licensing medical corporations, we are accustomed to look to the statistics of candidates admitted or rejected at these various Institutions, and to judge from them of the value of the several diplomas given. The profession, in consequence, has frequently been led to draw erroneous conclusions. Nothing is easier than for a Court of Examiners to reject or admit a candidate; and the most trivial circumstance will sometimes influence their decision. In Dr. Crisp's case, we are led to believe from his Pamphlet, that a former disagreement with one of the Examiners in the treatment of a case of rheumatic fever led to his rejection at the College of Physicians. Certainly, it was not from the want of general knowledge, as the President and Censors stated, if we may judge from the questions and answers published; and it is the height of folly to suppose, the Apothecaries' Society, the College of Surgeons, and the University of St. Andrew's had each successively been imposed on by an ignorant candidate. The diploma of either of these Corporations is as respectable as that which the London College of Physicians furnishes; and the latter Institution has not *prestige* enough to escape the charge of incompetency or of favouritism in rejecting a candidate who has proved himself fully competent to practise his profession.

The College has a long black catalogue of sins registered against it, for which atonement can only be made by future good conduct. As yet, it has done but little for the advancement of medical science, though established and endowed for this very purpose. Pride and persecution have marked its career, and hence, for a long series of years, it has been exceedingly unpopular. A quaint writer of the Sixteenth Century, one Dr. Gideon Harvey, Physician in Ordinary to His Majesty, thus speaks of the Corporation in his time :—"This famous conclave is the eldest quack synagogue, consisting of a physic pope or patriarch, and a competent number of medical cardinals, who, being grown ancient, covetous, and, through forgetfulness, ignorant, are to govern the rest, and, whenever they are consulted, they are to impose upon the juniors their pretended long experience, which they are to embrace with the same implicit faith the Turks do their Alcoran. But, if refractory, they are to be convened before Il Consiglio Picolo, which is their purgatory, whence they may be received again into the bosom of the conclave; but if, afterwards, they prove incorrigible, the conclave sits upon them, and they are then damned, and utterly expelled, without redemption."

The general practitioners have nothing to expect from this College, the pretended clause in their favour being easily evaded; and as to its diploma, it is not a whit better than those granted by the other medical corporations of the empire.

CITY NUISANCES.

It seems agreed, on all hands, that we are a "practical" people—utilitarians—men of business—deep in science, too, and well read in philosophy. There is scarcely a journal—from the mighty *Times* to the smallest of its competitors, or imitators, if such they may be termed—hardly a periodical or publication that, to this effect, does not contain a gratulatory sentence. But, notwithstanding this, there are certain points on which we propose to join issue; and, as these will be seen to relate to our sanitary condition, they clearly come within our province. So many and various, indeed, are the subjects that press upon our attention, that we are puzzled which to choose—where to begin. But first, although at the risk of being accused of treading in other men's steps, we shall touch upon the Great Nuisance — the Smithfield Nuisance. Our cattle, when scattered upon a thousand hills, or when dotting our verdant plains, present a pleasing, as well as a profitable spectacle. But when, for man's consumption, these poor animals are brought together, *en masse*, into the great area in the very centre of our City, who, of any feeling, but must feel — first, for the misery of the brutes themselves,—in summer, footsore, panting, and without water; in winter, cold, shivering, and shelterless. For it must be remembered, how soft and pleasant, in the former, are their pastures; in the latter, how warm and comfortable their sheds. Next, a regard to *self* engages the attention. And who shall describe the amount of filth thus introduced into a focus,—the unsanitary influences —the bellowings, shoutings, drivings through narrow and crowded streets—the cruel goadings and their demoralising effects—the alarms and accidents, not to notice the additional evil of insect life in abundance. All these things cry aloud with one mighty cry for redress. But what is the response? Vested interests! corporate dues! injury to the surrounding neighbourhood! &c. &c.—Silence! The truth is, that if we really were the kind of people we assume to be, a remedy would soon be found. Smithfield's vast space would be enclosed instead of enlarged, and markets would speedily be established—east, west, north, and south—outside the bounds, to supply the wants of about half a million human beings, occupying each of the four quarters of an overgrown metropolis. But, it is said, what is to make up for the great loss and injury that would thereby accrue to numbers, and to the corporate body? One sentence is sufficient. Individual interest must give way to public good; it is not only the law of the land, but the law of Nature. So long as Smithfield exists, we stand condemned as a sensible people.

Our second subject, also, may be said to be stale, for it relates to our sewers; but in this, as in the Smithfield nuisance, we are only reminded of our adherence to our old habits as a people. How many years have both the one and the other been considered an evil! They yet remain, and, therefore, demand continued discussion. The succession of the solitary drop of water wears away the stone. In sewerage, the principle laid down, of the weak giving way to the strong, is carried out in one of its most irritating attributes; for the man who dwells in a street or corner of the City, without the line of sewerage, (and there are many such,) is compelled to pay as heavy a rate for that which he does not possess, as his more fortunate neighbour; nay, even although his workpeople amount, as we know to be the case in some instances, to 80 or 100 individuals. Let any person enter such a dwelling, in the confined air of the City, and on what is curiously termed a "muggy" day, and then let him ask if there be no just cause of complaint. It is not a sufficient answer to say, that the City adds yearly to its drainage as many yards as its funds will admit. We fearlessly assert, that a people, wise as well as wealthy, would have found the means, in a much smaller space of time, of giving effective relief. We decline, on this point, still further descending to particulars, not because they are not at hand, but because we wish to deal generally, as well as generously, with public bodies.

Then, again, let any one have to pass certain gratings of our sewers,—and here we cannot help noticing the one at the north-east corner of Lincoln's Inn—enough to taint the atmosphere of a nation, almost equal to the smell lately alluded to in our columns, of the environs of Paris, and which our nose will never forget. But these things are not confined to London; for we remember, some few years ago, walking along the upper part of one of our sea-side towns, and being struck with a close resemblance to the Paris smell. We searched out the cause, and found that it proceeded from a knacker's-yard and a receptacle of filth, surrounded by dwellings in the fashionable town of Brighton! It is now removed, and so we hope will soon be our sewer nuisance.

The third item on which we shall remark requires most delicate management; but a Medical Journal may be allowed a liberal license. What man, woman, or child, has not, at one time or other, in the crowded and interminable streets of London, been exposed to dire and necessitous distress, for want of one or both of the means of relief? They "manage these things better in Paris," at least publicly. There, in the public ways, you may see a proper provision for relief. We have been wise enough at last, and we hail it as a good omen, to erect near the 'Change, and at the back of the Bank, well

contrived places of resort; and let us hope that these, and those of another kind, will be properly and promptly extended, and kept under watchful care. What can be more offensive or indelicate, than the appearance of our courts and other by-places, especially near to public assemblies, and at even-time? What more unsightly than the places attached to our public-houses? Who more cleanly in their homes, or more nicely clean in their persons, than the generality of the inhabitants of the city and suburbs of London? In these matters they are not to be excelled; and yet they tolerate these public nuisances.

We acknowledge, that the latter subject is difficult in all its bearings; but public health and public morals justly take precedence in civilised states. We regard the manner in which these things have been managed by the great Railway Companies as not one of the least of the benefits that they have conferred upon the community; and if the City authorities are incompetent, from whatever cause, to deal with this and the former points to which we have alluded, let the general Government step in, superintend, and remedy these growing evils.

CHOLERA, THE PRECURSOR OF GREAT SANITARY IMPROVEMENTS.

Cholera is a singular disease, and appears destined to accomplish some extraordinary revolutions in society. It is yet doubtful whether we must consider it a scourge or a blessing; for, while it is cutting down human beings without mercy, it is indirectly accomplishing reforms which physicians and philanthropists would in vain attempt without its assistance. Hardly has any calamity happened to an individual, to a city, or to a nation, without some good arising from it. From Ilium's ashes sprung the Eternal City; and, if we are to credit an ancient oracle, Pandora's box gave us, for all the complicated evils it contained, the greatest and best of earthly blessings—hope.

Cholera—the scourge of nations in the Nineteenth Century—is teaching us lessons which will benefit future generations; for, while it plays havoc with human life, it is palpably showing us whence it derives its existence, and how it can be weakened. No disease has produced greater alarm, or excited greater attention, than this. It appeared at a time when science was able to study it with greater advantages than in any former period, and in a place where men of enlightened minds could apply their energies to the unraveling of its mysteries. Had its ravages been confined to the sunny plains of India, where it sprung into existence, it might have remained for ages yet to come the "*opprobrium medicorum.*" Three European visitations have, however, decided its fate, if Governments are but wise enough to attend to the lessons which the members of the Medical Profession give them. The birth-place of Cholera was a swamp; the places of its power, marshy and undrained flats; its victims, those in whom the vital powers are enfeebled from any cause, or are not perfectly developed.

The advent of this disease to the British Islands in 1831-2 was not without its advantages. The members of the Medical Profession, baffled in their efforts to effect cures, sought the means of prevention, and an impetus was given to sanitary improvements, which, when fully carried out, bade fair, not only to disarm cholera of much of its power, but typhus, scarlatina, and small-pox, also. For nearly sixteen years the efforts of sanitary reformers to rouse the Government and people from their apathy appeared almost vain; another threatened visitation of the Asiatic pestilence, however, aided them in their good work, and forced through the Legislature a "Public Health Bill,"—a kind of first-fruits of the coming harvest.

It has been proved, beyond all doubt, that cholera and fever delight in the same localities, and attack the same classes; it is fair to conclude, therefore, that the same causes, only modified by circumstances, operate to produce the two diseases. We are now pretty well acquainted with the fact, that stagnant ditches, stinking cess-pools, and crowded dwellings, generate typhus; so, also, do they cholera. Dumfries, now scourged by this latter pestilence, we are told, remains with scarcely a single improvement since 1832. Glasgow, the dram-drinking city, has had, within a few years, passed into it ten thousand poor Irish, without an additional house for their reception. In that city, Mr. Grainger informs us, where the disease is raging, you meet with nothing but filthy and disgusting sights; and in Hamburgh, those who resided near the *embouchure* of the ditches and canals, suffered four times as much as those who lived in the upper part of the town. In London, the first victims of the cholera were those who lived in low and damp situations, or were exposed to the baleful exhalations of stagnant ditches or filthy sewers. The recent outbreak amongst the children of the Pauper Asylum at Tooting, is another proof of the power of noxious gases to produce disease when the vital powers are enfeebled from any cause. In the short space of only a few days, nearly three hundred individuals of tender years were seized—a large number of whom died. Such a visitation was calculated to arrest the attention of the Legislature and the Government. Mr. Grainger, the Medical Inspector of the Board of Health, immediately visited the place, and also a large number of medical practitioners. The establishment appears to be composed of detached buildings, some of them suffering from the effects of age, and situated over a ditch. Six weeks ago this ditch had been cleaned out by the boys, and the matter it contained had been deposited on the bank, in order eventually to be used as manure. In an adjoining field was another stagnant pool, of large dimensions, connected with a huge tank, into which all the refuse of the Surrey Lunatic Asylum deposits itself. The filth of this receptacle was within two inches of the surface of the ground, and emitted a most offensive odour. It was, on one side, dammed up, in order to manure the adjoining land. The first intention of the Board of Health was to have these filthy places cleaned out, and a body of navigators was sent down to commence operations. It was, however, afterwards determined to remove the contents by flushing, as there was a good fall of water in the neighbourhood. A detachment of fifty "navvies," in their jack-boots, armed with pick-axes, shovels, and wheel-barrows, were sent down to Tooting to cure the cholera. Verily, this is an age of wonders! The inhabitants might well be astonished. Mr. Grainger, however, understood *his* mission. The service of the "navvies" was not at this time employed, it being considered better to quietly carry off the filth by water, as a number of children yet remained in the establishment. The members of the Profession are wonderfully honoured in having such stout and valiant men for a rear-guard as the "navvies." They will, doubtless, prove a real Macedonian phalanx against the cholera, if the weapons of their warfare are diligently and constantly employed. Had the service of these illustrious worthies been long ago called into operation for sanitary purposes, we might not, perhaps, now have been lamenting so many deaths produced by typhus and cholera.

In the excellent Lecture of Mr. Grainger, which we recently published, he there shows most truly, that the great epidemics which formerly desolated cities and provinces have been got rid of, not by medical science; that is, we conceive—not by the employment of medicinal agents, administered in accordance with the principles of medical science,—but by sanitary measures. Hereafter, the grand specifics against the invasion of the cholera will be well-built towns, good sewers, pure water, clean ditches, and suitable food and raiment for the people. Hygiene is an important branch of medical education, and our brethren must be the principal instructors of the public in all that relates to their health, as well as their attendants in the hour of sickness.

Cholera will prove a valuable aid to every order of philanthropists. The fear of it will help the cause of Temperance Societies, by reclaiming many drunkards; it will make baths and washhouses flourish, by urging those, who were once filthy, to cultivate habits of cleanliness; it will benefit many branches of trade, by causing large sums of money now wasted to be expended in those articles which really conduce to the comfort and happiness of mankind; and it will give the members of the Profession the high satisfaction of having been the principal agents in accomplishing such important reformations.

THE TOOTING CATASTROPHE.—VERDICT OF MANSLAUGHTER AGAINST MR. DROUET.

The Coroner's Inquest, held at the Globe Tavern, Gray's-inn-road, on the bodies of four children, who died in the Royal Free Hospital, soon after their removal from the establishment at Tooting, has been closed, and a verdict returned, "That Bartholomew Peter Drouet is guilty of manslaughter." The announcement, we are told, was received with some manifestations of applause by the spectators assembled in the room.

A more serious outbreak of disease than that at Tooting,—call it cholera or what you will,—scarcely ever occurred in this country, nor were the causes ever more palpably manifest; and a Coroner's Inquest was the necessary sequence of so sad a catastrophe.

From the facts which have been elicited, we

are led to conclude that the children at Tooting were seized with a rapidly fatal disease, in consequence of a culpable disregard of hygienic rules. The building in which these unfortunate beings were located was in the vicinity of ditches and ponds of filthy water, from which emanated gases injurious to health. The ventilation of the estabishment was of the most defective kind; one of the surgeons stating, in his evidence before the Coroner, that the total atmospheric contents of the 44 dormitories amounted only to 196,705 cubic feet. Deducting 1-20th for bedsteads and the children, there would be scarcely 136 cubic feet of respirable air for each individual. This quantity, with doors and windows closed, would not support life for more than eight hours. In the school-room occupied by the boys, there would be only 37 feet for each.

It has been doubted by some, whether the disease is really the Asiatic cholera; and there are certain symptoms which have led professional men to conclude that it is rather a species of asphyxia. That the present state of the atmosphere predisposes persons to attacks of cholera, none can doubt; and therefore it is that the "Tooting disease" assumes this peculiar form. Under other influences, we should have had the deadly typhus, which, while it might not have carried off the patients with equal rapidity, would have proved as extensively fatal.

There is one circumstance connected with this disease, which we consider it proper to notice, and that is, its decidedly non-contagious character. Only one or two of the adults connected with the establishment have been seized, and there is no proof that the children have carried the malady to any of the places to which they have been removed.

This catastrophe will lead to these good results: Workhouses will henceforth be constructed upon principles more in accordance with the science of hygiene; paupers will be better clothed and fed; and a greater regard will be paid to them when affected with sickness. Should these beneficial changes follow, we should hope that even Mr. Drouet will not lament that a verdict of "manslaughter" has been returned against him.

The Jury regretted that the Poor-law Act was quite insufficient for the purposes for which it was intended. However defective such Act may be, we maintain that it no way sanctions the keeping of pauper children in filth; their being subjected to bruises, from kicks, blows, and other cruel violence; or their being fed on "bill-stickers' paste," (to use the words of the Deputy-Coroner,) and out of hog-tubs, The Poor-law Act is sufficiently stringent to prevent the perpetraton of these things.

ELECTION OF OFFICER OF HEALTH FOR THE CITY OF LONDON.

The election of Officer of Health for the City of London took place on Tuesday last, and, as was expected, Mr. Simon was appointed to fill the situation for one year. Mr. Williams, of Farringdon Ward, on moving that a Committee be appointed to consider the duties of the Medical Officer, said he was of opinion that the whole Medical Staff of the City Unions should be connected with the sanitary regulations. That Staff consisted of eleven men of great professional experience, who visited all parts of the City in which disease was likely to exist, and he would wish to see them occupy the place marked out for Mr. Simon, who could not act in so extensive an arena without the assistance of the Commissioners themselves, or of those men whose high capabilities could be brought to bear effectively upon any dangerous epidemic, however general. He therefore proposed, that the 500*l.* per annum should be divided amongst the Union Medical Staff. The motion of Mr. Williams was overruled, and no provision was made at the meeting to reward the City Union Surgeons for the duties they will have to perform under the new law.

This we consider to be an act of injustice towards them, as it is impossible that effective sanitary regulations can be carried out without their co-operation. No class of men can be so well acquainted with the abodes of misery, and the localities which, from their neglected condition, are foci of disease. Mr. Simon already feels the difficulties of his situation, and earnestly solicits the support of the various authorities who are interested in promoting sanitary improvements. Among these must be ranked the Union Medical Officers; and to deny them a moderate stipend for additional duties, is both unjust and impolitic.

The proposition which they have made, is, in our estimation, one to which the City authorities cannot do better than accede; it is, that they should be allowed 50*l.* per annum each in addition to the salaries allowed by the various Unions for medical attendance on the sick poor.

We cannot conceive by what process of reasoning it can be proved, that because a medical gentleman engages to attend the paupers of a Union for a certain sum, which, in a majority of instances, is barely sufficient to meet the expenses he incurs, he should be required to act, in cases of emergency, as an officer of health without fee or reward. If the law sanction such a thing, it is the duty of the whole Medical Profession to demand, in the ensuing Session of Parliament, an alteration. Without this, it will be vain to expect justice at the hands of Poor-law Guardians. We have had too many specimens of their illiberality, to suppose that epidemic cholera will make their consciences sufficiently tender to prompt them to increase the stipends of their medical officers. Instances enough have already occurred, to show that guardians intend resisting to the utmost the just demands of medical men. Mr. Deputy Harrison, on Tuesday last, at the City meeting, opposed the Petition of the Surgeons of the London Unions; and he hinted that the Commissioners of Sewers would rely upon Boards of Guardians to furnish Mr. Simon with all the information which he should consider necessary to obtain in performing the duties of his office.

This hint will not be lost upon the worthy gentlemen for whom it was intended; and we shall soon hear of their imposing additional duties upon their already ill-paid medical officers. The tale of bricks will be demanded, but no straw given; and if the oppressed are not exactly charged with being idle, they will with being avaricious.

We again repeat, that redress can only be obtained through the medium of the Legislature; and the Union Medical Officers should lose no time in sending Petitions to Parliament. We are sure, also, that the "Convention," whose labours have been so abundant and praiseworthy, will early move in this matter; aud we hope that earnest, persevering, and united effort will be crowned with success.

EXTRAORDINARY ELECTION OF A SURGEON TO THE SUFFOLK GENERAL HOSPITAL.

At the moment of going to press we received, from a valued Correspondent, the result of the Election of a Surgeon to the above Institution, vacant by the resignation of Mr. Coram. The candidates were,—Messrs. Kilner, Newham, and Heane. A *few minutes* before the closing of the poll, the numbers were,—Mr. Kilner, 270 votes; Mr. Newham, 87; and Mr. Heane, 77. Mr. Kilner, having a professional call, left the Hospital, considering, very justly, his election certain; but Mr. Coram, the retiring surgeon, as soon as Mr. Kilner was gone, presented 400 *guineas for* 200 *votes*, which he immediately gave to Mr. Heane, who, consequently, had a majority of five votes over Mr. Kilner, a member of the College, with the additional qualification of L.S.A. Thus it will be seen that Mr. Heane attained his appointment by the purchase-money of his friend Mr. Coram.

So strong is the public feeling against this transaction, that the Medical Staff of the Hospital at first contemplated resigning in a body; they have, however, deferred taking any step at present. The Committee held a meeting last Wednesday, when a protest, signed by the principal part of the Resident Governors, was presented, calling upon the Committee to declare Mr. Kilner elected, or to convene a special meeting of Governors to consider the question, and, in the meantime, to suspend Mr. Heane's admission to the duties of the office.

EDINBURGH ANÆSTHETICS. DR. SIMPSON AND OUR DUBLIN CORRESPONDENT.

[To the Editor of the Medical Times.]

Sir,—It appears, from a very long letter, in your Publication of last week, that Professor Simpson, of Edinburgh, is very wroth with me, because I have informed your readers that serious charges have been made, impugning his professional conduct. I am not surprised at the learned Professor's ire being excited at the publication of such charges; but why should he pour out the vial of his indignation upon me, who am the mere reporter of other men's sayings or writings? Would it not be strange, if the head of the Foreign Office, at the time that the British Ambassador was forced to leave Madrid, had fulminated a philippic against the *Heraldo* for reporting the insult? Yet Lord Palmerston would have acted just as reasonably in abusing the printers' devils, as Dr. Simpson has done in attacking your Correspondent, while he permits the real delinquent to escape.

But Dr. Simpson may say, that I have given currency to the slander, and therefore, if not the originator, am equally responsible. There might be some force in this position, if I had been the first to publish the charges in question; or if I had reported them on light authority. But when these charges were publicly enunciated by a University Professor, in an

address to a learned Society,—and when these charges were repeated in an article published in the *British Record*, and in a widely-distributed Pamphlet, by no less a person than the President of the King and Queen's College of Physicians,—it is ridiculous to talk of them as "a *rumour which seems to have been floating about the professional circles of Dublin." Dr. Simpson wants me to keep that a profound secret which I myself heard announced in a public oration, and read in periodicals and pamphlets!

Dr. Simpson seems to think that I have misstated the charges made against him. He has certainly himself misstated them. I never said, that Dr. Montgomery was "indignant;" the word does not once occur in my Report of his address.

In conclusion, Sir, as I have neither originated the charges against Dr. Simpson, nor given them currency without due warrant, I do not consider an investigation into their truth as any part of the duty of your

DUBLIN CORRESPONDENT.

* The statement, that the report was *rumour*, originated with the Editor M. T.

REVIEWS.

Physiological, Anatomical, and Pathological Researches. By JOHN REID, M.D., Fellow of the Royal College of Physicians of Edinburgh, Chandos Professor of Anatomy and Medicine in the University of St. Andrews, &c., &c. 1848. Edinburgh: Sutherland and Knox. London: Simpkin, Marshall, and Co., and S. Highley.

Among the earliest friends of our student life was John Reid, and well do we remember the kindliness and patient forbearance with which he drilled into us our first lessons in anatomy and physiology. The same kindliness of disposition which then distinguished him has accompanied him through life, endearing him to all who were brought in contact with him, and calling forth the liveliest regrets when it was known he was labouring under what was supposed to be incurable disease, and that, ere long, death would claim his victim. But not only did the kindliness of his youth follow him to his prime, but also his patience and his perseverance; and he became eminent as a laborious and indefatigable investigator into scientific truths. It was a matter of regret to all, that his researches, hitherto made known in periodicals and pamphlets, and copied into text-books and the compilations of others, were not likely to be collected and revised by himself, and given to the world in a less ephemeral and more satisfactory form. Happily, however, surgery has snatched him from an impending and early fate, and, as we trust, restored him to health and strength, to continue what we hope the volume before us will form but the first of a lengthened series.

We hold, as weekly journalists, it is our province to do little more than to inform our readers of the opinions and views that are given to the world, and to place them *au courant* with all that is going on in the medical literature of the day; and, indeed, in the great mass of information that we thus weekly lay before our readers, we have no space for lengthened critical reviews, which are too often made a mere vehicle—a peg upon which a reviewer may hang some favourite theory or doctrine of his own, four-fifths of the readers being all the while as fully capable of appreciating an author's views as the reviewer himself, were these distinctly and analytically set before him; and it is astonishing how little is the space these will sometimes occupy; how "fine by degrees" they become; how "beautifully less," when stripped of all extraneous and often meretricious ornament, they are exposed by the pen of the *précis* writer in all their unadorned and simple nakedness!

"The papers," says Dr. Reid, in his preface, "printed in this volume, have, with the exception of two, been published in periodical journals within the last thirteen years. As in several of them, especially in those containing the results of experimental researches on different physiological questions, I took occasion to give a *resumé* of the labours of those who had previously investigated the same subjects, I have added in the form of appendices, placed at the end of the papers to which they refer, an account of the results arrived at by those who have been subsequently labouring in the same field, and have pointed out in how far they agree with or differ from those I obtained. The appendices are included within brackets, to distinguish them from the original papers; and one of them is of considerable length, occupying thirty-seven pages. In reprinting these papers, I have not scrupled to make verbal corrections where it was thought advisable; but, special care has been taken not to alter the meaning of any passage, either by introducing new words, or by withdrawing the old, so as to change the character of the statements and opinions they originally contained."

The volume contains the following articles:—

1. On the relation between muscular contractility and the nervous system.
2. On the order of succession in which the vital actions are arrested in asphyxia.
3. On the effects of venesection in renewing and increasing the heart's action under certain circumstances.

4 and 5. An experimental investigation into the functions of the eighth pair of nerves, or the glosso-pharyngeal, pneumogastric, and spinal accessory.

6. On the effects of lesion of the trunk of the ganglionic system of nerves in the neck, upon the eye-ball, and its appendages.
7. On some points in the anatomy of the medulla oblongata.
8. On the anatomical relations of the blood vessels of the mother to those of the fœtus in the human species.
9. Injections of the vessels of the fœtus, to show some of the peculiarities of its circulation.
10. On sensational and emotional reflex actions.
11. On some points in the anatomy and physiology of the heart.
12. On the measurements of the heart.
13. Tables of weights of some of the most important organs of the body at different periods of life.
14. Some observations on the structure of the mesenteric glands in the balaenoptera rostrata.
15. Some observations on phlebolites.
16. Three cases of partial hypertrophy of a portion of the organs of voluntary motion.
17. Case of monstrosity by inclusion: also a case where both kidneys were placed on the same side of the body.
18. Case of disease of the spinal cord, from an exostosis of the second cervical vertebra.
19. Report on the epidemic fever of Edinburgh.
20. Observations upon the statistics and pathology of the continued fever of Edinburgh.
21. Case of obliteration of the vena cava superior at its entrance into the heart.
22. Contributions to forensic medicine.
23. On the value to be attached to experiments on the nervous system.
24. On the effects of the entrance of air into the veins.
25. On the cerebral circulation.
26. Anatomical and physiological observations on some zoophytes.
27. On the development of the ova of the nudibranchiate mollusca.
28. Observations on the development of the medusæ, and an account of a new actinia.

Of these, all except No. X. and No. XXIII., have appeared in various periodicals, and are probably already familiar to the reader. We, therefore, confine our analysis to the two papers now, for the first time, published in the volume before us. And first of that, "On sensational and emotional reflex actions," concerning which, very intricate, and but little generally understood subject, we would remark, that there are four modes by which muscular action is excited, and by which the most remarkable phenomena of animal life are manifested; and, these taking them separately and independently, imply an ascending complicity of nervous structure. Thus, the first or simplest is that of direct stimuli applied to the muscular fibre, as in the heart's circulation, and the digestion and assimilation of the stomach and intestines. This action is carried on without the agency of the central organs of the nervous system, and is, consequently, an involuntary kind of action, and one of which the animal is unconscious. The next kind is what has been termed the excito-motary movements, and which require for their manifestations a spinal cord commencing at the optic lobes, with the corresponding nerves of sensation, motion, &c. &c. The impression in this case is first produced upon the external filaments of the efferent nerves, as on the skin for instance, from whence it is conveyed to the spinal cord; here a motive impulse is excited and instantly conveyed by the efferent nerves to the muscles. In general, this reflex movement is accompanied, or called into action, by a sensation; but, in other cases, there are grounds for believing, that these motions take place independent of all sensation and uninfluenced by volition. It is probable that most of the actions of the lowest classes of animals are of this latter kind. Dr. Reid illustrates the muscular movements dependent on the sensations and emotions, such as nausea and vomiting arising from the muscles of the diaphragm and abdomen being excited into action by disagreeable smells, by impressions upon vision, as unsteady rolling motions or disagreeable sights, or even by the brain excited by the recollection of any of these disgusting sensations. Then, again, the convulsive movements of the chest and face, constituting laughter, may be caused by the tickling of the soles of the feet, as readily as by exciting the brain to a sense of the ludicrous. When an object is thrust near the eye, although it does not touch it in the slightest degree, a warning impression is instantly communicated to the nervous centre, and as instantly are motor powers directed outwards to the muscles of the eyelid. Severe pain transmitted from any part of the body to the brain, immediately set in action the muscles of the face and chest; the jaws are convulsively gnashed together; the sides of the mouth are drawn outwards, exposing the teeth; and the breast heaves and swells with agonising throes; or the impulse is communicated to the larynx, causing those groans and cries which are equally irrepressible by the most stoical man as by every class of air-respiring animals. The stimulus of intense cold on the external skin, communicated inwards, gives rise to that muscular shivering of the whole body and chattering of the teeth which so well characterise the houseless and starving wretches of our streets. Nor are the influences of the mental emotions less conspicuous, bringing out so distinctly the passions of joy, fear, hope, despair, as depicted in the natural physiognomy of men and the lower animals. How exquisitely the finer shades of these are displayed in the countenances of children and females who have less control over their natural emotions than sterner man! In a hygienistic point of view the effects of joy or grief on the heart's action, the stomach, the capillary circulation, the skin, the kidneys, and the liver, are of more importance than all the changes of the elements or the effects of food or climate. Hope, serenity, and joy, effect wonderful reflex actions in the whole organic apparatus, exciting the system into healthful operation; while grief, terror, despondency sink and depress the springs of life.

"It is not unusual to find," says Dr. Reid, "an army, when flushed with victory and elated with hope, maintain a comparative immunity from disease under physical privations and sufferings, which, under the opposite circumstances of defeat and despair, produce the most frightful ravages."

There are certain motions and actions, the effects of habit and long use, which become, in fact, reflex, and are performed as unconsciously as many of those properly so-called *excito-motary*, which Dr. Reid might have noticed. We wish space would have allowed us to allude to the experiments Dr. Reid adduces, confirmatory of Haller's view of a distinct power called muscular irritability; or, at all events, demonstrative that such irritability is not immediately dependent upon the central nervous system.

In the paper, No. XXIII., "On the Value to be Attached to Experiments on the Nervous System," Dr. Reid remarks, that such are likely to lead to erroneous conclusions where a correct appreciation is wanting of the evidence they yield. In all ex-

periments on living animals there is this to be taken into account, that lesions of one part, and especially of the nervous centre, have an effect upon the whole complicated and intimately interwoven machine; and hence it is that, in similar experiments by different individuals, we have often the most discordant results. Thus, for instance, the disappearance of a function after the removal or injury of a certain portion of the brain is no certain proof that this function was connected with the removed organ; but, on the other hand, if a certain function be hypothetically appropriated to a particuliar organ, and if, on removing this organ, the function be still exercised, then there can be no reasonable grounds for denying the efficiency of the experiment to settle that particular question. Thus, if after the removal of the cerebellum the voluntary movements be either imperfectly performed or destroyed, we are not entitled to conclude that the cerebellum is the seat of these functions; but if, after the cerebellum has been removed these functions remain still unimpaired, then the conclusion necessarily follows, that the latter have no connexion with the former. It is only after repeated and careful comparative trials that a negative experiment can be admitted as evidence. Thus if the portio dura nerve be cut, and it is found that the sensibility of the face remains perfect, although the power of muscular motion be lost, we are entitled to conclude, that the sensibility of the face is not due to the portio dura; but it is not until after repeated experiments give the same results, and we find that, after dividing the fifth pair, the only other nerve distributed on the face, that the very opposite results follow, viz., loss of common sensation, with persistence of the voluntary muscular movement, that we are warranted in concluding the voluntary movements of the face to depend upon the integrity of the portio dura.

We take our leave of Dr. Reid with great regret, for the general character of his volume is patient and accurate research, guided by sound and deliberate judgment. We strongly recommend all its contents to the attention of our readers, particularly the papers Nos. 4 and 5, on the eight pair of nerves, which are elaborate and good, and No. 8, on the relations of the mother and fœtus, which is both original and conclusive.

The Training Institution for Nurses and the Workhouses; an Attempt to Solve one of the Social Problems of the Present Day. By Edward Sieveking, M.D., &c. London: Williams and Norgate. 1849. Pp. 22.

Some time ago an announcement was put forth, that it was the intention of certain benevolent individuals to establish "a training institution for nurses;" and, when we announced the fact in the *Medical Times*, we remarked, that the institution appeared better calculated to send forth a class of religious females to administer spiritual instruction than to afford efficient aid to sick persons. The nurses, or "Sisters of Charity," were to be under the control of an unmarried clergyman of the Established Church, and they were to have no immediate connexion with the great metropolitan hospitals. It seems to us a strange way of fitting persons for the duties of nurses by putting them under a short course of religious discipline; for, we conceive, that the most efficient attendants on the sick are those who have been trained in the wards of our hospitals. If philanthropic individuals are disposed to found an institution for the training of nurses, we would council them, by all means, to choose, as head of the establishment, a duly qualified medical practitioner, of high character; at the same time having a strict regard to the moral character of the females to be instructed as nurses.

In the scheme to which Dr. Sieveking refers, in his Pamphlet, it is proposed:—

"1. That a Central Committee be formed in London, consisting of clergymen and medical men, and others interested in the project, for devising the means for carrying out, in the speediest, most effective, and comprehensive manner, the proposed workhouse visiting system,—that they enrol the names of ladies and gentlemen willing to co-operate with them,—and that they encourage the formation of Local Committees, composed, in a similar manner, of the clergy, the members of the medical profession, and others.

"2. That the co-operation of the various Boards of Guardians be at once solicited, and that it be distinctly expressed, that no undue interference with the political machinery of the workhouse system, nor any increase of taxation, be intended.

"3. That the Local Committees determine with the respective Boards of Guardians upon the specific manner in which the general plan may be carried into execution, and that they keep up a relation with the Central Committee, so as to act as much as may be expedient with its concurrence.

"4. That the lady members form distinct Committees, to which the Honorary Secretaries, and the medical man appointed for that purpose, be allowed access. Any official communication between the Ladies' and the Gentlemen's Committees to pass through the Honorary Secretary.

"5. That the Central Committee at once place itself in relation with the existing Institution for educating nurses, so as to secure, as far as compatible with the mutual objects, a cordial co-operation.

"6. That all the expenses incident to the execution of the project be defrayed by private contributions, but that it be an acknowledged object of the Institution to diminish the Poor's-rates, and to become self-supporting; therefore, that the nurses be sent out—

"*a.* Gratuitously to the poor of a district, application being made upon the certificate of a qualified medical man;

"*b.* On terms of consideration, to be fixed by the clergyman of the district and one (or two) members of the Committee, to persons in better circumstances; and

"*c.* At a definite charge to those in easy circumstances.

"7. That the nurses be allowed to receive no pecuniary remuneration from the families they attend, and all monies due for their services be paid to the respective Treasurers.

"8. That the nurses be divided into three classes: *a.* those who have entered into a general agreement to serve; *b.* those who have acquired the right to a certain low rate of remuneration; and *c.* those who, by a certain length of service, and good conduct, are qualified for the highest rewards that may be at the disposal of the Central Board, either in the shape of pecuniary gratification, or of an admission to the Model Institutions.

"9. That the Committees of this Institution place themselves in relation with the District Visiting Societies, and solicit their co-operation."

DISTRICT LUNATIC ASYLUMS IN IRELAND.

[To the Editor of the Medical Times.]

Sir,—In your publication of the 13th instant, there is an Article on the subject of the District Lunatic Asylums in Ireland, which is calculated to produce an injurious impression of the management of these institutions, and I beg permission, through your Journal, to make a few observations in reply, more particularly with reference to the one with which I am connected.

In a comparative view of the number of recoveries which have taken place in the various Asylums, it is stated, that in some they amount to 25, 28, or 29 per cent., while, in others, the Richmond and the Maryborough for instance, they are as low as 13 per cent. I do not know what mode of calculation has been employed by the compiler of the table from which you quote; but I would remark, that no comparative statement of any two Institutions is of value, unless all the circumstances of each are fairly taken into account. Dr. Thurnam, the highest authority on the subject of the statistics of insanity, adopts, as the freest from objection, a calculation of the number of recoveries on the number of admissions. Applying this rule to the Richmond Asylum for a period of ten years, ending Dec. 31st, 1848, the admissions during that time having been 876, and the recoveries 389, a per centage of the latter is obtained amounting to 44 and a fraction,—altogether, a more favourable result than might be expected, when the circumstances of the Institution are fairly considered.

This asylum is quite inadequate to the wants of the district attached to it, and, in consequence, a large number of insane persons are committed to the prisons, from whence many are discharged recovered; while the chronic, and more unpromising cases, are transferred to the asylum. 149 were admitted in this way during the last two years, of whom more than twenty were epileptics; and, of the others, several had been insane for many years: thus swelling the admissions by a class of patients, of whose recovery there was not the slightest probability. (a)

From the manner in which the number of persons, subjected to seclusion, or restraint, in the Richmond is noticed, it might be inferred, that in this asylum alone was either employed; whereas the writer could not have been ignorant that, in the Inspector's Report for 1846, from whence he derived his information on this point, restraint is stated to prevail to a much greater extent in some others. Of the number of cases mentioned to have occurred in the Richmond, the greatest proportion were patients secluded during temporary states of excitement; and of those actually subjected to restraint, one was a man with double hernia, whom it was necessary to prevent interfering with the use of a truss; and the others were almost exclusively cases under treatment by blisters, or irritating application to the scalp,—a class whom even Dr. Conolly would admit to be exceptions to a general rule. And to the successful exertions of that excellent and philanthropic physician to correct the abuses of restraint in the treatment of insanity, no person is more disposed to do justice than I am.

If the number of cures effected in establishments for the insane be regarded as a proper test of their value and efficiency, the Irish District Asylums may fairly lay claim to this character, on unquestionable authority. In the valuable work of Dr. Thurnam, on the Statistics of Insanity, a Table is given, showing the proportion of recoveries in the principal Hospitals for the Insane in Great Britain and Ireland, and in several of those in the United States of America, and the Continent of Europe,—in which the greatest amount is exhibited by the Irish asylums. This statement is the best reply which can be given to the depreciating remarks you have published on these institutions, and which have evidently emanated from some discontented spirit at this side of the Channel. So far from its being the determination of the Government, as insinuated, to exclude medical residents from the Asylum, on the last occurrence of a vacancy in the office of Manager,—that of Carlow,—the appointment was given to Dr. White, a well-qualified practitioner; and I have reason to believe, that, in the appointment to such offices in future, medical men will exclusively be selected.

I cannot, in justice, conclude these observations, without bearing my humble testimony to the constant attention to the interests of the insane, in this country, given by the Inspectors of Lunatics, and expressing my conviction, that, in the performance of their important and arduous duties, they are actuated by a sincere and anxious desire to promote the welfare of the inmates of the various establishments, both public and private, placed under their superintendence, accompanied by a due regard to the interests of the profession.

I am, Sir, your obedient Servant,
John Mollan, M.D.,
Physician to the Richmond District Lunatic Asylum.

Dublin, Jan. 23, 1849.

(a) This subject has not escaped the serious attention of the Government, and measures are now in contemplation to supply the additional accommodation required in this district.

ON DR. STEVENS'S TREATMENT OF ASIATIC CHOLERA: BEING THE THIRD LETTER OF E. A. TURLEY M.D., IN CORRESPONDENCE WITH G. ROSS, ESQ.

My Dear Sir,—Since I last addressed you, I have reperused all your valuable papers on cholera in the *Medical Times*, and I turn from them still more convinced of your determination not to admit of any evidence, over the authenticity of which any doubt rests in your mind. I am, nevertheless, equally assured, from the facts I have collected, that you have been unconscious of the circumstances connected with Dr. Stevens's first practical application of his views at the Coldbath-fields Prison, attested by every one of those individuals, both medical and non-medical, who had a right to form an opinion on the subject. These facts it will be my business to exhibit, in conformity with my stated intention—viz., to examine critically the results of the saline treatment of cholera in 1832, and the statistics thence arising.

In my last letter, I believe I have made it

manifest that Dr. Stevens is equally worthy of credence with any other labourer in this cause, till his facts and opinions are either controverted or nullified. I believe that neither of us doubt that Dr. Stevens's experiments on the human blood, healthy and diseased, made in the West Indies, in America, and in this country, suggested to his mind the saline treatment in yellow and other putrefactive fevers. But, as you have so forcibly stated, in one of your lectures, there are human *motives* which might actuate some of our readers to doubt or to disbelieve facts, I shall quote from the "Dictionary of Practical Medicine" Dr. Copland's opinion on the researches of Dr. Stevens, page 191:—"Dr. Stevens has described the appearance of the blood in tropical fevers with greater minuteness than his predecessors, has referred to most important changes in the saline constituents of the fluid, and has fully confirmed some very detailed observations, adduced by myself several years previously." Again, "Dr. Stevens states, that the blood in these fevers loses its property of coagulating, becomes more fluid, or thin and watery, of much darker colour, and has its fibrine and saline ingredients exhausted." Were it necessary here to present a record of the encomiums offered to Dr. Stevens, for promulgating his important views on the altered state of the blood in putrefactive fevers and cholera, I might extend this letter to a fulsome length, even in the condensed opinions of men of eminence, in the West Indies, in America, in Denmark, Russia, Germany, Sweden, France, and Britain. One eulogy alone from our veteran chemist and physiologist, Dr. Prout, will suffice me to adduce. In a communication to the *Medical Gazette*, on the paper of Dr. Stevens, which was read before the College of Physicians in 1830, this gentleman states that the valuable practical essay of Dr. Stevens contains "the germs of discoveries of the last importance to mankind."—See *Medical Gazette*, vol. 8, page 770. In proof that Dr. Stevens had applied his views on the changed constituents of the blood, by administering his saline powder of the neutral salts with great success in the fevers of the West Indies, long prior to the irruption of cholera in England, I refer you to his work on the blood, as well as to his published essays. I, therefore, conclude that it will be admitted that the saline treatment originated with Dr. Stevens, and was first employed by him in the West India islands, and that it was first used in cholera in London by himself. But lest this should be doubted, and even if doubted by yourself I am sure it would be honourably doubted, I shall quote Dr. Stevens's letter to the *Medical Gazette*, vol. 8, page 740:—

"Sir,—As I have never seen even one case of the Indian cholera, of course I can only judge of the treatment of that disease by reasoning from analogy betwixt this and other malignant fevers which I have actually seen; but probably it was not far from the truth when I stated that the practice which I had found so useful in the malignant fevers of the western world would be equally successful in the treatment of all other forms of malignant disease; and perhaps, also, after this treatment has been fairly tried, the outline of the practice in all malignant disease will ultimately be nearly the same. I can now add, that the same treatment which I have recommended in the yellow fever, &c., has been extensively used, and with equal success, in the treatment of those malignant forms of the marsh fever which were formerly so fatal in the Genesee country, on the southern shore of the Lake Ontario. This country is so flat, that the Erie Canal runs through it for upwards of seventy miles without even one lock. From being so flat, it is full of marshes; and, during the hot months, there are many of the districts in that territory nearly as sickly, and until lately nearly as fatal, as the marsh fevers of Sierra Leone. The result, however, is now very different, particularly at Rochester, and other places in that country, where the alkaline carbonates, &c., are now used in place of calomel,—or the mere purgative and bark treatment, which were formerly used in these localities with so little success.

"That sickness of the stomach, which is so generally met with in the commencement of all those fevers that are produced by the specific aerial poison, is probably the effect of the poison itself, which is thrown out of the circulation, and causes irritation in the gastric organs, in the same way that tartarized antimony produces nausea and vomiting when we inject a small portion of that agent into a vein. When proper remedies are used, that sickness at the stomach which begins with the disease soon passes away; but that peculiar irritation in the gastric organs, which comes on at a later period, and which is often so distressing in the last stage, is evidently, in these fevers, produced, in a great measure, by an excess of acidity in the gastric organs. This may, perhaps, arise from the decomposition of the saline ingredients of the blood, by the nervous or electric fluid which appears to exist in excess in all fevers, but particularly in those of malignant character. After the decomposition of the saline matter, the acids of the salts may be attracted into the gastric organs, where they exist in excess, and act as a source of intense irritation. This, however, is, in part, theory; but there is no question of the fact, that there is, in all the malignant fevers of the New World, particularly in the last stage of those diseases, an excess of acidity in the alimentary canal, which extends from the tip of the tongue to the very verge of the anus. When we apply, at this period of the disease, a piece of litmus paper to the foul or red irritable tongue, the test is reddened almost instantly, and when we apply the same paper to the fluids ejected from the stomach, it is reddened almost as suddenly as if it had been dipped in a pure acid. In fact, even the matter of black vomit (which is merely an internal effusion of the black and dissolved blood) receives such an addition of fixed acid in the stomach, that it effervesces freely with the alkaline carbonates.

"The excess of acid which produces the intense irritation of the stomach is not the acetic, for even the matter of the black vomit has no sour smell. This excess of acid is probably derived from the saline matter of the blood; and, as the muriate of soda is the principal saline ingredient in the blood, so I believe that the muriatic is, in fever, the acid which exists in the greatest excess in the stomach; but, whatever the source of this acidity may be, it is, as I have said, at this period of the disease, the true source of the intense burning, and that local irritation, amounting even to inflammation, which is the real cause of the gastro-enterite of Broussais. This species, however, of the enterite cannot be cured, either by gum water, taken internally, or by leeches applied to the pit of the stomach. The irritation is produced by a chemical cause, and can only be removed by chemical means.

"It is, at this period of the disease that the alkaline carbonates are of such infinite value; when we give, for example, the carbonate of soda, the fixed acids of the stomach are immediately neutralized by the alkali of the carbonate; a large quantity of carbonic acid is evolved by the mouth, and the irritation of the stomach disappears almost as fast as if it had been removed by a charm. By this treatment we not only remove that irritation and severe burning in the stomach, which is so distressing to the patient, and even so destructive to the gastric organs, but we gain another point, which is, at this period of the disease, of still more importance than the mere removal of a local irritation. The fixed acids are, as I have said, immediately neutralized by the alkali of the carbonate. The muriate of soda, and the other natural salts of the blood, are instantly formed in the stomach itself. Now, we know that these salts do enter the circulation; we know, also, that they mix with, and become a part of the circulating blood; we know that they change its properties and remedy its morbid condition; we know, also, that they add to the stimulating power of the circulating current, and enable the heart to keep up its action.

"In consequence of this addition of saline matter, the kidneys, and the other secreting organs, continue to perform their functions. The skin does not become yellow, nor the breath fœtid; neither is the mortality one-twentieth part so great as it had been under the old modes of treatment. In fact, the successful results which have already followed the use of the above practice, prove that the saline remedies are the agents of all others the best that we yet know of for the successful treatment of malignant diseases. When there is an excess of acid acting as the source of destructive irritation in the gastric organs, the treatment with the alkaline carbonates is decidedly the best; and those agents are as decidedly the worst, the effect of which is in direct opposition to that of the alkaline salts. When there is no excess of acid in the stomach, as sometimes occurs in fevers that are more mild, the carbonates enter the circulation unchanged; and we know that, when they are mixed out of the body, even with the black blood taken from the heart of those who have died of yellow fever, they redden its colour as much as the muriate of soda, or any of the other stronger salts. I have also stated, that all the acids blacken the colour of the blood so completely that, with the addition of a little water, even healthy arterial blood is immediately converted into a fluid exactly resembling the black vomit.

"The dark colour of the blood which we observe in the beginning of pestilential fevers, is the effect of the poison on the vital fluid; but the black colour in the last stage of the disease, is produced by the loss of the saline ingredients, which I can prove are, beyond all question, the true cause of the red colour of healthy blood. The mere fact that the blood has a dark colour in all the fevers which arise from poison has been long known, but the causes of this dark colour have been but ill understood. An attempt to redden the dark colour of blood in fever has been, with some practitioners, the chief object of the plan of cure; but ignorance of the real properties of the vital fluid has led to errors which have been even more fatal than those which now generally exist as the consequence of the doctrine of pure solidism. Acids redden the blue of vegetable colours, and these agents have been extensively used by a certain class of physicians to redden the blood in fever, on the supposition that they contain an excess of oxygen, which they would give over to the black blood, and thus redden its colour. The fact is, however, that though acids redden the vegetable colouring matter, they completely destroy the red colour of the blood: yet these are the very agents that have been thrown in so unmercifully into an organ already burning from an excess of acid, on purpose, as they say, to redden and revivify the colour of the dark blood.

"I shall afterwards have occasion to bring forward some melancholy proofs of the fatal effects of the acid treatment, and to show that in some places it has been used to a fearful extent.

"The calomel and other modes of treatment have done much mischief,(a) but the acids have been the agents of all others the most destructive in the treatment of the yellow fever and other diseases that really possess a malignant character. It has been already stated, that when the blood is black from the loss of its saline ingredients, *oxygen is not attracted into the circulation in the lungs*, after the removal of the carbonic acid,—at least, if it be attracted at that period, even the strongest oxygen has no more effect in reddening the black blood than it has in reddening the black clot that has lost its saline matter, and, of course, its red colour, from immersion in distilled water. Yet, though this practice has been weighed in the balance, and found wanting, we are annoyed almost daily by the recommendation of means for oxygenating the blood. Oxygenating the blood, however, is of no use in such cases, for the blood can only be remedied by saline remedies. Calomel and antimony may fret the stomach, and add to the sufferings of the patient. Acids and opium may, and do darken and destroy the red colour of the blood; but when the red colour is lost, as in bad fever, it can only be restored by the use of those remedies which are, in reality, in its healthy state, the true cause of its red colour. It may easily be ascertained, by the litmus paper, whether there be or be not in cholera an excess of acid either in the blood, or in the fluids ejected from the gastric organs. If there be an excess of acid, then the alkaline carbonates are the remedies, of all others, the most likely to be useful; if there be no excess of acid, then the mixture of muriate of soda and nitrate of potass may probably be preferred; and, as all parties agree in admitting, that, during the first stage of cholera, the blood is not only diseased, but black in colour, and thickened in consistence, I am inclined to believe, that under all circumstances, the non-purgative saline medicines are the remedies, of all others, the most likely to be useful; for they not only redden the colour of the blood, but by increasing the fluidity of its solid ingredients, and adding to its stimulating power, they will render the blood more fluid, and, of course, better fitted to serve the important functions which it is intended to perform in the living system.

"I will afterwards bring forward some very strong facts, to prove that the aerial poisons which act as the remote cause of the essential fevers, do not produce their effect by any direct impression on the nervous system; on the contrary, they appear, like the oxygen of the air, to be attracted into the circulation, and produce their effects on the solids of the system, entirely through the medium of the blood. The diseased state of the blood is the immediate cause of fever; the diseased action of the solids is merely the effect. I have seen cases in which there was no excitement from first to last; yet these very cases, in which the solids were not injured in the

(a) In one of the last Numbers of the *Journal Universel et Hebdomadaire*, we find it stated in a letter from M. Londe, the President of the French Commission now in Poland—"Les moyen principaux que l'ou emploiè ici contre le cholera sont, one ma, le calomélas à forte dose, (huit á vingt grains par heure, ou même par demi heure,) il est administré ici, dans l'hôpital de bagatelle, par M. Searle, médecin anglais. Dans cet hôpital, la mortalité est effrayante."

least, were of all others the most fatal. All fevers from poison are generally preceded by a stage of torpor; for the first effect of the poisoned blood is to paralyse the heart, and, indeed, the whole of the vascular organs. The continuance of the cold stage is in proportion to the quantity or virulence of the poison that has been taken into the system; but in all such cases reaction is the only road by which the animal economy marches to health, and the first duty of the physician is decidedly to bring on reaction, or fever, as speedily as he can. When this is effected, should the reaction run high, the excitement may be reduced by the lancet, and the typhoid symptoms, which sometimes afterwards occur, may probably be prevented by the subsequent use of the carbonate of soda and other saline medicines, which we know to possess the power of preventing that black and dissolved state of the blood, which is in reality in fever, the true cause of the nervous as well as the other bad symptoms. The diffusible stimuli produce their effect in some cases, by a direct and transitory impression on the nervous system; but, as already stated, the saline agents enter the circulation, mix with, and become part of the blood. The blood is the natural stimulus of the heart, and the active non-purgative saline medicines decidedly add to its stimulating power; these, when given early in cholera, and in active doses, will, by increasing the stimulating power of the vital fluid, enable it to act with more force on the vascular organs, and in this way rouse the patients from that cold fit or stage of torpor, in which it appears they generally die.

"From what I have seen of their effects in other diseases I have no doubt that if the saline medicines be fairly tried, the mortality from cholera will be considerably less than it has hitherto been; but, to say the truth, I do not anticipate much advantage either from the saline or any other remedies, or believe that they will ever be fairly tried so long as they are used by practitioners who believe that fever is a nervous impression, and who believe also that all our remedies in that disease act merely by sympathy, or some mysterious agency, on the nerves of the stomach.

"It is well known that many practitioners have long been in the habit of using the saline medicines, particularly as purgatives, in the treatment of fever; and many still continue their use, merely for the very substantial reason that they find them useful. The true reason, however, why these remedies are so decidedly superior to all others in the treatment of this disease has not, I believe, been generally understood; and, therefore, these medicines are often combined with acids, or other powerful and adverse agents, which prevent the good effects that would otherwise have followed the judicious use of the active saline agents, given on a steady principle, and used only at certain periods of the disease, when there is almost a certainty of their doing good.

"I know it will be asked, why have the citric and other acids been successful in scurvy, where the blood is darker than it is in health? To this it may be answered, that the scurvy is not, like the cholera or the yellow fever, a disease that causes death in a few hours or a few days; and, therefore, medicines that may be used without causing immediate death in the one, cannot be used in the others with equal impunity. My own conviction is, that there is no one disease in the whole catalogue in which the profession has been so much misled as in the very disease now under consideration. During a residence of 20 years in the West Indies, I have only met with one case of scurvy, and that case was decidedly brought on by the excessive use of citric acid, which an American gentleman had been recommended to use, as a preventive against the yellow fever. His own conviction, as well as mine, was, that the scorbutic symptoms had been brought on by the acid. This was immediately laid aside, and, under the use of the carbonate of soda, he was quite well in three weeks. To those, however, who are disposed to see the contrast between the effects of the neutral salts and the citric acid in the treatment of scurvy, I would recommend the perusal of Mr. Cameron's paper on this disease, which they will find in the Medico-Chirurgical Review—in one of the numbers, I believe, for 1829. It has long been, and I am sorry to observe still is, a common source of error, particularly in fever, to confound a similarity of certain symptoms with a sameness of kind. The sporadic cholera, which is occasionally met with in the hot months, both in this and other countries, is evidently as totally different from Indian cholera as east is from west. The one is a symptomatic affection, accompanied by a mere momentary excitement, arising in part from a severe local irritation in the gastric organs. The other is a most malignant disease, produced by the existence of a specific and virulent poison in the system, which contaminates every drop of the blood, and excites diseased action of every solid in the body. Such being the fact, it is evident that remedies which are successful in the one, may be not only inert, but even actually injurious, in the other.

"The Asiatic cholera is, as we well know, a most fatal disease, and will require both an active and judicious treatment to overcome the evil effects of the morbid poison; while the sporadic, or plum cholera, of this country, may, I believe, in most cases, be almost entirely left to itself to work its own cure; and were it at all necessary, the cases which are now so numerous in most of the journals might be faced by others, where the patients were obstinate, and refused to take any other remedy except a little warm brandy and water, which was given during the cold fit, on purpose to bring on reaction as speedily as possible. In one case, which I saw lately by accident, the symptoms for the time were quite as severe as those described in the various journals; yet, though the patient refused all remedies except warm brandy and water during the cold stage, he was just as well (perhaps even better) on the following day than if he had taken 125 drops of the Cajeput oil.

"There is one circumstance connected with the history of cholera, which renders it a much more formidable disease in northern latitudes than either the yellow fever or the plague. The poison which produces the yellow fever requires a given degree of heat to enable it to exist in the atmosphere; and when the thermometer either rises or falls above or below a given range, the plague disappears. But the poison of cholera is not rendered inert by the first morning of frost, as is the case with the poison of the yellow fever in the United States of America; for it appears that this poison, like that of the small pox, can produce its fatal effects as certainly in the middle of a winter, in Russia, as in the burning plains of the torrid zone. When once introduced, the contagious poisons possess the power of multiplying themselves; and as the cholera poison acts in every temperature, it is more than probable, that if it once finds its way into this country, it may remain here as a fatal scourge, not only to the present, but also to future generations. This, as well as the great mortality caused by the poison of cholera, imposes a solemn responsibility in those who are, or who at least ought to be, the guardians of the public health.

"At present I have merely given a general outline, but the same subject will be considered hereafter more in detail. The above has been written in haste, and may, probably, contain more errors than one. Should the treatment, however, which I have found to be so useful in the malignant fevers of the new world be found, even in the slightest degree, to lessen the sufferings, or diminish the mortality of fever in the other divisions of the globe, I will then be repaid for the dislike which I now feel in appearing before the Profession as the advocate of doctrines so much in opposition to the common opinions of the present day. That this opposition may be put down to its proper account is the wish of, Sir,

"Your obedient Servant,

"W. STEVENS, M.D.

"September 5, 1831."

I purposely avoid adducing any new testimony, or opinion, from Dr. Stevens, at present, on this subject, as he might be considered a partial judge; and, if he has any objections to urge against me from this circumstance, the same course of treating the matter is equally open to him as to ourselves, *veritas prevalebit*. In the last letter I have shown the grounds on which he arrived at his views, before these were tested by their actual employment in cholera. I now proceed to show the date of their introduction into the Coldbath-fields Prison, and the results during the first irruption of the disease there. It was, possibly, the above letters of Dr. Stevens which induced the desire of the then, and present surgeon of the prison, Mr. Wakefield, to see the saline treatment employed in his practice at Coldbath-fields Prison, finding that the mode of treatment recommended by the Central Board of Health in cholera was utterly useless in the cases in which he had tried it. Be this as it may, Mr. Wakefield did, however, send a medical friend of his to Dr. Stevens, who was then in London, on the evening of the 7th April, 1832, begging him to meet him at the prison as early as possible; Dr. Stevens went there on the following morning. It appears, that at this time two patients had died, and two others were extremely ill under the treatment of "the Board," administered by the above gentleman. In conversation with Mr. Wakefield, Dr. Stevens agreed to charge himself with every new case that came in after this date, unless his treatment should be found manifestly inferior to that employed by others. In the beginning of the epidemic four cases were lost under the treatment recommended by the Board of Health; two by Mr. Wakefield and by Mr Whitmore; and after this period, out of one hundred cases admitted into the cholera ward of the prison, 3 died, and 97 recovered. These were all cases of *true* cholera, having the symptoms according to the printed instructions of the Board, which occurred during the time from the 8th of April to the beginning of May; for, though many others were preserved by early treatment, not one of these were reported as cholera cases, or put on the books of the infirmary of Coldbath-fields, by Mr. Wakefield. The second appearance of the disease did not take place till thirty-three days afterwards, viz., on the 3rd of June. In the former attack, the disease commenced with the male: in the second onslaught, with both male and female prisoners. Two deaths, it will be observed, occurred in the beginning of the first irruption in two patients, who were discovered to be dangerously ill during the temporary absence of Mr. Wakefield. Mr. Whitmore, a medical gentleman, who lived opposite to the prison, was sent for. He also treated these two cases according to the directions of the Central Board of Health, and both these cases shortly died.

Very faithfully yours,

ED. ASTBURY TURLEY, M.D.

[To be continued.]

THE CHOLERA AT TOOTING.—REMARKS ON MR. SOUTHEE'S LETTER.

[To the Editor of the Medical Times.]

SIR,—Having read with much surprise the letter of Mr. Richard Southee, of Cambridge, I beg you will permit me, through your pages, to correct the error he has made, and to disabuse the minds of the profession.

In the first place, he says:—"Two gentlemen who were in attendance on the patients, accompanied us." Permit me to say, there were four gentlemen, besides myself, in attendance on the sick,—namely, Messrs. Bailey, Kite, Penny, and Phillips, all of whom will, I have no doubt, give a correct statement of the symptoms evinced by the cholera at Tooting, which Mr. Southee, I imagine through mistake, misrepresents. He says, "Suppression of urine was denied to exist." This I unequivocally state to be incorrect. There was suppression of urine in all cases where the patients were in a state of collapse, and the bladder, on *post mortem*, was found empty and contracted. Again, he says, "Here, also, was an entire absence of thirst, and the vomiting and purging neither numerous nor excessive." This also I deny. The thirst was extreme, and the vomiting and purging both copious and incessant; in many instances, the very last effort of life was to crave drink, which was instantly rejected by vomiting, the patient actually dying in the very act.

In conclusion, I beg to state, there was no one symptom described by Mr. Southee, as belonging to the cholera in 1831, with, perhaps, the exception of corrugation of the skin, which was not to be found in the cases at Tooting; and I can only account for Mr. Southee's mistake through his having passed from ward to ward in a very rapid manner, and through his having seen the patients when suffering from consecutive fever more than from actual cholera I should be sorry to attribute wilful misrepresentation to any gentleman.

I must also take the liberty to remind Mr. Southee, that even in India the cholera varies in its symptoms at different seasons, and even in the same season at different places; and the very best writers on cholera admit that there is no one symptom invariably present.

I am, Sir, yours obediently,

WM. HOME POPHAM.

Judd-street, Brunswick-square, Jan. 22, 1849.

DR. DICKSON ON THE TREATMENT OF CHOLERA.

[To the Editor of the Medical Times.]

SIR,—It was my fortune, at the early age of four-and-twenty, to be placed in full medical charge of H. M. 30th Foot, "The Old Three Tens," as the corps is still called, the regiment being at the time in India on the Madras station. For one so young, this was a position of great responsibility, seeing that to my exclusive care was committed every arrangement connected with the sanitary condition of nearly 1,000 men,—officers and soldiers included,—to say nothing of their wives and children, together with their numerous native camp-followers. All,

nevertheless, went smoothly with me till that scourge the cholera came, when, as in every instance where this disease has first broken out epidemically in a regiment, the mortality, whatever the treatment employed, was very considerable. This took place in November, 1828, and in December of that year I sent in my Official Report to my medical superiors. Observe! I neither printed nor published,—I made no pretensions to authorship then,—I simply performed—with becoming modesty, I hope—my duty as a public servant. The importance of the subject, however, led me to further investigation. Further opportunities occurring, I never rested till, to *my own* satisfaction at least, I had fully made out, that this terrible disease, called "CHOLERA," is neither, —as its name imports, and as it was then very generally believed to be—a mere disease of the biliary apparatus, nor, according to some few, a disorder of the stomach and bowels simply, but that the *brain* is the chief organ implicated, and that the more urgent symptoms—the vomiting, difficult breathing, loss of voice, &c.—are the immediate result of a palsy, or diminution of cerebral influence over the pneumogastric, or eighth pair of nerves. These views I sustained by the fact, that this same vomiting, this asphyxia, this loss of voice, can each be caused by whatever may lessen the brain's influence over the nerves in question, such as loss of blood, passions, poisons, and mechanical injury even; that, moreover, each and all of these terrible symptoms can, *at will*, be produced in the dog by the simple *artificial division* of this eighth pair; the arterial blood, after that operation, becoming black and viscid, as in cholera asphyxia, and, as in the same disease, being again reddened by the *artificial* inflation of atmospheric air; while the appearances of the internal viscera after death are found to correspond precisely with those of the same viscera in persons who have died of the epidemic disease! Hence I argued, that the common practice of giving the vaunted calomel, to relieve a supposed congestion of the *liver* of a cholera patient, to the neglect of his breathing, when absolutely dying of suffocation of the *lungs*, is nearly as preposterous as to be busy with the little finger while a man is suffering from a comminuted fracture of the leg or arm!

These views, together with my own ideas as to treatment,—ideas which your space will not allow me to develope here,—I submitted to various intelligent medical friends, and, encouraged by them, so early as the autumn of 1829, I consented to give my *brochure* publicity. In that year, accordingly, I sent it to the Madras Government press, and, as soon as it came from the printer's hands, I distributed copies gratuitously to all who took an interest in the subject. In 1831, I re-printed my Paper in the *Lancet*. In 1832, shortly after my return to Europe, the same views again appeared, at greater length, in my "Prevalent Diseases of India;" and yet again, in 1836, in my "Fallacy of Physic as taught in the Schools." In each of these *published* writings of mine, I condemned the employment of the lancet in cholera; I did the same in my "Revelations on Cholera," printed last September; and in each and every of these works I adhered to my original proposition, that paralysis of the pneumogastric nerves accounts for all the more urgent symptoms of the disease. Having been long a regular subscriber, and occasionally a contributor to your Journal, I expected to see some notice of the proposition in the *Medical Times*; but, among all the letters and "Lectures" with which your pages were inundated during the cholera panic, nothing of the kind appeared. At last, under the head of "Reviews," I found a long list of cholera books, my own revelations on cholera among the number. "Oh," said I to myself, "now we shall have something about the eighth pair of nerves." Nothing of the sort. Not one solitary extract from my book, although it figured in "our list" of "Reviews;" but, in its stead, to my astonishment, I perceived that your "Reviewer," on the faith of a work of a Mr. Rogers, had made me out an advocate for bleeding in all cases of cholera! Your critic, in that "Review," forgot to name when, or where, I had ever been so. Having, as it now appears, for the last nineteen years of my life, invariably set my face against that practice, I naturally requested permission of you, Sir, to repudiate it as mine. Whereupon your Reviewer writes a letter, and dares me to deny that I am the author of a certain report in Mr. Rogers's book. Up to that hour, I had not seen Mr. Rogers's publication. Then, however, I thought it right to get it; and therein, truly enough, I find imbodied, a "Report on Cholera in H. M.'s 30th Regiment, in 1828, by Samuel Dickson, Esq." Yes, Mr. Editor, this long-forgotten MS. of mine, after a sleep of twenty years, at last figures in the pages of Mr. Rogers, along with other MS. reports, "the Author's of which (according to that gentleman's Introduction) having no thoughts of their ever being published, and never having revised them since they were first written!" Had Mr. Rogers, in common courtesy, communicated with me before he published what his own admission shows he had no right to do without my sanction, I should assuredly have stated objections; but, now that he has printed my MS., I may at once state that I am not in the least ashamed of that report, or of any part of it, not even of the recommendation to bleed in all cases of cholera! If I feel ashamed in the least, of anything or anybody, it is of my teachers. All great doctors and professors, in their time, with every one of whom the lancet was then the universal panacea, not in cholera only, but in almost every other disease whatever! So far, indeed, from considering it a reproach, that in 1828, when fresh from the schools, and with little consequent experience, I could only look at disease through *their* antiquated spectacles, I now take no small credit to myself that I pulled them from off my eyes so early as the following year, 1829. From that day to this, no one will accuse me of changing MY opinions as to the expediency of bleeding, in cholera at all events!

As your Reviewer affects to despise the doctrine, that the more dangerous symptoms of the epidemic cholera depend upon a paralysis of the pneumogastric or eighth pair of nerves, I may here state that Dr. Wilson Philip thought it so good, that the year after its publication in the *Lancet*, he delivered an essay at the Westminster Medical Society, wherein, without acknowledgement, he adopted it as his own; and, strange enough, even in this very volume of Mr. Rogers, which your critic appears to value so highly, I find a Report of Dr. Chapman of the 63rd Foot, written so late as 1843, which contains this passage: —"Indeed, I am disposed to consider the eighth pair of nerves as constituting the immediate central point of action (if I may so express myself) of the poison of cholera.

I have thought it just thus far to place myself right, Mr. Editor, with your readers.

Yours, S. DICKSON,
Author of the "Fallacies of the Faculty."

Bolton-street, January 15, 1849.

ON THE TREATMENT OF CHOLERA.

[To the Editor of the Medical Times.]

SIR,—I feel confident that the motive which induces me to address you, viz., the pain I feel to see the cholera so fatal in its effects, will, to high-minded physicians and medical practitioners, plead for me an adequate apology for the liberty of this anonymous address.

I have long been convinced that the recommended early treatment of patients, seized either with cholera or malignant fever, is radically wrong.

In such cases, although there may be a degree of vomiting, diarrhœa, a sense of extreme langour, and even threats of spasm, the natural secretions and excretions are all more or less restrained, changed, or totally deficient, and the circulation disturbed, —consequences of whatever may be the poision inhaled or intercepted. Now, that important auxiliary to our art, the *vismedicatrix naturæ*, really makes an effort to expel such poison, and restore those normal secretions, &c.,—1st, by (imperfect) vomiting; 2nd, by inefficient and watery alvine mucous evacuations.

My belief is, Sir, that the practice of administering opium, chloroform, and astringents, increases the evil, and wars against old dame nature herself.

Now, I would take a hint from her, and encourage and imitate her in her efforts, by my endeavours to promote and excite all the secreting powers which opium, &c., checks, by locking up the liver, gall, bladder, kidneys, &c., in torpor.

The opium even renders calomel to be inert and useless as to the purposes indicated by nature and our own art.

Instead, therefore, of beginning with opiates, astringents, and anti-spasmodics (even when united with calomel), I would, especially if called early, begin in almost every case with a powerful emetic of ipecacuanha and emetic tartar.

Nothing, as I have always found, so effectually arouses the system, restores the balance of circulation, expels poisonous matter, and promotes torpid and deficient secretions.

Towards the end of the operation, bilious vomiting would, in all probability, be effected; and I would follow up this practice by a large dose of calomel, with cathartic extract and oleum menthæ p., washed down with a saline effervescent aromatic draught;—repeating these, according to circumstances, and promoting their active operation on the liver, kidneys, and bowels, by warm aperient fluid medicines.

Thus, if bilious dejections were produced, the tendency towards the blue stage and the dreadful spasmodic symptoms, I think, would be most likely obviated.

I write from some experience, and do not hesitate to urge a trial of these remedies; for certainly we have been hitherto generally very unsuccessful everywhere in our treatment of cholera.

In cases, also, of low fever, typhus, &c., I am confident, after much experience, that the practice I recommend is the best, especially in the early stages.

Of course, the strength of the patient should be supported at the same time, by broth, arrow-root, &c., with even a little wine, or spirit, occasionally. Salines—camphor, sp. ætheris, vitriolicus, or nitrosus; liniments, frictions, warm baths, &c., may be also employed as auxiliaries; but the sheet anchor I depend upon is the restoration of the bilious and urinary discharges, and a free and easy perspiration effected by the emetics, cathartics, and repeated doses of calomel, without the paralyzing opiate.

Yet, after the biliary evacuations have been copious, and the catharsis seems to have been carried on sufficiently, there could then be no objection to the mistura cretæ with cinnamon, and even a small quantity of tinct. opii., or the pulvis doveris; but we should be careful not to occasion a renewed torpor of the peristaltic action.

I have the honour to be,
Sir,
AN OLD AND RETIRED PHYSICIAN.

Dover, January 11, 1849.

CHARACTERISTICS OF THE CELTIC RACE.

[To the Editor of the Medical Times.]

SIR,—It appears to be quite the fashion to abuse the Celt; and, although I am by no means disposed to veil his national or constitutional failings,—which, after all, may differ more in kind than number from those of his neighbours,—yet I cannot permit a phrenological commentator like your correspondent, Dr. Massy, to take up the skull of a Caffre or an idiot, and present it to the readers of the *Medical Times* as the type of the race.

I confess, that my Celtic blood has been occasionally stimulated to unwonted rapidity, by the somewhat caustic remarks of your able and eloquent correspondent, Dr. Knox; believing that they might have been considerably modified, so far as they reflected on the characteristics of the Irish and Scotch Celt, by having taken into consideration, that they are conquered races,—that oppression, insufficient nutriment, and, indeed, every cause calculated to promote the degeneration of race, has been exerting its slow but certain influence both in Scotland and Ireland, especially in the latter country, for centuries,—centuries during which their rulers have been steadily advancing, under equal and well-regulated laws, from comparative barbarism to the highest state of civilization, favoured by circumstances which afforded the most powerful incentives to exertion.

I am not, however, about to don the sword and buckler for the Celtic race,—for, in spite of my "aggressive group," I am a very peaceable Celt. My object is, with a due regard to scientific truth, that of controverting a few of your correspondent Dr. Massy's *facts*. A few, I say,—for, either there is something very faulty in the "involutions and convolutions" of my cerebrum, or, it is a very difficult matter to place a head and tail on the majority of his propositions. He has evidently assumed the mantle so lately laid aside by his able predecessor Dr. Knox, and the imitation of his style is beyond all praise. Here, however, our eulogy, I fear, must cease,—for, while we have his short, terse, epigrammatic sentences, we look in vain for their pith and marrow; the form is present, but how emasculated!

"The skull of the Celt," says Dr. Massy, "is ugly, and approaches that of a monkey! The forehead runs back and is compressed." Poor Celt, let us examine a few more of your *developments!* "Your temporal region is flattened"—(Who ever saw a temporal region that was not?—"compressing that organ called Number; and this accounts for the thoughtlessness and want of calculation of the Celt." Thus,

according to Dr. Massy's phrenology, Memory, Reflection, and Judgment, are under the influence of "*that organ called Number*"! "But the organ of Constructiveness is in proportion—(Quere: Direct or inverse?)—"he is the artist, possessing mechanical skill and manual dexterity; his galleries of Paintings and Sculpture, at Versailles, and those of Naval Design, at the Louvre, all speak for him." What! galleries of Paintings and Sculpture, and of Naval *Design*, indicating alone the organ of *Constructiveness!*—neither Form, Order, Reflection, nor Judgment, but mere constructiveness! Has Dr. Massy ever sought for galleries of art in a colony of beavers? According to his system of phrenology, they should be gentry of infinite taste in the fine arts; for I believe that the beaver possesses a notable development of "constructiveness!" But let us hear our commentator once more:—"The Celt has a surprising taste for music,—noise and clatter are his delight!" Shades of the bards! Noise and clatter, synonyms for music! It is much to be feared, that the cranium of our phrenologist is *surprisingly* flat in that region, at least!

There are many exceedingly obscure paragraphs in your Correspondent's communication, which I dare say he will favour the readers of the *Medical Times* by explaining; *e.g.*, "Here is one with a narrow, high forehead, and small quick eye,—of an extremely excitable temperament, endowed with a natural facility to learn and communicate; but is 'a fond and false deceiver.'" Again: "There is another, who has great breadth of forehead, the sign of intelligence, but yet *not so.*" (!) "The ideas appear very deep, indeed so deep, that the owner cannot reach them." "In a third, both dispositions are united into pride and cunning, without forethought and prudence." What a strange piece of moral chemistry! The fond and false deceiver, plus him whose ideas *appear* so deep, that the owner cannot reach them—equivalent = the man in whom "pride and cunning" predominate, without "forethought and prudence."

"Now we shall go to the annual Puck-Fair, held at Killorglin, near the Bay of Dingle." And now I should like very much to know what that same "Puck-Fair" has to do with the comparative anatomy of the Celt and Saxon skull? Perhaps others may solve this question,—*Non Œdipus sum!*

I must not, however, trespass too much on your space.

The greater portion of Dr. Massy's communication is by far too childish to require comment, and not the least so is the attempt to connect the intellectual faculties with the development of the foot. The length of the toes for instance, with the height of the forehead, and the well-arched sole, formed by the astragalus, navicular, and cuboid, with their *elastic* (a) ligament, with firmness, veneration, and benevolence.

I begin to fear that my nasal fosse must be enormously large, and my perceptives deficient in the same ratio; for, although I have spent at least twenty years of my life on "the sod," and am tolerably well-acquainted with the people of every part of the country, I have observed none of the phrenological characteristics which Dr. Massy has so ingeniously pourtrayed. To contravene his affirmations with reference to the phrenology of the Celt, would indeed be matter of supererogation. Whatever may be his faults, his intellectual powers are admitted. The brightest pages of English history are illumined by his genius! In 1800 more than half the world yielded obedience to his dicta, and the proud and powerful Anglo-Norman was by him almost isolated in his sea-girt home, from commerce and communication with foreign nations.

I pity the judgment of the man who can seek for the characteristics of a race on the bog, or the rock, to which the wretched serf has been chained for centuries, groaning under the iron hoof of a tyrannical master, and compelled to subsist on a wretched root, inferior in the quality and quantity of its nourishment to the trefoil he treads beneath his feet. Placed as the Irish peasant has been, his degeneration was inevitable; and it must be regarded as at least unphilosophical, to abuse him for features of character which were generated by circumstances over which he had no control.

I affirm, that the true characteristics of the Hiberno-Celt, both moral, intellectual, and physical, are to be found only in the cities and large towns of the south and west of Ireland. In the cities of Cork and Waterford, the race is as pure as on the bogs of Galway, or the wilds of Mayo; and here, both in form and in intellectual capacity, the Celt may challenge competition with most races. The shrewdness, perceptivity, nay the intellectuality of the wildest Celt, has frequently been acknowledged, and indeed the monkey-like skull, with which Dr. Massy has endowed him, is a vision almost too wild for even Celtic ideality.

I am, Sir,

Your very obedient servant,

P. Brady.

(a) Does Harrison state that the ligaments are elastic?

GOSSIP OF THE WEEK.

Apothecaries' Hall.—Names of gentlemen who passed their examination in the science and practice of Medicine, and received certificates to practise, on Thursday, 18th January, 1849:—William Griffiths, Standish, Lancashire; Thomas William Houchen, Wareham-hall, Norfolk.

Royal Medical Society.—We understand, that, at a meeting of this ancient Society, held on Friday night, Robert Anstruther Goodsir, Esq., Fifeshire, was elected one of the annual presidents, in place of D. Lamb, resigned.

Appointment.—The Queen has been pleased to appoint Daniel Blair, Esq., Doctor of Medicine, to be Surgeon-General for the colony of British Guiana.

War Office.—January 23.—97th Foot: Assist.-Surg. Henry Downes, M.D., from the Staff, to be Surg., vice Austin, promoted on the Staff. *Hospital Staff.*—Inspector-General of Hospitals, with local rank, Montague Martin Mahony, M.D., to be Inspector-General of Hospitals; Deputy Inspector-General of Hospitals, James French, M.D., to be Inspector-General of Hospitals in Canada only, vice Montague Martin Mahony, M.D., who retires upon half-pay; Staff-Surg. of the First Class, Charles Maclean, M.D., to be Deputy-Inspector-General of Hospitals, vice French, promoted; Surg. William Austin, from the 97th Foot, to be Staff-Surg. of the First Class, vice Maclean, promoted.

Obituary.—Suddenly, of cholera, at Cairnbroe, Lanarkshire, 15th inst., James Murray, surgeon, F.R.C.S.L., Edinburgh, while in the discharge of his medical duties at that place.—On the 16th inst., at his residence, Warwick-buildings, Worthing, Sussex, after a lingering illness, Jacob William Robins, Esq., M.R.C.S., L.A.C., in the 72nd year of his age.

London Hospital.—Mr. Hamilton has resigned his office as Surgeon to this Institution.

Dr. Armstrong and Sir William Burnett.—This gentleman, whose dismissal from his post at the Royal Naval Hospital, Plymouth, we noticed last week, has addressed a letter to a local journal, giving his own account of the circumstances of the case, which he was induced to do to counteract certain reports which had been circulated, injurious to his character. He complains, that there has been "a disposition to interfere with the medical duties, and a total indifference and apparent contempt shown towards the *medical officers*," (the subject of our leader last week.) Dr. Armstrong states, that at an interview with two of their Lordships at the Admiralty, they expressed their regret at the occurrence, observing that no imputation had been cast either upon his public or private character. The imputation of bribery said to have been thrown by Dr. Armstrong upon Sir William Burnett, and in consequence of which a court of inquiry was instituted, is thus explained by Dr. Armstrong:—"Mr. Wilson, Assistant-Surgeon, attached to the Dispensary, came into my room some years ago, and requested me to recommend a friend of his to Sir William Burnett for admission into the navy as an assistant-surgeon. As I had no knowledge of the person, who resided at Liverpool, I declined doing so unless I saw him, or knew something of his character. Mr. Wilson now stated, that there was another way of doing it, and on inquiring in what manner, he replied that he would be admitted at once by sending twenty or thirty pounds, and that it was commonly reported that Mr. Anderson had given him a bribe. I felt much annoyed at hearing this, because Mr. Wilson was indebted to my recommendation to Sir William for the situation he then held. I advised him not to attempt to bribe him, as, if he did, I believed he would immediately go to the Admiralty and turn him out of his situation. Long after this, during a conversation with Mr. Dalton, in which Sir William's name was mentioned, I inquired if he had ever heard of the report that he received a bribe? He replied, that he had not, and that he did not believe it. Entertaining the same opinion, I considered the report malicious and unfounded; yet now, when he has excited himself into a state of phrenzy, brings it forwards as a charge against me." Dr. Armstrong concludes his letter with the following extraordinary statement:—"Sir William, it appears, has a friend whom he is desirous of having promoted, and who is now nearly of an age which renders him unfit for his present situation. Had I been aware of his wishes or intentions, I should have been glad to have made a vacancy for him many months ago, without giving him the trouble to watch for some chance which might arise from the wild and disordered intellect of an unfortunate hypochondriac." The situation from which Dr. Armstrong has thus been dismissed is worth upwards of 600*l.* per annum.

Cholera.—Two decided cases of Asiatic cholera have occurred at the Holborn Union workhouse, and have both terminated fatally. The first case was a man, aged 57, admitted to the workhouse in August last, taken ill on Saturday morning, and died at 11 o'clock on Saturday night. He had not been in the slightest degree in connexion with the children or any of the persons at the Royal Free Hospital. The other case was a man, aged 29. He had been in and out of the workhouse frequently, and in November was sent to the Fever Hospital, from which place he returned to the workhouse on the 12th December. He was employed as a messenger and to carry provisions, &c., from the workhouse to the Royal Free Hospital for the use of the nurses and children. He was taken ill on Saturday afternoon, and died yesterday at 2 o'clock, p.m. The children belonging to the Union, and now at the Royal Free Hospital, and in Greville-street, are progressing most favourably; but one of the nurses at the hospital, in attendance on the children, has had an attack of cholera, and is now considered dangerously ill.

London.—The Official Returns.—The fresh cases in England reported to the Board of Health on Monday were as follow:—Howden Union Workhouse, 2 cases, 1 death, 7 recoveries; Carlisle, 4 cases, and 3 deaths; and Wandsworth, 3 cases, 1 recovery, and 2 deaths. The total number of new cases reported from Scotland and England was 310, with 133 deaths, and 97 recoveries.

The Cholera in Gateshead.—Five cases of cholera have occurred here. On Wednesday, a special meeting was held of the Local Board of Health, comprising the guardians and other gentlemen, when it was resolved to establish a cholera hospital, in the neighbourhood of (but apart from) the Union workhouse. Notices have also been issued instructing persons to apply to certain medical men, without delay, in all cases of disorder in the bowels.

The Cholera in Newcastle.—We have no complete report of the number of cases and deaths in Newcastle; but one surgeon alone (Mr. Gibb) has had, we understand, eleven cases in his own practice, nine of which have proved fatal. Nearly the whole of these cases have occurred near the Tyne and Ouseburn.

Ireland.—In Belfast, the disease has been on the decline, and the total number now amounts to 135 cases, 61 deaths, and 46 recoveries. Two cases have taken place in Donaghadee, both fatal.

Edinburgh and Neighbourhood.—On Wednesday, there was only 1 case reported; on Thursday, there were 4 cases, no deaths, and 3 recoveries;

on Friday, 6 cases, 1 recovery, and 1 death; on Saturday, 6 cases, 1 recovery, and 3 deaths; on Sunday, no cases, 1 recovery, and 2 deaths; on Monday, 1 case and 1 death; and yesterday, 5 cases, 1 death, and 2 recoveries. Several cases are said to have occurred at the village of Restalrig. On Thursday there was 1 new case at Haddington.

GLASGOW.—On Tuesday, there were reported, in Glasgow, 62 cases, 19 deaths, and 30 recoveries; on Wednesday, 59 cases, 26 deaths, and 48 recoveries; on Thursday, 50 cases, 19 deaths, and 24 recoveries; on Friday, 39 cases, 18 deaths, and 29 recoveries; on Saturday, 63 cases, 23 deaths, and 19 recoveries; on Sunday, 47 cases, 15 deaths, and 26 recoveries; and, on Monday, 31 cases, 15 deaths, and 24 recoveries.

OTHER PLACES IN SCOTLAND.—In Kilbarchan, 4 deaths have occurred; in Barrhead, the disease has considerably increased, the cases last week averaging about 7 daily; in Airdrie, the report since 6th January gives 54 cases and 35 deaths; in Paisley, only a single case is said to be under treatment; in Greenock, 9 new cases and 4 deaths occurred last week; in Rothesay, the total number now amounts to about 40; in Kilmarnock, 2 cases have occurred; in Dalry there have been 18 cases, 8 fatal, since New Year's-day; at Dunipace, near Stirling, several cases have occurred; in Kelso, there have been 3 new cases, 1 fatal; in Selkirk, 6, 2 fatal; in Melrose, 2, 1 fatal; in Jedburgh, 5, 2 fatal; in Dryborough Mertown, 6, 2 fatal; in Doune, 2, both fatal; in Anderston, 4, 1 fatal; in Renfrew, from 22nd ult., 18, 10 fatal; and in Hamilton, from 29th ult., 36, 26 fatal.

DEATH OF DR. THOMSON.—Among the victims to the ravages of the cholera in Glasgow, we regret to announce the name of Professor Thomson, who has long filled the natural philosophy chair in that University. His funeral took place on Thursday afternoon. The company numbered between 400 and 500 gentlemen, professors, ministers, students, and others.

THE CHOLERA is spreading rapidly in America. At New Orleans it is very bad. This frightful epidemic has likewise appeared at Mobile and in Texas. At Fort Lawson, Texas, it raged with intensity for two weeks; 40 deaths occurred at Bayley in one hour, and 40 in one night. At Port Lavaca 135 persons died, The dead were piled in heaps. One account says, that half the regiment was swept off—another account, that only 75 had died. The camp was broken up. The disease has since abated. Terrible consternation pervaded the inhabitants. There were 13 cases at Houston.

RUSSIA.—ST. PETERSBURG, DEC. 30.—THE CHOLERA.—On the 27th, 46 cholera patients were under treatment; in the course of the day ten fresh cases occurred; six died and six recovered. On the 28th, therefore, there were 34 cases under treatment. The official journal of the kingdom of Poland contains the following statistics of the cholera since its first appearance to the 18th December:—Warsaw, 4,086 cases, 2,445 recovered, 1,623 died; government of Warsaw, exclusive of the capital, 11,804 cases, 5,547 recovered, 4,145 died; government of Lublin, 15,355 cases, 8,623 recovered, 6,626 died; government of Radon, 4,607 cases, 1,920 recovered, 2,380 died; government of Plock, 7,316 cases, 3,233 recovered, 4,010 died; government of Augustowo, 8,046 cases, 5,217 recovered, 2,775 died: Total, 51,214 cases, 26,985 recovered, 23,560 died.

DUMFRIES.—DONATION TO THE POOR FROM THE CRICHTON INSTITUTION.—Dr. Browne, of the Crichton Institution, has sent a donation of upwards of 20*l.* for the benefit of the poor of this town, *contributed by the lunatics!*

SEAMEN'S HOSPITAL.—At the last meeting of the governors of this excellent Charity, Mr. George Busk, the senior surgeon, was made an honorary life governor, in consideration of his valuable services. The Secretary stated, that, during the past quarter, the following was the number of patients admitted:—30 from Her Majesty's ships, and 637 from the Honourable East India Company's ships and British and Foreign merchant vessels; making, with those on board, 837; of whom 654 had been discharged, 170 was still on the sick list, 7 convalescent, and 6 fit for duty. The out-patients in the same time were 461. The total number received since the establishment of the Dreadnought Hospital-ship were 58,767. The expenditure during the quarter had been 1,359*l.* 3s. 5d.

SOUTHERN AND TOXTETH HOSPITAL, LIVERPOOL.—The annual meeting of the friends of this Institution was held last week, when it was stated, that, during the past year, 691 patients had been admitted, and 1,920 out-patients, making a total of 2,611. The proceeds of the concert given by Jenny Lind for the benefit of the hospital amounted to 1,300*l.*; in addition to which, the Treasurer reported the receipt of upwards of 600*l.* since the last meeting, including the munificent donations of 100*l.* each from Christopher Leyland, Esq., and Hugh Jones, Esq. It was resolved, that in future the Honorary Medical Board do appoint two of their body to act upon the Committee of this Hospital, the said appointment to be made by the Medical Board in such rotation as they may judge expedient.

LIVERPOOL INFIRMARY.—On Monday week the annual meeting of the trustees and subscribers to this Charity was held in the Board-room of the Institution. Mr. Edward Gibbons in the chair. It appeared, from a statement read by the Treasurer, that the number of patients who had received the benefits of the Institution for the last year was 2,238; average weekly number 191, being an increase of 2 over the year 1847. In the Lunatic Asylum there had been admitted 122 patients; weekly average 69, exceeding by one the number in 1847. In the Lock Hospital the total number was 567; number weekly, 47; previous year, 45. There had been a falling off in the donations, legacies, and Church collections, of about £280, and on the whole annual income of £900. The Earl of Sefton was elected President for the ensuing year, and Mr. Alfred North, Treasurer.

GLOCESTER INFIRMARY.—At the last meeting of the Governors of this Institution, Mr. Turner, the Treasurer, reported, that he had just received a receipt for the transfer of £2,000 to the Trustees of this Charity, being the munificent donation of William Page Wood, Esq.

BENEFICENCE.—The late Mrs. Mary Hilles, of Park-place, Clifton, a lady of great benevolence, has just bequeathed the following munificent sums to medical charities in Bristol:—the Infirmary, £100; the General Hospital, £100; the Dispensary, £100; and nearly £2,000 to other non-medical charities.

A LUNATIC BALL.—At Haydock-lodge, which contains 400 patients, a concert, consisting of vocal and instrumental music, is held twice a-week, under the direction of a musical professor. The concert is conducted almost entirely by the patients, assisted by the attendants and nurses. On New Year's-day a grand ball was given to the whole of the inmates of the establishment, including the attendants, nurses, and domestics. The patients conducted themselves with great propriety, and it was evident that the unfortunate beings thoroughly enjoyed themselves.

A LEARNED HOMŒOPATHIST.—A Dr. Burkhardt advertises a series of lectures on homœopathy, at Berlin, as a popular explanation of the science; the heading of one of the series runs thus:—"The Natural Law of the Healing Operation of Homœopathy in the Polarization of Medicinal Dynamics."

THE FRENCH ACADEMY has elected the Duke de Noailles to fill the chair in that institution vacated by the death of M. de Chateaubriand.

A COMMISSION OF THE FACULTY OF MEDICINE AT PARIS have reported favourably on the results of the trials which have been made with the powder of the flowers or leaves of an Abyssinian plant called *Kousso* as a remedy in the most obstinate cases of tænia. It has not yet been tried in this country.

MORTALITY TABLE.

For the Week ending Saturday, Jan. 20, 1848.

CAUSES OF DEATH.	Total.	Average of Five Winters.
ALL CAUSES	1,345	1,169
SPECIFIED CAUSES	1,334	1,164
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	393	221
SPORADIC DISEASES:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	51	54
Tubercular Diseases	155	203
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.....	136	141
Diseases of the Heart and Blood-vessels.....	55	40
Diseases of the Lungs, and of the other Organs of Respiration	300	243
Diseases of the Stomach, Liver, and other Organs of Digestion	68	67
Diseases of the Kidneys, &c.	15	13
Childbirth, Diseases of the Uterus, &c.....	14	9
Rheumatism, Diseases of the Bones, Joints, &c.....	7	7
Diseases of the Skin, Cellular Tissue, &c.	..	1
Malformations	1	3
Premature Birth.....	24	23
Atrophy.....	23	15
Age.....	59	73
Sudden	13	14
Violence, Privation, Cold, and Intemperance	20	37
Causes not Specified	11	5

TO CORRESPONDENTS.

"Mr. H. Broughton, Dobcross, Manchester."—The article shall appear in an early number.

"Mr. Smith, Southam."—Communication received.

"Dr. H. Freke, Dublin."—A private letter has been sent.

"Dr. Jones Lamprey, Dover-street, Piccadilly."—The paper on Chloroform in Cholera shall appear next week.

"T. D. P."—An occasional Correspondent, "On the Use of the Long Forceps," received.

"Honestas" writes: "Will you allow me to ask the name of a young gentleman who was admitted a Member of the College of Physicians, on the day that Dr. Crisp was rejected; and, in common fairness, may I ask, why his name has been omitted in the published list sent by the College."

"An Old Pupil of Professor Harrison" writes: "In your Journal of January 13, page 232, the Author of a paper, headed 'Races of Men—Contrast between conformation in the bones of the skull and face of the Celt and Saxon,' having stated, in his description of the face of the Celt, that 'the corrugator supercilii of *either* or both sides gets into action, wrinkling vertically the brow of "the man of the revolution,"' adds, in a foot-note, 'Harrison says—This pair of muscles cannot act separately. This, I believe, is incorrect, as they act independently of each other.' I am very anxious to know upon what grounds Dr. Tuthill Massy contradicts Professor Harrison; and should likewise be somewhat curious to see that face in which the corrugator supercilii of *either* side acted by itself."

"Dr. E. A. Turley, Worcester."—Received.

"A."—The regulations of the Queen's Colleges in Ireland are published in a pamphlet by authority; to be obtained from Thom, printer, 87, Abbey-street, Dublin. The Charter of the Belfast College was published in the number of the Dublin Medical Press, of the 16th inst.

"A. B., Bristol."—We cannot.

"Chirurgus."—"On Reference Fees to Medical Men" is an advertisement.

ORIGINAL LECTURES.

LECTURES ON FEVER.

BEING AN ATTEMPT TO DEVELOPE MORE DEFINITE VIEWS OF ITS NATURE AND TREATMENT, BY THE CONSIDERATION OF THE PHENOMENA, AS OBSERVED IN THE PRACTICE OF MEDICINE AND SURGERY; BEING A CONTINUATION OF "MEDICINE AND SURGERY ONE INDUCTIVE SCIENCE."

By GEO. MACILWAIN, F.R.C.S., Author of the above-mentioned Work, "Unity of the Body," "Tumors," &c., &c., &c.

LECTURE III.

[Concluded.]

Plague.—Dr. Hancock.—Partiality in its Distribution.—Bubo.—Carbuncle.—Peritoneal Fever.—Dr. Robert Lee.—Pathological Conditions in.

PLAGUE.

It has been already observed, that every form of fever demonstrates some one particular point more lucidly than others, and that it is this circumstance which renders the *variety* really instructive to us, and, as I believe, necessary to the discovery of the truth. This is true of the plague; but it seems to me, also, that no one form of fever contains within its own list of facts anything like such clear suggestions as to the real nature of the more important relations of that which we term fever. As we are not about to rest our reasoning on any one phase of the disease, it is not necessary here to state the whole of the phenomena; but we will select such as appear most essential and well ascertained. In common with all fevers, the plague differs exceedingly in its mode of access, the presence or absence of premonitory signs, the rapidity of its development, and in the celerity, certainty, and extent of its fatality. Some, says Sydenham, were attacked suddenly and died in the streets, whilst, after a time, none "*unless a fever and other symptoms had preceded.*" You will find one or other of the facts I lay before you in almost every author who has written on the subject; but for the notes which I chiefly refer to I am indebted to Dr. Hancock's excellent Work on the "Laws of Pestilence," (a) a book which sufficiently evinces how highly qualified the Author is in a moral, literary, and philosophical sense, for the task he undertook. I had for some years the honour of being his colleague; he has long since retired to Ireland, and I trust still in the enjoyment of that happiness which is derivable from a calm and uninterrupted enjoyment of intellectual pursuits, and a retrospect of a life characterised by a careful observance of the highest duties of a Christian physician. I beg the reader's pardon for this digression, but I could not resist a line or two in tribute to an old colleague whom I have not seen for many years, and perhaps never may meet again, but of whom I always think with sentiments of respect and affection. Well, Dr. Hancock has no object of the kind which we are pursuing. His purpose is to prove, that, however infectious the plague may be, whether it be derived from atmospheric causes, or circumstances of a local nature, or, as he believes, from both in conjunction, that it is indigenous, and that Quarantine laws, abstractedly considered, are of very little use; whilst, in diverting attention from more important measures, they are not only mischievous, but in various ways of course highly injurious and oppressive. In the first place, then, we remark that the plague suddenly destroys, sometimes without the occurrence of fever at all; secondly, like all other fevers, it is irregularly distributed; some escape it altogether, many dying of it, many recovering, and many not being affected. In regard to its invasion, plague is emphatically that form of fever which has most strongly impressed the fact of a peculiar constitution of atmosphere as one of the elements of epidemic fevers through various, what I may call, premonitory facts. Unusual presence or scarcity of different insects, various diseases among cattle, peculiar abundance of vegetables or fruits, augmented severity of type in existing diseases, and other similar indications, have one or other, or all of them, almost always preceded plagues, of which we have the full history. The rise, progress, and decline of this disease have been generally observed to take place with a remarkable indifference, as it were, to surrounding circumstances, which, nevertheless, so long as it remains, indefinitely increases its severity and multiplies its victims, such as crowded ill-ventilated localities, &c. The arrival and departure of the plague, too, is often coincidental with many phenomena which have sufficiently marked relations to the general atmospheric phenomena, as distinguished from ordinary local peculiarities. Amongst many who escape, several well authenticated and significant peculiarities have been recorded. As in all other epidemics, there has been always remarked a general, and sometimes an absolute immunity in those who were well housed, well fed, in good air, and temperate *in all things*. Here, as in moral matters, a very little habitual self-denial presents the surest exemption from real calamity. Certain occupations are known to have been attended with more or less exemption. Amongst these may be named water carriers, (a) oilmen, and tanners. Among a million and a half carried off by the plague in about four years, (b) Mr. Baldwin, Consul General of Egypt, could not ascertain that a single oilman had suffered. It is also said, that in Tunis, those who work in oil stores are never affected by the plague. It seems that the exemption of tanners from the plague has been recorded at Rome, Cairo, and other places, by Fonseca, Mindererus, (c) Schenk, and Maclean. In some instances druggists and apothecaries have appeared to have been partially exempt. Persons labouring under chronic disorders, and extremes of youth and age, seem to be less liable, that is, the aged, and children at the breast; yet, when the supply has been cut off from the latter, "hundreds of them perished."(d)

In a plague at Manchester infants escaped, and at another at Moscow very few under two years old died of the disease. (e) The *Proto Medico* at Malta says of the plague there, that several infants drew milk from the time that their mothers were affected to the time of their death without taking the disease; but, with those extremes excepted, the "young and strong" are more especially in danger. There is, in regard to the plague, a well-recorded and frequent occurrence, which is rather contrary to what we observe in certain other fevers, viz., that in plague, foreigners very often escape. In a plague at Basle, only Swiss, no Italians, French, or Germans were affected. In Hafni, in Denmark, a similar immunity occurred to the English, Dutch, and Germans. Sir Robert Wilson records, that in Egypt the British army passed through several villages affected by the plague without its being communicated to a single soldier; and on another occasion recorded by Assalini, in which the French army moving towards Acre, having been subjected to great privation, was attacked by the plague, it appears, that the Egyptians and Assyrians, notwithstanding their continual intercourse, remained unaffected. It has also been observed, that a person may leave a plague district, and yet, in a week or two after, have the plague—analogously to what we have observed in intermittents; but it does not in the least follow, that a person so affected shall convey the plague to any one else in that locality. In certain plagues at Constantinople, it has been observed, that of all nations the Armenians are the least exposed to it. These, it seems, eat little flesh, but consume a good deal of garlic, onions, and wine. On the contrary, it has been reported of certain plagues in Constantinople, (f) that foreigners were most obnoxious to the disease. This, however, is not so contradictory as it seems. It appears the Mohammedans, to whom, it is said, Timone alone alluded in contradistinction to foreigners, occupy the more airy parts of the town, and that would agree in both senses with other reporters. It has been observed, too, that Catholics are more subject than Protestants, which has been attributed to peculiarities in diet connected with their religious observances; and various other most interesting differences in liability, with regard to Jews, Turks, and Armenians, which are, at least, coincident with other differences, are worthy of more analytical inquiry than they appear ever yet to have received. Dr. Hancock's book is full of valuable facts,—industry, care, logical accuracy, candour, and love of truth are its great attractions. It was remarked, in London, that amongst those apparently most obnoxious to it were butchers. In regard to all other circumstances which tend to spread or give intensity to fever, plague presents the usual phenomena, as will hereafter be observed. I need not describe the symptoms of plague: it is agreed by all writers, that it is an exaggerated form of fever, and that there is no symptom absolutely pathognomonic of it. The occurrence of bubo and carbuncle are circumstances having some interesting relations to the subject; they are not constant by any means; but, *cæteris paribus*, they appear to have been held as interesting points in prognosis. Russell (a) says, "amongst the most fatal cases were those who had no bubo." Orræus remarks, "that the major part of those with bubo recovered, whilst those with petechiæ and carbuncle generally died." These facts are all important in our inquiry. I regret that the quantity of work we have before us forbids us giving more at length the various facts I have collected on this subject; I will, therefore, conclude with the one most important; namely, that there is a general concurrence as to the tendency in plague, wherever it is, to adapt, if I may so speak, the tendency of the ruling disease,—that is, in one case, to the heart, or lungs; in another, bilious; in a third, a dysentery; a fourth, a bilious remittent tendency, and so on. The history of plague is abundantly rich in facts, in relation to the much-agitated question of contagion,—some of which will come before us in another place. We must, however, for the present, quit the subject of plague, and proceed to consider some facts of one other form of febrile disturbance.

PUERPERAL FEVER.

It has sometimes occurred to me, that those who would make artificial divisions between medicine and surgery must be puzzled to know where to place puerperal fever; for the most important features of the complaint are certainly met with by all in what is conventionally held to be their peculiar province. As surgeons, I know, that we not unfrequently meet with a good deal of peritonitis, and venous inflammation, too, that we would gladly avoid; and, I have no doubt, that the obstetric physician and the consulting surgeon, by studying together the phenomena of puerperal fever, strangulated hernia, obstetrical and surgical phlebitis (if I may use the terms,) would find themselves mutually benefited in regard to the various important phenomena evinced, inflammatory and other, by the serous membranes. Does the physician show me nothing of which I can avail myself in surgery, when after, we will say, an *apparently natural labour*, he may have, without any evident cause, as the phrase is, a supervening peritonitis or phlebitis, with a rapidly destructive fever of an inflammatory, or of a powerless kind, as the case may be, which may frustrate all his attempts to save his patient, by bleeding and antiphlogistics on the one hand, by an opposite plan on the other, and, in a third case, by any combination of both; or do I show a physician nothing in regard to such cases, when I take him to a case of strangulated hernia, wherein the peritonitis shall be well developed by symptoms, wherein the operation shall lay the fact before his eyes, and yet wherein the removal of the stricture and absolute repose, shall constitute the successful remedies of the case, with which he has been

(a) "Researches into the Laws and Phenomena of Pestilence," by Thomas Hancock, M.D., Author of "Hancock on Instinct," &c. &c.

(a) Volney's Travels, ch. vii.
(b) London: Thomas's Practice, 223.
(c) Plouoquet Bibliothec, Vol. VI., p. 364.
(d) Investigation, &c., concerning the Plague in the Levant.
(e) See Short and Mertens.
(f) Dr. Timone in Ph. Trans.

(a) Russell on Plague.

accustomed to associate bleeding and purging, as the only hopeful but uncertain remedies? It seems to me, we exchange facts of the highest value, and alike indispensable, if we would have demonstration of *the whole* relations of the subject. Here, however, we must not digress,—we are collecting the facts of fever. Well, then, after a natural labour, there shall arise, in the course of a few hours, a few days, or any intermediate time, a fever, ushered in by shivering, nausea, often sickness and vomiting, pain in the head, which shall, for a time, be attended with great excitement; and which, if it be not relieved, speedily passes into a state of depression, with feeble, quick pulse, dry tongue, coma, delirium, and death. Coincidently with this, there has been, at the first, *usually* more or less tenderness about the region of the uterus, which extends more or less over the whole abdominal region; or, it may be more restricted, or be (more rarely) very imperfectly developed, or even absent. I must here so far deviate from my plan, as to say something of what is happening all this time; because, I cannot otherwise, in the few lines I have for the purpose, bring the matter fairly before you. It is found, then, on dissection, that there is acute membranous inflammation of a *diffused* character, or the organs themselves may be the seat of the inflammation. That is the one circumstance which I would impress. 2ndly. There is a *very great tendency* in the inflammation to be seated in the membranes.

3rd. It is formed either in the peritoneal investments of the organs, or the membranes lining the veins; but, whether in these, or in the organs themselves, it does not appear that inflammation of the one at all *necessarily* implies affection of the other. Inflammation of the veins is not an uncommon occurrence in Surgery, and is not at all confined to a mere sequence on wounds. Some years ago, I thought it worth while to publish a case occurring in the *male*, from its seat and character being exactly that of phlegmasia dolens. Inflammation of the veins of the uterus, in connexion with peritoneal fever, have been now remarked on, more or less, by several physicians; but it is to Dr. Robert Lee that we appear to be specially indebted for more full and satisfactory researches on this subject. Without entirely agreeing with him in all his remarks on the *general* bearings of the morbid anatomy of this disease, still, all the facts put forth on the subject by this distinguished physician are intensely interesting. The inflammation seems to be characterized by its usual appearances, varied only by its degree, and the structure in which it is seated. Thus adhesions, cream-like or other effusions of lymph, on the peritoneal surfaces more or less aqueous or puriform effusion in the cavity of the abdomen, layers of lymph, or secretion of pus in the veins, diffused abscesses exterior to the peritoneum, softening and alteration of the structure of the uterus or its appendages, secondary abscesses in other organs, or in other parts of the body. In short, all those various changes, (which I need not go through in detail,) but which characterize, as the case may be, peritoneal or venous inflammation. It seems, I think, by Dr. Robert Lee's account, that the pain on pressure which is pretty constant when the peritoneum is the seat of the mischief, becomes somewhat uncertain, as it is seated more deeply, that is in the veins or structure of the uterus, which is an important fact as ministering to the insidious character of the more deeply seated affection. But there is a remark of Dr. Lee's, which I think specially important; and, although I have no experience in regard to the case itself, yet my general investigations into the pathological relations of membranous inflammation, leave no doubt on my mind that Dr. Lee's observation is essentially correct. After stating his opinion, that the facts justify the inference, that inflammation of the uterus and its appendages is the proximate cause of the various destructive febrile affections which follow parturition, he makes the following important remark, which I shall beg you to bear in mind for future purposes, "and that the various forms they assume—inflammatory, congestive, and typhoid, in a great measure depend on whether the serous, muscular, or venous tissue of the organ has become affected."

Peritoneal fever sometimes prevails epidemically, and has given rise to some very interesting phenomena, which strongly suggest that it is communicable by contagion; but the facts are not essential to us in this place. Wherever it prevails, the same irregularity in its distribution is observed as that which attends all other fevers. None can say who is to be affected, or who is to escape, as regards any given parturient woman. It is very destructive. Generally, if fatal, it terminates in a short period, varying from a few days to even a few hours. As you may suppose, considerable difference of opinion has existed on the subject of treatment. Dr. Robert Lee, viewing the disease as inflammatory, and treating it on the suggestions of the pathological conditions, rests his treatment chiefly on bleeding and other branches of the antiphlogistic plan—not indiscriminately, of course, but with certain modifications; others have used depletion with great caution, or distrusted it altogether. I have never seen any disease more thoroughly disheartening to medical men than what I may call epidemic puerperal fever. Some years ago, when it was very rife, a friend of mine, in large midwifery practice, was almost broken-hearted, from the number of fatal cases which had occurred to him; nor was he the less so from it occurring to him that he might have adopted his views of treatment too exclusively; when he met a brother practitioner who had been just as liberal in the use of the lancet as the other had been chary of it, but with no better success, and who felt equally depressed by his results. Now, nothing in my view leads to any practical correction of all this, or even renders it intelligible, so clearly as our "Law of Inflammation." But we must proceed. I may, however, add, that on the commencement of this fever there is frequently a cessation of the secretion of milk, and the lochiæ are either altered in quality or quantity, or suppressed. The skin, too, appears to me, judging from the report of cases, to evince less power than in any other form of febrile disturbance. We shall, in the next place, proceed to collect the facts of the morbid anatomy in fever.

ORIGINAL CONTRIBUTIONS.

OBSERVATIONS IN THE HOSPITALS AND MEDICAL INSTITUTIONS OF THE CONTINENT.

By Dr. KIDD, of Limerick.

(Continued from Page 267.)

In chronicling the doings of the great men of Germany, (by which, I must confess, one is likely to be led astray,) we must not lose sight of our original object. I spoke before of the general appearance of "Gun-shot Wounds," and some new points with respect to the phenomena presented by the orifice of "exit and entry;" we now proceed to another subject, of not less interest, that of AMPUTATIONS.

The hospitals of the Continent, turned, during the past year, into great military ambulances, with every variety of wound and injury, have afforded opportunities of studying this subject of the greatest importance; opinions, previously resting on insufficient data, have been confirmed, and new facts, of the greatest interest, added to the general stock of information.

The interests of science and those of humanity are one; and if, in dwelling on some points, we may be accused of tediousness, it is so intended that we may get at all the facts and all the opinions possible. A great harvest of facts, such as we shall never again experience, has been offered to our toil. The labourers, especially in France and Germany, have not been few; and, if daily watchings and nightly wanderings from bed to bed, and hourly thinkings among the first surgical men in Europe, amid eager gazers, and the bustle and agitation of revolutions, and the clatter of arms, and the deep, dread horrors of pain and suffering are worth anything, the reader is spared such dreadful experiences. It is said, the first accounts of the revolution of February in Paris, was looked on in London as a hoax; it is even hinted that many people, for several days, could not be brought to believe in it. The scenes of the Continental hospitals are much akin; men who have seen half a dozen cases of gun-shot injury in their life, cannot be brought to have any definite idea of thousands of such cases; and yet any one that could spare a couple of months in the French capital during the past year, or among the wards of the hospitals of Vienna or Berlin at present, would witness such scenes of wonderment.

The introduction of the various anæsthetic agents in amputation; the improvements in the knowledge of the mechanism and treatment of hæmorrhage; the recognition of the effects of moral influences in the general treatment of gun-shot wounds, have given the subject a new and scientific character of no little interest; to which, if we add the generally-recognised principle of the abolition of secondary amputations, we shall perceive, that the late events have been not at all barren in results; indeed, the facts themselves are of the very deepest importance.

And, speaking of the results of moral agents, perhaps I may here say, it has been a subject of very general observation during the late events, compared to those of other years, that the wounded have been, in most instances, in a state of depression and sadness not at all favourable to the issue of their cases. It was impossible, indeed, not to observe this in the various institutions in which the exigencies of the moment had huddled them together. A similar spectacle, we are told, presented itself in the French hospitals after Waterloo; defeat was in every face, and privations of every sort delivered up the unhappy victims to the worst forms of typhus and hospital gangrene. In the revolution of 1830, on the contrary, as I had occasion to mention before, a very general feeling of joy and satisfaction became everywhere evident, assisting in a very marked manner in bringing about a favourable termination to many of the worst cases. This lesson alone is one that should not be lost on our practical surgeons; intimating, as it does, not indistinctly, that, under such circumstances, we cannot pay too much heed to have removed from our patients every source of mental agitation; that especially about the latter periods of all surgical cases,—at the time, for instance, when we are to dread gangrene and hæmorrhage,—we cannot be too careful to keep our patients quiet and free from all excitement.

That fine line, dividing those cases which require operation from those which should be left to the reparative efforts of the system, is very difficult to seize, cases often requiring all the moral courage and decision the surgeon can muster to bring him to pass a verdict one way or the other. Of this, however, I would wish to inform the more thinking reader, from all I have been able to see, that a great deal may be left—much more, indeed, than we are at all aware of—to the all-powerful efforts of the system; that once sentence is passed to save a limb, we should not retract, but do everything possible to sustain and support the *vis medicatrix* in the struggle. The case will be more tedious, and test our surgical faith very severely; yet, holding on to the end, we shall be saved the unsightliness of a limb lopped away, an infinity of pain and uneasiness; and, possibly, a long-suppurating and conical stump.

When there is fearful smash made of the end of one of the long bones, going possibly into its capsular investments, or destroying the joint itself, when the chief artery is injured, or the plexus of nerves with which it is generally surrounded, there will be little difficulty, perhaps, in coming to a conclusion what we are to do; and yet I have seen cases that defied "all rule and all authority" on these points,—cases brought in too late for amputation make recoveries truly astonishing. When there is a splitting of one of the large bones, with a tearing of the vessels and a bruising of all the soft parts, the case is, perhaps, equally clear. Yet any one watching, day after day, the result of some such cases, after the late events on the continent, would see

how little faith nature often puts in the *ex cathedra* sentiments of many of our highest authorities.

In hazarding this expression of opinion, I am quite aware I am arraying many old authorities in fearful opposition to mine. Yet, perhaps, the circumstances of the relative engagements go a great way in accounting for the matter; together with our advanced knowledge of physiology and its correlative branches of science: in the matter of *tetanus*, for instance, the freedom from this complication, the bane of our elder surgery, was quite remarkable during the late battles, not a case, that I am aware of, having occurred after hundreds of fearful injuries; yet it is not difficult, perhaps, to account for it; if more frequent in the army on the field, it is due very clearly to the more unfavourable condition in which the wounded are placed,—exposed to long heavy marches, to vicissitudes of seasons of the most hurtful kind, to sudden variations of temperature,—things in themselves, perhaps, capable of inducing this formidable malady.

That the absence of these disturbing agents should lessen, in the same way, the necessity of indiscriminate amputation, in civil strife, of primary and secondary operations of all possible shades and character, does not appear to me so difficult of explanation, and placed, as the generality of all such gun-shot accidents must be, in every-day practice, in almost similar circumstances, in positions where every possible care and attention may be shown them. I would merely contend, for the present, for our practice, in this particular way, undergoing some reformation; if the practice is new, it is, perhaps, not so heterodox as we would be led to think.

As to the necessity of amputation, as one of the cardinal points of military surgery, we have, of course, the opinions of Guthrie, Thompson, Hunter, Ranby, and Bilguer; in the French school, Dupuytren, old Ambrose Paré, (not the worst of the groupe,) Roux, and Baudens; and here in Germany, Wagner, (who has written specially on the subject,) Schneider, Rust, Graefe, Langenbeck, and many others.

With respect to the simple question of primary amputation, on which all the world now seems nearly settled, we have in array on one side, Le Dran, Thomson, Guthrie, John Bell, Larrey, Roux, and all the first men of the Continent; on the other side, names not less respectable, Percy, Faure, John Hunter, &c. Many of the points urged by the latter, though very forcible apparently, have really little weight; they are evidently not of a practical character; and since our knowledge on such subjects has become so precise, must yield to the overwhelming testimony of later experience.

Against anything in the *expectant* way, we have, of course, Roux, Baudens, and some of our other military men. M. Malgaigne, however, from a long experience, both at home and abroad, from a comparison of facts of the most extended kind, still continues the opponent of too much operating. He does not affect to deny, that, after the expectant mode, we will not have many deaths; yet he says the amount will be less than that after amputations. Hosts of figures of the most opposite character have been brought to bear on the subject. The impression of this able surgeon is, however, clearly against that indiscriminate interference with the knife so generally recommended. Again, under his own care, he finds the rate of mortality only one-half among the well-fed military men brought into his wards, compared to the wretched, half-starved insurgents, broken in spirit after defeat, and in the worst possible condition for recovery. An old pupil of Broussais, the idea of inflammation, of gastro enteritis, and the other fine things now gone to the tomb of "all the Capulets," have haunted him like a dream. Yet he now sees reason, he says, to give such fancies to the winds,—and, in place of starving his patients and bleeding them, he exhibits stimulants and nutrients, brandy when necessary, wine, soups, and broths. For myself, I must confess I have been astonished at the directions given by the great surgeon of the St. Louis Hospital, who takes every opportunity, too, to communicate his views and explain the results. It is quite clear, his figures, with respect to the relative mortality of insurgents and soldiers under his own immediate care, must shake, in no inconsiderable way, those brought against him by the high military authorities I have named; indeed, there can be little doubt at all of the matter, and if so, the statistics of M. Roux are worth exactly nothing.

M. Velpeau is another surgeon of very considerable experience, whose celebrated *mot* gives the result of his extended practice in a nut-shell:—"Plus je vieillis dans la pratique, *moins* je suis partisan de l'amputation." And he goes on to tell us, that he operated more in 1830 than in 1848, according to a blind belief in the doctrines of the schools, and that, even in 1848, he had learned to trust more in the resources of the system in June than in February.

M. Jobert, and one or two other men, are also of similar opinions.

A singular mixture of races is found in the Continental hospitals; and, if I may trench on the province of our able and gifted friend, Dr. Knox, I would say that race has sometimes not a little to do with the *resilience* of the system, so to speak, under surgical injuries. There are three well-marked races, perhaps, to which the crowd of inmates of the hospitals on the Continent may be reduced. The Roman,—at this side of the world it is rather a term of obloquy to say Celt; the German—we must not for the life of us say Saxon; and the Slavonian. The Celt is the most civilized, most removed from the true physiological, flesh-and-blood standard of the animal—man, least calculated to resist surgical accidents. There are traces of an old civilization about him not to be misunderstood. His civilization, zoologically considered, has made a hot-house plant of him; his adventitious mode of existence, his *petit verre* of brandy, his scalding coffee, have perpetuated it.

The German has been civilised much later; he is a hardier animal than the Celt. I use the word animal in a physiological sense,—he eats salads and meat for his breakfast, washing them down with Hochheimer and Burgundy; he is muscular, strong built, and takes especial care of himself; he is not so volatile as his neighbour, or so fond of *niaiseries*. He says *ja wohl* to everything, quite satisfied all is right; his system, I think, is healthier. Thirdly, the Slavonian, from the eastern parts of Germany and Austria—a man of yesterday—a savage—in the physiological sense. These three races, of course, suffer many modifications, but the attentive eye cannot fail to perceive the preponderance of some one character in each of the miserable inmates of the several institutions, and that one class should go through operations better, and require less management after, is only what we should, *à priori*, expect, thus disturbing our calculations still further. To return, however, to the subject more immediately before us.

In the ordinary details of amputation the German medical men use wonderful care and caution; indeed, everything in the German hospitals is done, as I said before, with the regularity of a machine. They seem to draw a marked distinction between those cases requiring the removal of a bone from the joint, and those where amputation, properly so called, is performed,—a moiety of a limb left as it were hanging between the organic and inorganic world. Except in cases of removal of the thigh, where the operation is necessarily tedious, and the strength of the assistant may be too much put to the test, the tourniquet is rarely used, obstructing, as it must do, the venous circulation, and leading to increase of hæmorrhage. Chloroform is making its way steadily, everywhere the use of it being looked upon as one of the greatest boons of the present age to suffering humanity. Under certain restrictions, indeed, there can be little doubt of its becoming an adjuvant to the practical surgeon of incalculable value. The patient is sometimes, I think, on the Continent, taken with surprise to find a troublesome tumor or diseased member removed. He is given a long day; his consent is quietly obtained; his friends are all prepared for the matter; and while the poor fellow is looking out for this surgical Greek Kalends, the thing is done. Such a mode of proceeding does not consort with our ideas of propriety, perhaps, at this side of the world. Yet the patient is relieved from a little world of ghastly horrors that his imagination never fails to body forth, his *morale* is in a healthier state, and the subsequent processes of healing and granulation more kindly performed. From what I have seen everywhere, I am inclined to think we should be more careful about hæmorrhage after operations in which this new agent is used than we have been hitherto; the system, under circumstances of the sort, is very easily "knocked down;" and when we have superadded to the anæsthesia of chloroform over the vital system, the impending death of the other system, that of organic life, from want of blood, it is time to look about us. In cachectic habits, and cases of malignant tumor, the Germans economize every drop of blood; a flannel bandage, to preserve the warmth of the limb, and empty it, is run round it up to the cut, the effects of which must very obviously be to diminish the amount of blood in the limb, and preserve so much for the exigencies of the system after the operation. Whether such a mode of proceeding in amputations for gun-shot wounds would be advisable, as leading to subsequent congestion and hæmorrhage, is perhaps questionable.

In other instances, the chief artery of the limb to be removed is tied above the cut, *before* the operation is entered on; but except in very peculiar cases, where, for instance, intense hæmorrhage has set in after the receipt of a gun-shot injury, or the patient appears in the last degree of weakness and debility, such a mode of proceeding is not advisable; it is, in point of fact, two operations, not one.

[To be continued.]

"RACES OF MEN."—CONTRAST BETWEEN THE CONFORMATION IN THE FOOT OF THE CELT AND SAXON.

By R. TUTHILL MASSY, M.D., Exeter.

Let any anatomist take the small foot of a little Frenchman, and carefully examine its outlines, its arches, its delicate muscles and bones, then clear everything away from the ligaments, and study that one which supports the head of the astragalus and allows it that great freedom of motion,—I mean the calceo-navicular ligament, which, by its attachments, keeps the navicular bone, and that of the heel, in position with the astragalus.

Take, then, the foot of a large German, examine its strong outlines, its muscles and tendons, its bones and the unshaken arches, transverse, oblique, and the great one from behind forwards, then come down on the calceo-navicular ligament, and compare its thickness, strength, and firmness, with the thinness, delicacy, and yielding in the ligament of the other foot; observe the unyielding nature in the Saxon foot.

At the same time, you may bend the foot of the Celt into every graceful attitude,—the yellow elastic ligament will allow it,—the joints, muscles, blood-vessels, and nerves, will admit of every possible position: follow that foot through all the daring acts of the Revolution: over the barricades it passes with all the quickness of thought,—it is related to the mind, its director; grief hops off the mind with as much forgetfulness as the foot hops off the flag; all the sad and frightful events of life, when once stept over, appear forgotten, and a new era opens on this man, so he bounds forward for "Liberty, equality, and fraternity!"

At the other side of this picture, we have the thoughtful Saxon; his ligament will hardly bend,—how steadily he moves to the counting-house; the sure-footed man will never fall while he keeps the rod and the staff of his forefathers.

In my last paper, I apologised for comparing the bones of the foot and those of the skull together; in this I shall do likewise, while I compare the elastic ligament with the elastic brain; and before doing so, I must refer my *readers* to that disease called flat-foot, where the sole touches the ground; the spirits fall with this ligament; the most lively

become depressed under this unmanageable malady.

Every one has seen horses with this unhappy conformation of the hoof. The horn, bars, and frog are flat; the elasticicity of sole is gone; the beauty of the coffin-joint is destroyed,—it sinks down; the pastern has no elegance of motion. Get on this lumbering horse's back, how very unpleasant the action is. Compare his sluggish trot and heavy tread. Two hours' ride on such a horse gives one such a shaking! I might go further with my comparisons. Let this suffice; for all men make their daily remarks on men's gait. I recollect spending a few days at that queen of watering places, Rostrevor, in the county of Down. At the hotel window, a gentleman sat each evening telling the characters of persons by their gait. It may relieve this dry subject, my giving a description of Rostrevor. It is facing the Bay of Carlingford. To the south and to the north, it has a groupe of undulating hills and picturesque valleys, dotted with villas, surpassing in beauty Madeira Vale at Undercliffe. If it were in England, no doubt I would have a pic-nic party of the *élite* on the top of that massive hill, down whose rugged side the sparkling waters tumble. Ah! there is some one at the brook not so fair as the Circassian or Georgian, nor does she bear the character of the Celt or Saxon—how pure, how calm, how heavenly she looks; her jet black hair twisted to the back; her open forehead, full dark eye, beaming, blushing countenance. She has taken her pail of water, and left for home. How gracefully that uneducated bare foot steps out. The movements about the hip are lovely. She has not been deformed by a steel corset; her breathing, the emblem of life, is not laboured by the burthen or ascent.

Pardon me one moment,—as I have introduced this Phœnician Irish-girl, I must take her foot as an emblem of perfection. The beauty of its mechanism is lovely, the hinge-like articulations of the toes move so well; the part ball-and-socket joint at the instep admits of such grace and ease in the step; the tendo-Achillis is well inserted; follow it up one-third, and we get at the beauty of the calf; stop at two-thirds, for here is perfection. But I must return to the leanness and delicacy of the tendons on the dorsum of this foot; the thinness and transparency of the skin; the blue veins; the rounding of the ankles, and the imperceptibility of the action in the back tendons, moving in their sheaths, all forming a piece of undulating architecture.

Let no one condemn me for resting so long in my description of the mechanical and physiological action of the foot; there is more to be learned from it than one at first imagines. It leads your thoughts to the human mind; it is of some moment to the physician in his diagnosis of disease, and helps him to the general laws of mental physiology, and gives him some idea of the movements of the passions. The young student may fearlessly follow me in such footsteps as lead to the "great master-principle in the operations of the human mind,—the associations of ideas." From thence his reasoning will take him to his kind and heavenly Father, on whose bosom he will yet rest adorned with the promised crown, if he be *faithful*. We will admire beautiful mechanism without sin,—that plague and endless torment of the human *soul*; we will closely examine man's mental nature through his physical structure; we will trace the nerves and bloodvessels, and then we will read the history of Job,—a man "perfect" in mind and "upright" in body.

The Saxon's ancle is wide; there is also great width from the ball of the great toe to the base of the little toe; but the foot is so disfigured by last-makers and shoe-makers; the first has caused corns by not measuring those large toes, and the second has thrown the ankle forwards with high heels; so that I have an injured an imperfect foot to demonstrate. In truth, it is a pity to see so sensible a man crippled by the fashions; those corns make him very uneasy after dinner.

As the Celt has a lighter body to carry, he requires a small ankle, and less width across the toes, and this he has. The sole of the foot is thin, and allows considerable pliability. I must repeat what I think I have traced—I mean the intimacy between the elastic ligament and the elastic mind.

The Celtic foot is rapid in all its movements. Directed by his passions, it flies by to perform some daring act. The scaling ladder is on his shoulder, now against the ramparts; he is over, and a corpse within the walls.

The Celtic race were Druids and nobles; in other words, priests and military, and thus they continue. They were conquered on the shores of Britain, yet they left a trace behind to mix with the German, and thus you have the great mass of our present English population, the improved intermediate race I described.

Those curved lines of grace and beauty which I pointed out in the Celt and Saxon, are seen continually combined in the English and Irish; but the stature of the latter people is tall and athletic. Dissipation is weakening the mind and enfeebling the body of the former, through the growth of depravity, which is quite luxuriant in all the large cities and towns: the present and past generations are different.

The polite Frenchman will take off his hat when I say, as a physician, that I bow in reverence to the literature of his country. France, that can boast of giving birth to Lavosier, to Gay Lussac, and to Bichat; Dupuytren, Richerand, and to the inestimable Laennec. But I would wish him to keep it off while I hint at his naked exhibitions under the cloak of fine arts. Frequently have I heard the duped student of Briton regret his first false step on the theatre of such iniquity; every vow to relinquish such scenes proved useless; the crime at length appeared harmless, then habitual, and at last the old man tells us, with his gray hairs and broken down constitution, "I would have been an infidel had it not been for my early education." Yes, this would have been thy sad end had not your mother taught you to kneel by her knee, and ask God's blessing on your youthful head, and then to kiss and to be kissed by her,—an equal pride to both.

Mr. Brady mistakes me, if he imagines that I wish to take from the Hiberno Celt any of his good qualities; for I believe that any man, whether he be Celt or Saxon, who has a dash of Erin's blood within him, possesses a talent of mind and symmetry of body unequalled. I need not tell Mr. Brady that the Irish are loved for their wit, talent, and generosity; not so with the pure Celt of France.

I know men will differ with me for connecting the intellectual faculties with the development of the foot, and they have done so; but generally admitting that there is something in it, no one doubts but that children resemble their parents in figure, face, and disposition:—the tyrannical family of the Claudii of Rome, which produced the inexorable Tiberius, the sternest of despots; produced a savage Caligula, a Claudius, an Agrippina; and from the very same fierce family, after a period of six hundred years, sprung up the vilest of the vile, a Nero.

CHLOROFORM AS A REMEDY FOR CHOLERA.

By JONES LAMPREY, M.D., London, Author of "Remarks and Observations on the Cholera at present Epidemic in Berlin."

On a former occasion I have been permitted to draw the attention of the readers of this Journal to the terchloride of carbon, as a remedy for cholera; in the present instance, I beg leave to make some remarks on the discovery and therapeutic properties of chloroform, as applicable to the treatment of the same disease.

When chloroform is administered, by inhalation, to produce an anæsthetic, or sedative state, it appears first to act as a stimulant to the nervous and circulating organs, which sometimes amounts to considerable excitability—oppressive and laborious respiration very often takes place for a few moments, and frequently—particularly if there is much difficulty in making the person inhale it—there is much gasping, jactation of the arms, spasmodic action of the muscles of the extremities, venous congestion of the surface of the body, producing a marked livid hue; there is considerable engorgement of the large superficial veins; blood is found to ooze from ulcerated or abraded surfaces, if there be any present; and, where ulceration is more extensive, as in cases of caries or necrosis opening by sinus, considerable hæmorrhage sometimes occurs, the blood assuming a dark venous tinge; this is frequently found to be its condition, though proceeding from an artery, and it is commonly observed that the insensibility which takes place under the most favourable circumstances, closely resembles asphyxia, and is very variable in its duration.

On the other hand, some of the symptoms of cholera, especially in the advanced stages of the disease, are observed to be a laborious and oppressive respiration, jactation of the arms, spasms of the extremities, a livid hue of the body; and cholera patients are most frequently found in a state of great insensibility, closely resembling that of asphyxia.

When such an analogy appears to exist between the effects of the remedy and the symptoms of the disease which it is intended to meet, there can be very little grounds for expecting much benefit to be gained by its exhibition, and this can be further shown on reference to the *post mortem* appearances observed in cases of death from chloroform and cholera.

At present there is much difference of opinion as to the exact appearances found after death from chloroform, some contending that it has not been satisfactorily proved to have caused death in a single instance, whilst others attribute certain toxic properties to it. As evidence of the discrepancy of opinion on this subject, it is only necessary to refer to the transactions of the Académie de Médecine of Paris, where it is being warmly discussed, and apparently without the least probability of arriving at any definite conclusion. Without giving all the details of the cases used in illustrating their various arguments, it will be sufficient for purposes of analogy to select some of the most marked appearances that have been observed in the best-attested cases where death has been attributed to it, and then place them beside the *post mortem* appearances observed in cholera.

In cases of death from chloroform it has been observed, that there is considerable disorganization of the blood, which assumes a dark, venous hue (Velpeau), and venous congestion of the brain and its coverings, and lungs. (a)

In cases of death from cholera, we also find vast disorganization of the blood, which assumes a black hue, venous congestion of the brain and its meninges, lungs, and abdominal viscera, or, in fact, universal venous congestion. (b)

Hence the appearances of disorganization and venous congestion observed after death from both causes being similar, such a remedy would appear to be contra-indicated in this disease, as being likely to induce the consequences it was intended to prevent. Indeed, Dr. Hill has well said, in speaking of the treatment of cholera by chloroform, in his communication to the *Times*, of which I cannot do better than give the following extract:—"Of course," he says, "great caution is necessary in administering the chloroform, and in not pushing it too far. In some instances, the patient will sleep for twenty minutes or half an hour; in others, for several hours, and, on awaking will again be seized with a return of the vomiting and cramps, when the chloroform must again be resorted to, and the patient be kept, in a great measure, under its influence till these symptoms abate. One of our cases required its use at intervals of twenty-four hours. Again, the cessation after its use may be so far great as to require gentle blood letting, which occurred in two of our cases."

And so alarmed were the physicians at Berlin at

(a) Vide the transactions of the Académie de Médecine, published in the *Gazette Médicale de Paris*, Numbers of October and November.

(b) Vide Chap. IV. Remarks and Observations, &c.

the occurrence of sudden death to a patient whilst inhaling it, that they refrained from trying it in any further instance, even though it afforded considerable palliation to the spasms, and induced a composure which lasted for some time in a former case. (a)

Again, it will be impossible to administer chloroform by inhalation during the state of collapse, owing to feebleness of respiration; and Dr. Sutherland says, that it "had been used in the state of collapse without effect; but, previous to this state, it had been found useful in reducing cramps and spasms, and certainly relieved the sufferings of the patients. It was simply applied by being dropped on a piece of flannel, which was held to the mouth of the patient." (b)

But, even were it easy to make it act in such a period of this disease, its tendency to produce venous congestion must prove very dangerous, as this state of collapse is, perhaps, altogether owing to an embarrassment of the circulation.

The conclusions I wish to draw from these remarks are as follows, viz.:—

1. Chloroform is no specific for cholera, no matter how skilfully applied.

2. That it cannot be applied with safety in the period of collapse.

3. That it ought not to be used when cerebral or or pulmonary complications are present; and in no case should it be pushed far or applied frequently.

4. That when it is considered well to administer it, (no doubt cases will occur when it will prove useful,) it must be given with extreme caution and with a due discrimination as to the proper stage of the disease in which it would be safe or dangerous to use it.

5. That to produce any beneficial effect, it should not be relied upon alone.

The cases in which chloroform will prove useful in relieving this disease, are those which have some amount of vital power remaining, without being threatened with cerebral or pulmonary complications; and even here, as it is only intended to meet symptoms, such treatment can only be considered palliative. Perhaps these remarks may hereafter prove useful in case this wide-spreading epidemic should afford us an opportunity of testing them, so that we may not be disappointed, should we not succeed in obtaining the happy results from this plan of treatment that have been hitherto represented to us only in its most favourable light.

AN ACCOUNT OF TWO CASES OF POISONING BY THE POWDER OF CANTHARIDES.

By G. SAUNDERS, Esq., Assistant-Surgeon, 47th Regiment.

It is at all times lamentable to have to record cases of poisoning; but the account which I am about to relate is one of interest, and, therefore, needs to be added to the catalogue of medico-legal knowledge, in pursuance of the doctrine of the great Baglivi, "*Ars medica est tota in observationibus.*"

On the 18th instant, two soldiers of the detachment stationed at Rathkeale drank between them ʒ iv. of the powder of cantharides, mixed in water. This occurred about half-past eleven a.m., in their barrack-room, when all the rest of the men were out at drill. It could not have been correctly ascertained for what purpose or under what circumstances they had taken this poison; but it appeared that the one, by name Buchannon, composed the poisonous mixture, and, after drinking a portion of it himself, gave what remained to the other, named Tucker, who readily drank it, from the effects of which he died. An inquest was accordingly held, and the verdict of the jury was to the effect, that the "aforesaid John Tucker came to his death by the effects of a quantity of Spanish flies, administered to him by John Buchannon, he knowing the same to be poison." The medical evidence given by the civil practitioner in charge of the detachment showed plainly that traces of the powder of cantharides were found in the stomach and small intestines of the deceased.

The Cases.—John Buchannon, aged 26, tall and moderately stout; Irish labourer; total service, 5 11-12ths years; General good health. About half an hour after drinking a portion of the mixture of cantharides felt a lump or a load in stomach, with violent burning pain in its region; a burning pain in situation of bladder, and in genital organs; a dull heavy pain and giddiness in head; a hot tingling pain in throat; great thirst; constriction about the fauces; and a sense of sickness. All these became speedily aggravated, and in about fifteen minutes more vomiting commenced, ejecting small quantities of a "whitish fluid," with considerable tenesmus and strangury, and much general restlessness for a long time afterwards. Was not received into the detachment hospital till about six p.m., when free vomiting was produced with warm water, which relieved the general uneasiness, but the pain in throat, stomach, and genital parts became more violent. At eight p.m. an ounce of castor oil was administered, which acted twice freely on the bowels, without any red tinge. 19th. Passed a bad night, on account of the severe pain in epigastrium, &c., but no pain in loins; pulse not altered from natural state; less tenesmus; strangury continues; linseed-tea given in the form of an enema, and taken by the mouth freely. Four p.m.—Bled from the arm; ad ʒiiiss.; slight fainting; blood rather dark in colour; neither buffed nor cupped; vespere, an anodyne draught.

20th. Passed a more tranquil night; heart's action slow, and somewhat labouring; respiration regular; tongue whitish, its mucous coat removed in streaks; vascular state of lining membrane of mouth, tonsils, and pharynx; general symptoms much relieved; and now, for the first time after taking the poison, passed about a pint of clear-coloured urine, not, however, without much scalding; bowels have not been moved since two o'clock this morning, when he had the last injection of linseed-tea; vespere, going on favourably. 21st.—passed an indifferent night. Pain in region of stomach, particularly on pressure just at the point of the ensiform cartilage; some difficulty and scalding in passing urine, which is now more high coloured; scarcely any thirst; was bled from the other arm; only a small quantity of blood was taken, when fainting came on; vespere, all urgent symptoms subsided. 24th.—Convalescent.

John Tucker, aged 23; English blacksmith; total service, five years; stout conformation; general good health. About ten minutes after drinking the poison, was seized with violent burning pain in throat, stomach, and lower part of the abdomen, with difficulty in swallowing, considerable tenesmus and strangury, giddiness, flushed face, and urgent thirst. All the symptoms of this man were very much more violent than those revealed in the case of Buchannon. On admission into hospital, about 6 p.m., took plenty of warm water, which brought on free vomiting; and, in an hour after, an ounce of castor oil, which purged him freely. Small quantities of bloody discharges from the bowels, which continued to flow during the night; but passed no urine. Had a few convulsions. The man's intellect remained clear to the last, and he died at five minutes before ten a.m., on the 19th instant. Venesection was not employed in this case, in consequence of symptoms of collapse.

AUTOPSY SIX HOURS AFTER DEATH.

External Appearances.—Integuments of neck and face of rather a bright red colour. Much discolouration of integuments of back, from gravitation of the blood.

Cranium.—Vessels of membranes and of brain filled with dark coloured blood; ventricles distended with clear serum.

Thorax.—Lining of trachea and bronchi vascular throughout, and the bronchi filled with reddish coloured serosity. Both lungs highly engorged with dark-coloured thick blood. Ventricles of heart contained thick dark blood, and a small quantity of coagulated fibrine. About ʒss. of serum in pericardium. Structure of heart healthy.

Abdomen.—Lining membrane of œsophageal tube of a pale colour, excepting a portion of its upper part, which was inflamed. Patches of vascularity of lining membrane of stomach, its large extremity deprived of its mucous coat in several places; the vascularity also extended to lining membrane of duodenum and small intestines; the powder of cantharides was scattered throughout the canal, and seen in greatest abundance between the folds of the small intestines; the vessels of the alimentary canal distended with blood; liver engorged with dark blood; gall bladder very much distended with bile, and no bile appeared to have entered into the digestive process; spleen and kidneys highly congested with blood; ureters vascular; bladder very much contracted and empty, its internal surface perfectly pale. All other contents healthy.

While examining the body by candle-light, the blood mixed with some of the contents which escaped from the stomach, &c., exhibited a beautifully bright sparkling light, resembling the phosphorescence of the sea. This was owing, undoubtedly, to the existence of minute particles of the elytræ of the cantharis vesicatoria.

In consequence of these cases of poisoning having occurred at Rathkeale, I was ordered down, when I had opportunity to make notes of the above cases.

(a) "Chloroform had been tried on two occasions: the first case derived a temporary benefit from it, as it completely subdued the spasms, and afforded tranquillity for about three hours, but its effects were not permanent, as these symptoms were renewed as soon as its effects were over; from the partial success in one case, it was tried in another, but, unfortunately, immediate death was the consequence."—Vide page 46 Remarks and Observations, &c.

(b) Vide *Medical Times*, of the 23rd December.

EXCESSIVE HÆMORRHAGE DURING THE CATAMENIA.

By DR. TUTHILL MASSY.

The patient is aged forty, the mother of three sons and two daughters living. Nine years ago she lost her husband, and ever since the period of menstruation has been regular but unusually long, lasting—for five or six days—and accompanied by a discharge of three half-pints of red florid blood, which is followed by great prostration of strength with a sinking sensation. The patient is stout, has the bilious temperament, with a healthy appearance and good appetite. The cause of the hæmorrhage appears to me to depend upon the uterine functions being checked in their natural operations at too early a period, so that, had her husband lived, she no doubt would have, by this time, nine children more; it, therefore, is a case for which medical treatment can afford very little benefit. It is astonishing to witness the procreative powers of some women along those warm southern shores; from eight to sixteen children are pretty common among the farmers.

In some of those great breeders *the left mamma is larger than the right.* When first my attention was drawn to this conformation and coincidence, I could but account for it on the historical grounds of the amputated breast of our heroines. In one family, the mother and daughter have the anomaly, one bosom much fuller than the other. The left the lady calls "her little one." She is a beautiful and fascinating woman, with nine children. She happens to be ten years separated from her husband, a military man, otherwise she would have, in all probability, as many more young ones!

I have almost invariably traced dissipated habits, previous to marriage, as the exciting cause, in women of city-life, of their not having children. It is also a principal exciting cause of the development of tubercle in the scrofulous.

Now-a-days, balls and parties polka all the young people either into delicate health or into the other world; and, as it is right to give the why for everything, *fashion* accounts for this.

Exeter, Devon, January 8, 1849.

HOSPITAL REPORTS.

(From our Edinburgh Correspondent.)

EDINBURGH ROYAL INFIRMARY.

SURGICAL HOSPITAL.

AMPUTATION FOR UNUNITED FRACTURE OF THE LEG.

BY PROFESSOR SYME.

Alexander Baird, aged 37, a carter, was admitted Dec. 29, with an ununited fracture of the right leg. He had received the injury about six months previously, by the wheel of a loaded wagon passing over the limb; the fracture was compound, and about the middle of the leg. He was treated in a distant part of the country, and in the following manner:—The limb was kept extended; a wooden splint was applied on the outside of the leg, reaching from the knee to a little past the sole of the foot, and the whole placed in a narrow wooden box, from which it was removed daily, to be washed and dressed. At the end of three weeks, the wound in the integument healed. For four months, this plan of treatment was pursued, but, by this time, the patient had got tired of being confined so long to bed. He accordingly removed the apparatus, and for the two months following made use of a rude splint of his own construction. He then came under the care of an irregular practitioner, who sent him to Edinburgh.

He is a very robust countryman, about six feet in height. On examination, the broken extremities of the tibia and fibula are found lying alongside of each other for at least three inches and a half, and the limb exhibits a corresponding amount of shortening. There is extreme mobility, and evidently a mass of muscle interposed between the ununited surfaces.

It was evident, that none of the ordinary plans of treatment could be tried, in such an extreme case as the above, with the least prospect of success; and, as it was the patient's own wish that the leg should be amputated, this request was agreed to, and the operation was reluctantly performed by Mr. Syme, on the 16th inst., in the manner usually practised here of late; viz., by the circular incision below the knee. The operation was more than usually tedious, on account of strong adhesions that had been formed; but, more especially, there was great difficulty experienced in securing the numerous small blood-vessels.

Since the operation the patient has suffered comparatively little, and there is not the least constitutional disturbance.

AMPUTATION OF THIRD AND FOURTH TOES.

BY PROFESSOR MILLER, ON 19TH.

Richard Luxton, sailor, some months ago, had his left foot crushed between two vessels at sea, so that the second and third metatarsal bones were displaced upwards, and the fourth downwards, giving the foot a much thicker and narrower appearance than natural. Some small unhealthy ulcers exist between and around the third and fourth toes, which seem to have suffered most; there is considerable œdema of the foot, and the patient is unable to use it. Mr. Miller removed the third and fourth toes by amputation through the metatarsal bones; and, as these toes were the main cause of the deformity, and were found, after the amputation, to have been most severely injured, we may expect, not only a more seemly foot, but that its usefulness may be, in a great measure, restored.

EXCISION OF THE ELBOW-JOINT.

BY MR. SYME, ON THE 23RD.

Peter Cameron, aged 21, a shepherd, admitted to the hospital, Jan. 12th. — Both elbow-joints are anchylosed, the left completely so,—but the right has a certain degree of motion. Both arms are thus kept extended, so that the patient, a young and robust shepherd, is almost helpless. He is unable to put on any of his clothes, cannot feed himself, and is totally unable to follow any kind of employment. He received the injuries which have led to this state of matters in the following manner:—About six months ago, while following his occupation on the hillside, in attempting to save himself from falling, he stretched out his *right* arm, and fell upon the palm of his hand. Since then, the limb has remained stiff, and almost useless. Three months after that, he had a fall from a loaded cart, while leading in corn. The left elbow-joint suffered on this occasion, and became of less use to him than the other. He was, on both occasions, seen by several practitioners, regular as well as irregular, but none of them could agree as to the exact nature of his injuries, still less about the proper mode of treating them.

The injury the right elbow has sustained is obvious, being evidently a dislocation of the bones of the fore-arm backwards. There is mobility of the joint remaining, to a certain extent, but the arm cannot be bent at a right angle. That of the left again is somewhat more obscure. It has been either a fracture through the condyles of the humerus, or of the heads of the radius and ulna. There is not the slightest degree of motion remaining, though at first there was a little, while the motion of the right, instead of becoming less, is gradually increasing.

Under these circumstances, Mr. Syme proposed to remove the joint of the left arm in the same manner as if it were diseased, so as to admit of a ligamentous union between the bones of the fore-arm and arm, and thus to form a supplementary joint, capable of flexion and extension. This was at once agreed to by the patient, who was most anxious to have some kind of use restored to a limb, in its present state worse than useless.

January 23.—The operation was performed by a transverse incision over the olecranon, and two longitudinal incisions at each end of it, somewhat resembling the letter H, admitting of the reflection of two flaps, the mode always adopted by Mr. Syme. It was difficult and laborious, owing to the large amount of new bone that had been formed, both behind and in front of the joint. The ulnar nerve was with difficulty dissected out from strong adhesions and new bone. Several large vessels bled during the operation; but, after enough had been removed, only one bleeding point could be observed. In consequence of this the wound was simply enveloped in a piece of dry lint. This was removed in the afternoon, when bleeding commenced; four or five vessels were then tied, and the edges of the wound brought accurately together by a number of stitches. The arm being bent at nearly a right angle, dry lint and a bandage were now applied. Chloroform was of the greatest service during this operation, as without it, from its length and severity, the patient could not have endured the agony attendant upon it. As it was, however, on its termination, he was carried out of the theatre with smiles upon his countenance.

January 26th.—He continues to do well, and takes his food with a relish.

REDUCTION OF A DISLOCATION OF NINE WEEKS STANDING.

BY PROFESSOR MILLER, ON THE 26TH.

James Smith, aged thirty-five, about nine weeks ago, in walking down a close with his hands in his pockets, was pushed down by a companion, and falling upon his left shoulder sustained a dislocation of the joint downwards, with extensive bruises of the surrounding parts. The practitioner who saw him did not discover the dislocation, but merely applied some topical remedy for the bruised condition of the shoulder. The long-continued immobility of the arm induced him to come to the hospital. Chloroform was administered to the extent of complete prostration, extension was then made by means of the pullies, and the arm replaced.

PROGRESS OF MEDICAL SCIENCE.

GERMANY.

By Dr. Bushnan.

BERLIN CORRESPONDENCE.

An election fever is now raging among us, and there is every probability that the "*materia peccans*," which has been accumulating in our system, since the dissolution of the National Assembly, will soon be expelled, much to the benefit of our constitution in general, and our second Chamber in particular. The members of our profession are occupying themselves very actively in these matters, and there is hardly an electoral division in which they do not head the democratic party. Indeed, here the medical men form a most important and influential body; and this need not be wondered at, when we consider the noble profession to which they belong; their usefulness, their activity, their knowledge of the sufferings of the lower orders, and the regard they bear to the cause of the poor. The wonder is, that they do not in England,—and there the reason is to be found in their want of union, the old story of the bundle of faggots,—as they do here, form a centre of intelligence which furnishes the majority of members to the popular party. From these, however, the medical men in the employment of the State must be excepted, for they form a body apart, and one apparently anxious to keep up the old state of affairs. One of these, Dr. Eck, the Director of the Friederich-Wilhelm Institution, has just been removed by death. He was what we call in Prussia a normal authority, "*Normalbeamten*;" honest, conscientious, pedantic, infallible, and an open and avowed enemy to every species of change and innovation. It is hoped, that, with his demise, one of the greatest obstacles to Prussian medical reform, so loudly demanded by the faculty, has been removed.

We receive very sad accounts of the cholera in Breslau, where it has been raging for the last three months, and still maintains its intensity, notwithstanding the changes of weather and the sudden alternations of temperature in the district. In a population of about 100,000, the cases average from sixty to eighty a day, of which from thirty-five to forty-five have been fatal. When so fearful a scourge brings with it so many harrowing tales of sorrow and distress, the ludicrous is scarcely admissible; yet I must tell you of a wealthy Breslau banker labouring under constipation, who could not find a medical man in the town to administer a purgative, lest a contrary state might be produced, a bowel complaint brought on, and a predisposition to cholera established. They might, too, have heard of the story you have told me of the Dumfries doctor, who, in the first visitation of cholera, recommended the use of purgative pills to keep off the disease; but which, on the contrary, had in this manner no little influence in the spreading and propagation of the epidemic. In the present case our friend went off to Berlin (what a blessing are railroads), where he found less scrupulous physicians, and returned home well.

The Berlin homœopaths have lately addressed a petition to the Government, praying to be placed upon the same footing with other doctors, so that they might be allowed to dispense medicines and to establish an homœopathic *klinic* or hospital for themselves. They were replied to that, when they thought proper to conform to the regulations enjoined by the law, and offer themselves for graduation, they would, if found qualified, receive a medical degree, and then become entitled to the same privileges as all physicians; and that, as regarded a hospital to be set apart for homœopathic practice, this, when formerly the system met with Royal patronage, had been proposed to the homœopaths, who then declined the offer, preferring to perform their marvellous cures in private.

But we are so immersed in politics, and in the hopes and fears concerning the result of our new elections, that all lesser lights, and medicine among them, are, for the moment, if not shut out, at least, obscured. We shall soon, however, settle down, as in the former days of peace and tranquillity; and then, through your instrumentality, the readers of the *Medical Times* shall be kept *au fait* to all that is likely to interest them occurring in this city.

ACUTE TUBERCULOSIS OF THE SPINE.

In the *Medical Times* of April 8, 1848, (No. 445,) I related the observation of Dr. Bühler, on carcinomatous affections of the spine. The same writer has published remarks upon acute tuberculis of the

spine, which I will now briefly detail. It is well known, that accumulations of tuberculous matter frequently occur in the vertebræ; and that these, sooner or later, produce a change in the column, and give rise to hump-back, Potts' disease, &c. &c. But experience has also shown, that such changes are not the constant results of tuberculous affections of the spine, for these will exist without them, as in psoas abcess, which is frequently, if not always, the result of such affections. Hitherto, however, the cases which have been described, have been those of a chronic form; but Dr. Buhler, in his work before us, "*Spinal Tuberculosis under a New Form*," has described three acute cases of this formidable disease, as he observed them in Dr. Hassé's klinic, at Zurich, and in which, during life, few local symptoms presented themselves, neither deformity, pain on pressure, nor psoas abcess. All these cases proved fatal; but, it may be presumed, if discovered early, that counter irritation might effect a cure, and, as it appears to me, many of the anomalous cases now termed spine diseases, but which are both named and treated empirically, may, in fact, be incipient tuberculosis. The cases described by Dr. Bühler occurred in a young man of 25, and in two girls of 25 and 21 years of age, none of whom had previously complained of ill health, and they entered the hospital merely from having, a short time before, been attacked with shortness of breath and difficulty of breathing. The countenance, however, too evidently displayed the presence of serious disease. There were great anxiety, restlessness, and prostration of strength, without, however, the slightest paralysis. The breathing was feeble and short; at times it was as rapid as 70 in the minute, and then life was frequently endangered by threatened suffocation. It was only during these exacerbations that the patients complained of oppression. There were no affections of the heart or lungs; the stethoscope revealed none, nor were there any symptoms present to indicate disease of those organs. The vertebræ exhibited no alteration of form; pressure on their processes, rubbing with hot sponges, violent shakings, and motion of the body, which were often induced, produced no pain. The man complained of no uneasiness in the back; the women, on the contrary, of some pain in that region, particularly on sudden movements of the spine. In all the cases, pain was traced along the course of the costal nerves and in the loins, and in one there was sciatica. There was always a sense of fulness about the abdomen,—a tightening, as if confined by a hoop or band, and a strong epigastric pulse. When first admitted the pulse was nearly 100, and latterly it reached 160; the skin was always very hot; there was not much emaciation, but the debility was so great that the patients generally fainted on getting out of bed. The man died tolerably tranquilly; but the women of suffocation, and with great distress. The duration of the malady from the time of admission to the hospital was eight, eleven, and thirteen weeks. On dissection, and the removal of the viscera, the disease presented itself as a yellow, transparent, fluctuating tumor, containing a flaky, yellow, cheese-like matter, about the size of an ordinary apple, and situated on the fore part of the spine, on the bodies of the vertebræ, which, when sawn through, were found to be infiltrated with a yellowish, glutinous matter. In two of the cases, six and seven vertebræ were affected; in the third, all the vertebræ were more or less involved.

FRANCE.

ACADEMY OF SCIENCES.

Meeting of January 15. M. Boussingault in the chair.

THE CHOLERA.

Dr. F. Perier forwarded a communication on the progress and nature of the epidemic in the Dép. du Pas de Calais. He pointed out a marked difference between the outset of the disease in 1831 and in 1848. In most cases typhoid symptoms had made their appearance, and special alterations of the gastro-intestinal mucous membrane had been noticed.

DIABETES PRODUCED BY AN OVER DOSE OF NITRATE OF POTASS.

Dr. Cardan related the case of a man who, in place of two ounces of sulphate of magnesia, swallowed three ounces of nitrate of potass. The first effect of the drug was, to produce considerable gastric irritation, which yielded rapidly, and a most abundant diuresis. The renal secretion increased in quantity, as much as five litres being excreted during the night, leaving a deposit of grape sugar upon the walls of the vase.

ACADEMY OF MEDICINE.

Meetings of January 16 and 23. M. Velpeau in the chair.

CHLOROFORM.

M. Roux said, that he had employed chloroform in more than 300 cases, and that he had witnessed unfortunate results from its exhibition only in a man affected with tetanus, and in whom the anæsthetic agent seemed to have hastened death. As to the other case, referred to by M. Guerin, of a woman operated on by M. Roux for cancer of the breast, who expired shortly after the removal of the tumor, Professor Roux did not believe that her death could be referred to that cause, but to syncope, an accident of frequent occurrence after great operations. Altogether, M. Roux would say that the number of accidents hitherto observed, did not justify the apprehensions of some severe, not to say captious, critics. With regard to M. Gorie's case, M. Roux, thought the fatal result was due to the introduction of air into the vascular system.

M. Amussat stated, that whatever might be the mode of inhalation, both ether and chloroform occasioned an alteration of the blood. He persisted in the opinion he had so frequently expressed of the change of the colour of that fluid in the arteries, during anæsthesia. Chloroform was not only advantageous in operative surgery, it was also sometimes a most useful assistant to the diagnosis: thus, in a case of calculus, in which the apprehensions of the patient made him object even to the introduction of a catheter, inhalation had permitted the surgeon to acquire positive information of the condition of the bladder.

M. Roux observed, that during the two years which preceded the introduction of ether into practice, the mortality of his operations had been 1·3; since the method of inhalation had been adopted, that mortality was reduced to 1·4.

Meeting adjourned at five o'clock.

MAMMARY CYSTS.

A Memoir, by Dr. Robert, Surgeon of the Hôpital Beaujon.

(Révue Thérapeutique.)

The diagnosis of some deep-seated cysts of the mamma presents considerable difficulties, and they are frequently mistaken by surgeons of great experience and ability, for tumors of a malignant nature, an error the more to be regretted as it has often been the occasion of important operations for the relief of a malady which might have been cured by simple puncture. During the last few years, M. Robert having met six times with this disease, publishes in the present paper the results of the comparison and analysis of the facts. The tumors observed by M. Roberts all belong to the serous monolocular class of cysts; they are developed in the cellular structures which connect the various lobes of the mammary gland. At first they are completely surrounded by the mamma, but in their subsequent development they glide between the lobes, and are finally separated from the skin merely by the subcutaneous adipose textures. When voluminous, they occasion slight pain, and a sense of distension. The fluid contained in their cavity is habitually transparent, and resembles that contained in the tunica vaginalis in hydrocele. The walls are very thin, and adhere intimately to the surrounding parts, a circumstance which renders their eradication almost impossible. When the gland participates in the chronic inflammation, which has been the first cause of the disease, the form of the tumor is irregular, the colour of the skin modified, and the appearance of the disease forcibly recalls scirrhus. In all cases, however, the most central and prominent part of the tumor offers an elastic resistance very different from the sensation of hardness yielded by the surrounding portion. This important circumstance is always of the greatest assistance in the diagnosis of the malady. It is true, that in some partially-softened cancers something analogous must be acknowledged to exist; but the redness and adhesion of the skin to the cancerous tumor is not observed in cysts. Besides, the pressure exercised upon the cyst causes it to disappear in a momentary manner, by forcing it back into the mamma,—a fact not observed in cancer. The treatment consists in the evacuation of the fluid, followed with the injection of a solution of iodine, or by such other measures,—the introduction of a tent for instance, which may be calculated to cause obliteration of the accidental cavity.

POPLITEAL ANEURISM.—GALVANISM.—RUPTURE OF THE SAC.—LIGATURE.—GANGRENE.—AMPUTATION.—DEATH.

M. VELPEAU.

Case.—X., aged 63; a gardener; of a strong constitution; accidentally noticed, three months before his admission into hospital, a pulsating tumor in the right popliteal region. The tumor was not larger than an egg, but was the seat of considerable pain. The pulsations were visible to the eye, and ceased upon compression of the femoral artery. The general health of the patient being excellent, M. Velpeau determined to attempt the cure of the aneurism by the employment of electricity. A battery of a dozen (4-inch) plates was put in requisition, and, the femoral artery being submitted to compression, two needles were introduced into the centre of the aneurism. The wires were then brought into play, and the operation was continued for half an hour, the patient complaining of much pain. The needles were left in the tumor, and a roller bandage applied to the foot, leg, and knee. After three days, the galvanic battery was again used, the needles being placed in a different spot of the tumor. The results were the same, viz., considerable pain and inflammation of the wounds made by the needles. The suppuration became abundant, but the physical symptoms observed in the tumor continued precisely in the same state as before the operations; hæmorrhage soon took place (ten days after galvanism), and the femoral artery was immediately taken up. The leg, however, which had grown cold and œdematous from the effects produced on the vessels by galvanism, became gangrenous after ligature, and amputation of the thigh was judged necessary. But the constitution of the patient had suffered greatly from the previous operations, and he died shortly after removal of the limb, a circumstance the more to be regretted, as the aneurism was, when the subject was admitted, in the most simple condition, and as ligature presented every chance of success.—D. M'Carthy, Physician to the British Embassy.

IRELAND.

[From our Dublin Correspondent.]

DUBLIN PATHOLOGICAL SOCIETY.

Saturday, Jan. 13.

Mr. Hutton in the Chair.

TUBERCULAR PERITONITIS.

BY DR. LAW.

The pathological specimen that I submit to the attention of the Society is one of tubercular peritonitis. The subject of it was Thomas Kavanagh, a sailor, aged 17. He was admitted into Dunn's Hospital, under my care, November the 8th, affected with diarrhœa, and swelling of the abdomen, with distinct fluctuation. The abdomen, when percussed in the umbilical region, yielded a dull sound. He was very much emaciated; was extremely weak; had no appetite, but urgent thirst. The tongue was red; the skin dry and coarse; pulse 84 in the minute. He had had low fever three months before, and before he had completely recovered his strength he resumed his former sailor occupation, in which he

was engaged about a fortnight, when he was seized with severe pain in the right side of the abdomen, and from thence over the whole belly. This pain, at the end of three days, had nearly subsided, and then he perceived the abdominal swelling to come on, and gradually to increase. Nearly at the same time he was seized with the diarrhœa. From the time he came under my care, he felt no pain or tenderness in pressing the abdomen. Before I learned the previous history of his case, from the dull sound yielded on percussing the abdomen, I diagnosed effusion into the cavity of the peritonæum, the result of inflammation of this membrane—a view confirmed by the history. He was ordered hydrargyrum cum cretâ and Dover's powder, a combination which seemed suited to the complication of the diarrhœa and the peculiar effusion. Under this treatment he improved considerably. His diarrhœa ceased, and the abdominal swelling diminished very much. He now began to complain of headache, but not so as to attract much attention. There was no flush of his face, no throbbing of the temples; pulse, 78; appetite improved. On the morning of the third day from his first complaining of headache, we found him in a state of profound coma, from which he could not be roused. Pulse 60 in the minute; pupils moderately dilated; respiration easy—neither oppressed nor hurried. His head was shaved, and a blister applied to the vertex. Turpentine stupes were also applied to the legs, and he got a stimulating enema. He was seized with strong convulsions a few hours before his death, which took place the next morning.

Examination of the body twelve hours after death presented the following phenomena:—Body very much emaciated; the surface of the brain exhibited very moderate congestion of its superficial veins, with a scanty effusion of serum upon it. There was a very small quantity of serous effusion into the lateral ventricles. An horizontal section of the hemispheres exhibited more sanguineous dots than usual, but the substance of the organ was singularly softened in its structure, apparently from a quantity of fluid infiltrated into it, which escaped from it when squeezed. Its altered consistence was the only deviation from its normal condition exhibited by the cerebral structure. The abdomen was next examined, as being the seat of the original disease. It contained, perhaps, two quarts of turbid milky serum. All the intestines were glued together by means of lymph, in the substance of which we observed numberless small tubercles. The convex surfaces of the liver and spleen adhered so intimately to the diaphragm, that they could not be easily separated from it. The false membrane that constituted the medium of adhesion contained numerous tubercles. The apex of the right lung contained the softened tubercle, and, so far, lent a feeble confirmation to the opinion propounded by Louis, viz., that if tubercles be found in any other part of the body, they will be sure to be found in the lungs. The heart, as in all such cases of perverted nutrition, was much smaller than natural.

The case seems to me to present many points of interest, bearing very directly on the science of pathology, and, therefore, on practical medicine; and consequently I would claim the indulgence of the Society, while I offer a very few observations upon them. I would first advert to the pathological appearances presented by the brain. The symptoms exhibited before death would have led to the expectation of finding a considerable effusion into the ventricles, and probably on the surface. Such was not the case. Was there, therefore, no effusion? There was effusion into the substance of the brain, and which, by softening it, and diminishing its consistence, gave rise to a peculiar modification of development of *ramollissement* of the organ, quite different from that described by L'Alemand. I had often noticed this softening of the brain, and regarded it as the result of a condition of the organ intermediate between inflammation and œdema of the organ. Dr. Bennet, of London, has recently written upon this species of hydrocephalus, which, if I remember rightly, he considers as constantly connected with scrofulous inflammation, an opinion, which, I must confess, my own experince goes to confirm, as most of the subjects in whom I had met with it, were of a scrofulous diathesis; and the inflammation exhibited the indolent insidious character that usually marks inflammation in such a habit.

If this species of hydrocephalus were more generally known, medical men would, in many instances, have been spared the mortification of thinking that they had formed a wrong diagnosis, when led by symptoms, they had predicted an effusion into the brain, and which they had afterwards vainly looked for in the ventricles, the ordinary seat of such effusion.

We would next allude to the effusion into the cavity of the peritonæum, and to our diagnosis of this effusion, being the result of peritonitis. It may be urged, the previous history of the case was enough in itself to determine the cause of the effusion without any other proof. We are free to own, that the history of the case did render it very probable, that such was the cause of the effusion, but we should not have felt ourselves justified, from the history alone, in pronouncing upon it with the confidence we did. We would here assert what we have stated before, in this place, on more than one occasion, that slow effusion exists in the cavity of the peritonæum, and then the abdomen, percussed in the umbilical region, yields a dull sound; the effusion is the result of peritonitis. The different results of percussion in such a case, and in one of ascites, depend upon the intestines in the former case being kept down by the false membrane, while in the latter they are free to float on the surface of the fluid, and so yield a clear tympanitic sound. We don't regard this point as a mere curious question, but as one involving important practical results, unless we are prepared to assert that all effusions into the abdomen may be treated the same, quite irrespective of their cause. The next point of interest connected with the case is the proof it affords that tuberculosis, or the formation of tubercles, is an inflammatory process, or the result of inflammation, as well as under what conditions of the system they form; and if tubercles be the result of inflammation in the abdomen, they will be in the thorax also, and the inflammation will be of the same unhealthy character in the two cavities. We have already shown that unhealthy pneumonia very commonly affects the apex of the lungs; but the very existence of tubercle bespeaks the degenerate character of the inflammation, and therefore identifies it with the unhealthy pneumonia that affects the apex of the lungs; and thus, I think, we have a reason why tubercles choose as the seat of their development the upper part of the lung. If I, then, be required to assign a reason why unhealthy pneumonia affects the upper part, while healthy pneumonia affects the lower part of the lungs, I freely confess I do not know.

THORACIC ANEURISM—RUPTURE INTO THE RIGHT AURICLE.

Dr. M'Dowel presented a specimen, which, he said, was interesting for many reasons, but mainly as it illustrated a rare termination of thoracic aneurism, and one which had never before been brought under the notice of the Society. The full details of the case which furnished the preparation, it would be unnecessary to dwell on; but he would narrate, from his hospital case-book, its leading and most prominent features.

Case.—The patient, a robust-looking man, of intemperate habits, and forty-two years of age, was admitted into the Whitworth Medical Hospital, Dublin, Oct. 13, 1846. For a considerable length of time, he had laboured under the symptoms of disease of the heart, and organic disease of that organ had, by more than one medical man, been supposed to exist. He was subsequently seen by Dr. Hutton, who agreed with Dr. M'Dowel in the opinion, that aneurism of the aorta, close to the origin of that vessel, existed.

The symptoms he then laboured under were the following:—Severe shooting pain in the right side of the chest, radiating to the axilla, scapular region, and spinal column, excited by the least motion of the trunk, or by pressure on the parietes; dyspnœa and breathlessness, brought on by even slight exertion; paroxysmal cough, with scanty, frothy expectoration, and pain felt in swallowing, which was referred by the patient to a point opposite the centre of the sternum. Radial pulse strong and full, and of equal volume on both sides.

Examination of the chest gave the following results:—The action of the heart was strong and diffused; in the space between the sternum and the right mamma a loud harsh *bruit de soufflet* existed, loudest over the centre of the sternum, transmitted upwards, but more faintly, along the course of that vessel, but not heard at the apex of the heart, nor posteriorly in the vicinity of the spine. This *bruit* was distinctly synchronous with the diastole of the heart. The region over which the *bruit* was audible also yielded a dull sound to percussion, and strong impulse to the hand, from the level of the diaphragm upwards to the fifth rib, and from the sternum to the right mamma; the root of the neck was puffed and swollen, but not œdematous, and there was observed venous turgescence in the neck and upper extremities. These were the symptoms, general and special, from which were deduced the diagnosis, that an aneurismal tumor existed, which had its origin from the intra-pericardial stage of the aorta.

After a short time, additional evidence in favour of this opinion was furnished by the appearance of a distinct tumor, with pulsation, over the portion of the chest which had been dull on percussion, and where the *bruit* had been, and still was, audible; the tumor, it was observed, was very remote from the line of direction of the aorta, being to the right of the sternum, and principally below the level of the origin of that vessel. From the time that the parietes of the chest yielded to the pressure from within, relief was experienced from several of the symptoms which had previously been the most distressing.

The patient left the hospital in three weeks much relieved, and was re-admitted in December. The tumor, it was observed, had enlarged; the face was remarkably pale; the pulse very irregular, or intermittent and feeble; in the other symptoms no change was remarked.

The patient left the hospital in a few days; and remained in nearly the same condition, until the beginning of January, when he complained of great weakness and of occasional faintness. On Sunday, the 7th, he got up and dressed himself as usual, but feeling very faint he had to lie down on his bed. At 1 o'clock, p.m., he suddenly tossed his arms about; complained of insupportable oppression in his chest, tried change of position, but could obtain no relief; said he felt "as if his heart was smothered:" and he continued deadly pale with livid lips. Dr. Minchin saw him at this crisis; but the pulse at the wrist had ceased, and the action of the heart was scarcely perceptible; the surface was covered with a cold perspiration; but the mind was unaffected, and the face never lost its paleness. He died suddenly at 4 o'clock p.m.

The *post mortem* examination, at which Dr. Minchin assisted, revealed an aneurism arising from the aorta, half an inch above the sigmoid valves, it passed downwards, forwards, and to the right side; its boundaries were the following,—Below, it reached to the base of the right ventricle of the heart and to the diaphragm, an adherent pericardium prevented it from passing further downwards in front of the right ventricle.

Anteriorly it pressed against the sternum and the cartilages of the ribs on the right side, (forming the projection, which was apparent during life, on the anterior wall of the thorax.) Posteriorly, it corresponded to the front of the right auricle of the heart, to the superior vena cava, and to the root of the right lung; to its right side lay the lung and pleura, which it had displaced; on its left side was the aorta, from which it sprung. When viewed externally, the heart and the tumor seemed one mass, so closely were they connected together. The heart and its valves presented no morbid alterations.

Dr. M'Dowel remarked on this case as follows:—

"There are three principal points of interest connected with this aneurism, to which I invite

the attention of the Society: the nature of the aneurism, the mode in which it terminated fatally, and the direction of the sac:—

"1st. Careful inspection of the interior of the sac has convinced me that it is formed by the dilatation of all the coats of the artery; that it is, therefore, a true aneurism; its lining membrane is continuous with that of the aorta through the mouth of the sac, and it contained no laminated coagula.

"2. We find that the aneurism has opened, by a transverse rent of an inch long, into the right auricle; thus constituting a rare form of varicose aneurism. From the history of the case, it is probable that life was prolonged for three hours after this fatal rupture took place, during which time there were no appearances to indicate that dark or venous blood was circulated with red blood through the arterial system.

"3. The direction of the sac downwards is unusual: two causes, I believe, may be assigned as having influenced its enlargement in this direction. In the first place, as it originated from the aorta within the pericardium, the progress of the tumor upwards was arrested by the reflexion of this membrane to the front of the aorta; and, secondly, the direction of the aneurism downwards was directly owing to the influence of the recoil of the blood, sent in a retrograde direction into the sac by the elastic resiliency of the coats of the vessel below. In corroboration of this view it was observed, during life, that the bellows murmur in the tumor was invariably synchronous with the second sound of the heart. Whilst that portion of the aorta where it first changes its direction (1st curve) is most exposed to the impulse of the blood impelled forcibly upwards by every contraction of the left ventricle, and aneurismal tumors, occurring in this situation, very generally acquire a direction upwards, passing, it may be, into the neck, from the operation of the same cause; it would appear probable, that the earlier portion of the vessel, or that which is situated within the limits of the pericardium, is most exposed to the pressure produced by the reflux of the blood recoiling towards the heart,—a pressure which it is subjected to, in common with the upper surfaces of the aortic sigmoid valves; and hence aneurismal tumors of the ascending aorta will very frequently assume a direction downwards, and the more likely the nearer their origin occurs to the origin of the aorta itself, where the force of regurgitation is proportionally more felt.

The annals of medical science furnish us with some cases which resemble the foregoing one. In the ninth volume of the *Dublin Medical Journal*, Dr. Smith has published a case of aneurism of the ascending aorta, where the sac, passing downwards, projected simultaneously into both ventricles.

In the same paper, allusion is made to a very similar preparation in Mr. Hunter's Collection, where the tumor is connected with the right ventricle. (No. 366.)

Many cases are recorded of aneurisms of the ascending aorta communicating with portions of the venous system,—with the pulmonary artery, Hope, Wells, Reid; and four preparations in the Museum of St. Bartholomew's Hospital;—with the superior vena cava,—Dr. Law, in Reports of Pathological Society, Dublin; Mr. Thurnam, "on Aneurisms," Med. Chirurg. Transactions, vol. xxiii.

Much more rarely do such aneurisms communicate with the venous cavities of the heart. In addition to the one described above, I find two recorded by Mr. Thurnam, (loc. cit.,) case vi., where the opening took place into the appendix of the right auricle; case vii., where the aneurism communicated with the right auricle, and also with the termination of the superior cava. Case xiii., by the same writer, gives an example of an aortic aneurism communicating with the left auricle,——history unknown.

Museum, Richmond Hospital, Dublin.

THE Cholera in Scotland appears at present on the decline.

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THE MEDICAL TIMES.

SATURDAY, FEBRUARY 3, 1849.

RELATIVE RANK AND PAY OF THE ARMY AND NAVY MEDICAL OFFICERS.

ALTHOUGH the ill-treatment of the Assistant-Surgeons must be said to be the greatest instance of abuse connected with the administration of the Navy Medical Board, there is another, of almost equal magnitude, affecting as it does, the rank and pay of the whole Medical Staff of the marine,—from the Assistant-Surgeon to the Director-General. And this regulation is carried out with most astonishing pertinacity, in direct opposition to a Royal decree in Council, demanding, therefore, the earnest attention of the whole Medical Profession. The appointment of a talented and truly business-like gentleman to the responsible position of First Lord of the Admiralty is most fortunate at a time when the different medical and surgical corporations appear willing to assert the rights of their members. Yet we cannot help expressing our fear, that a compromise may be effected, which may place the Naval Surgeons and Assistant-Surgeons in a position little better than that they at present hold; and thus we desire to keep alive the interest already manifested by the Profession and the public, in the hope that at no very distant period the long-neglected rights of the Navy Surgeons may be fully recognised.

In the year 1805 the Sovereign decreed, by order in Council, that "the rank, pay, and designation" of both Navy and Army medical men should be the same. There cannot be the slightest doubt, therefore, that the former are justly and legally entitled to the same rights and privileges as the latter. With such an ordonnance in full force, it may well be matter for surprise and indignation, that the Board of Admiralty still persist in withholding the proper rank, pay, and designation, of the whole of the medical officers in the Navy, and consequently continue to degrade them several steps in their profession from the lowest to the highest. Submission to this injustice, however, can no longer be tolerated; and active measures are being taken by the Profession, to compel the Admiralty Board to give the medical officers in their service the rank and privileges which they were awarded, nearly half a century ago, by the Sovereign in Council.

Many of our readers may not be aware of the extent to which this order of the Sovereign has been disregarded by those who have from time to time been appointed to administer the affairs of the Navy; the following brief exposition of the principal facts will, no doubt, suffice to show the nature of these causes of complaint.

The question of rank involves the important one of pay, whether on active service or not, of prize-money, and, indeed, of all emoluments derivable from their professional duties and other sources. It is, therefore, an important question, and one demanding consideration. The assistant-surgeon and full surgeon of the Navy have the same rank as those of the Army, relatively to the Executive of the latter; that is, with the Lieutenant and Captain, although after them; which implies, that the oldest surgeon ranks with, but after the youngest Captain of a regiment of the line. This alone would be a just cause of complaint; but it is thrown entirely into the shade, and becomes a matter of insignificance compared to what occurs in the higher grades of the service. Here we find that the Deputy-Inspector of the Army ranks with the Lieutenant-Colonel; but the Deputy-Inspector of the Navy with a Major only. The Inspector in the Army holds a position equal to that of a Colonel; the Inspector in the Navy must be content with the rank of a Lieutenant-Colonel; and, to go to the highest grade, while the Director-General of the Navy takes his rank with a Brigadier-General, the Director-General of the Army takes precedence of him, because he has the same position allotted him as a Major-General has. We have given merely the relative position of the medical officers in the two services, according to the Army Executive rank; but the rank of the Naval medical officers, if placed in juxtaposition with that of the Executive in the same service, shows the anomaly to be still more striking. The following Table exhibits the present false position, and what should be the proper rank of the different grades of medical officers of the navy.

	Present Rank.	Proper Rank.
Director-General	Commodore	Rear-Admiral.
Inspector	Captain under 3 years	Captain above 3 years.
Deputy-Inspector	Commander	Captain under 3 years.
Surgeon	Lieutenant	Commander.
Assistant-Surgeon		Lieutenant.

This Table requires no comment; it speaks for itself.

Considering the amount of work actually performed by all, from the Director-General to the Assistant-Surgeon, even if we leave out of consideration the Order in Council, the pay is, to say the least, very unjust. There is only one way in which this can be shown, namely, by comparison; and, although no one will say that the Medical Officers of the Army are, in the least degree, overpaid, it is absolutely necessary to drag them in again, that it may be proved how badly their brethren in the Navy are remunerated. The relative amount allowed for services rendered is shown in the following Table, which, however, does not take cogni-

zance of the distribution of prize-money and the amount of widows' pensions, both of which are open to abuse; nor is it anything more than a close approximation of the HIGHEST amount of pay received by corresponding officers in both services:—

Rank.	Army.	Navy.
Director-General . . .	£2,000	£1,000
Inspector	730	575
Deputy-Inspector . . .	545	385
Surgeon (Staff in Army)	437	329
Assistant-Surgeon . . .	185	165

With such evidence, no one will deny, that the different Admiralty Boards have, for nearly half a century, most grossly neglected the commands of their Sovereign,—rendered themselves culpable, by giving the shadow but withholding the substance—the designation, without the rank and pay; and have placed themselves in by no means an enviable position, from which, it is to be hoped, they will shortly be removed by the Legislature.

SOCIAL EVILS.

THERE is one point of view, relative to the late cruel and calamitous occurrence at Tooting, that we do not remember to have seen noticed. We mean the effect that such treatment of so large a number of the rising generation must produce on both the physical and moral state of society. What kind of men and women can we expect those to be, that have been reared under these circumstances; supposing them to have escaped, as it were with their life, from the hazards of such an establishment? If it be true, that *London*, with the continued infusion of the best of the *country's* blood, through the healthiest and strongest of its sons, can only just maintain for one generation the type and form of the full-grown man,—that, left to her own resources, confined within her own limits, a sadly different race of human beings would soon be seen in our streets,—what folly and iniquity, not to say false economy, must it be, thus further to dwarf down and dwindle this equally helpless and hopeless class—rendering them most fearfully unfit to resist the insidious approach of every form of disease; whilst their proportionally increased active and restless mental faculties increase the more the danger of their position. The number of children contained in the Tooting establishment seems to have been upwards of 1000, belonging mostly to the Holborn and Marylebone districts. These formed, of course, but a small part of the number, somewhat similarly situated, belonging to the whole of the Metropoltan parishes.

But, here we must observe,—and we do so most willingly,—that from special inquiries, and from the details contained in the evidence, as to about a thousand of these pauper children, placed under the care of a Mr. Aubin at Norwood, there is no reason to doubt that they present a very different appearance. Nor do we charge the authorities, who have fallen under such a fearful responsibility, with hard-hearted niggardliness, BUT, with culpable and cruel neglect,—for the sum allowed to Drouet, for every two of the children at Tooting, —(nine shillings per week,)—is just the average amount paid to an able-bodied agricultural labourer, to find himself, wife, and family, (as the case may be,) in food, lodging, and clothing. Still, we must return to the point of our commencement, the serious damage sustained by so large a multitude of children from these sources, entering within the pale of society year by year. Putting out of question, for the present, the inhuman character of their treatment, it is almost equal, in its effects, to offering a premium for the perpetuation of pauperism. What but paupers can they, and the mass of their descendants be? Were we to trace the career of one, of either sex, amongst them, we might probably form some conception of the bodily suffering and social evil thus engendered. While we commend our benevolent and charitable institutions, we are satisfied that the disease is in the bud,—and we shall never get fair blossoms and good fruit until we carefully attend to the root. Proper food, raiment, and cleanliness, are needed to produce a healthy body,—education and discipline added, we may hope for a sound mind in a sound body; and thus would these poor children stand a better chance in the battle of life.

Would that it were as easy to remedy as to relate the evils of our social condition. In our humble efforts we should feel much happier in the task. Whilst we deprecate and despise those new-fangled schemes of Communism that time after time have been started, from Robert Owen down to another great "O" of the present day,—the offspring generally of selfishness and cunning, to prey upon simplicity and credulity,—we see no reason why establishments should not be multiplied for the instruction of the kind of children to which we have alluded, both male and female, in the useful and necessary arts of life; thereby planting within them the force of habit, strong almost as Nature herself, and giving them something like a ray of hope for the future. Almost in all large commercial establishments, persons exist placed in "authority," with certain defined duties to perform, and who hold their position entirely on good behaviour—we think it would not be difficult to obtain like good service, under like regulations, for any kind or amount of labour and ability that might be required. And the signs of the times lead us to believe, that in every branch of the public service, as well as in regard to the disposal of public money of every description, a severe and searching inquiry will be constantly exercised and effectually conducted. We would fain believe also, that, notwithstanding the adage, "the poor have still *many* friends," and we hope that the new Poor-law President, who has a seat in Parliament, and who, on this subject, would be listened to there, will take hold of the hint contained in this paper, should it meet his eye, or if he can, a better, and produce such a thoroughly business-like and searching supervision, as would indeed prove a blessing to society.

THE COLLEGE ELECTION

The Twelfth Clause of the new Charter granted to the Royal College of Surgeons of England states, that "the Council of the said College shall cause the name of every Fellow for the time being of the said College, and if thought fit by the Council, together also with the place of residence of every such Fellow, to be entered, according to their several seniorities, in a book, or register to be kept for that purpose at the Hall of the said College, or such other place, for the time being, as the said Council shall direct; and such book or register of Fellows, at such times, and subject to such reasonable and proper regulations as the Council for the time being shall think fit and direct, shall be open to the inspection of any Member of the said College, (whether *Fellow* or not,) at the hall of the said College, or other place appointed for the time being, for the custody of the same." Believing that the names of a few of the eligible Fellows for election into the Council will be acceptable to our numerous readers, we subjoin the first dozen on the list, after the last-elected gentleman on the Council, together with their qualifications and contributions to the advancement of science:—THOMAS WORMALD, Esq., Bedford-row, Assistant-Surgeon to St. Bartholomew's Hospital, Author of "Anatomical Diagrams," in conjunction with Mr. M'Whinnie; GEORGE PILCHER, Esq., Great George-street, Westminster, Consulting Surgeon to the Surrey Dispensary, Author of a "Treatise on the Structure and Pathology of the Ear," for which the Fothergillian Prize was awarded; JOHN BISHOP, Esq., F.R.S., Bernard-street, Russell-square, Surgeon to the Northern Dispensary, Author of numerous contributions to the Journals, obtained a prize of 2,000 francs for a "Memoir on the Voice in Man and Mammiferous Animals," awarded by the Academie Royale des Sciences, Paris; JOHN GEORGE PERRY, Esq., Westbourne-street, Hyde-park, Government Inspector of Prisons, formerly Surgeon to the Foundling Hospital; GEORGE SIMPSON, Esq., Bedford-street, Bedford-square, Author of "Anatomy, as Applicable to the Fine Arts;" GILBERT WAKEFIELD MACKMURDO, Esq., New Broad-street, Surgeon to St. Thomas's and the Royal Ophthalmic Hospitals; FRANCIS KIERNAN, Esq., F.R.S., Manchester-street, Manchester-square, member of the Senate, and Examiner in Anatomy and Physiology in the University of London, Author of the elaborate "Researches into the Structure of the Liver;" JOHN MALYN, Esq., James-street, Westminster, Consulting Surgeon to the Western Dispensary, Author of Papers in the "Cyclopædia of Anatomy," and the "Cyclopædia of Surgery;" GEORGE GULLIVER, Esq., F.R.S, Surgeon to the Royal Regiment of Horse Guards, Author of Notes and Appendix to the English edition of "Gerber's Anatomy," Introduction and Notes to Hewson's Works. For the other numerous contributions to the advancement of medical science, the reader is referred to the "Medical Directory" for 1847. EDWARD WILLIAM TUSON, Esq., F.R.S., Harley-street, Surgeon to the Middlesex Hospital, author of "Myology," "The Dissector's Guide," &c.; RICHARD OWEN, Esq., F.R.S., Royal College of Surgeons. This gentleman is too well known to need further notice. WILLIAM COULSON, Esq., Frederick-place, Old Jewry, Surgeon to the Magdalen and City of London Lying-in Hospitals, and the Infirmary, Margate; Author of "Deformities of the Chest;" "Diseases of the Bladder and Prostate;" translator (with valu-

able notes) of "Edwards's Comparative Anatomy" and "Blumenbach's Comparative Anatomy," &c.

In enumerating the above we have, of course, passed over the names of gentlemen deservedly well known in the Profession, but who, residing in the provinces, are, of course, ineligible for election into the Council—as Messrs. *Cox*, of Birmingham; *Hey*, of York; *Clarke*, of Bristol, &c. &c.

BEDFORD GENERAL INFIRMARY.

A Special Meeting of the Governors of this Institution was held on Monday last, for the purpose of electing a physician in the room of Dr. Watt, resigned. An impression, however, having got abroad that one of the candidates had been in the field, and had obtained proxies before Dr. Watt's resignation was generally known, a motion was put and carried, that the election be deferred for one month. The votes were—For the adjournment, 43; against it, 42. We shall very shortly say a little on the necessity of hospital reform.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—Jan. 23, 1849.

J. M. Arnott, Esq., F.R.S., President.

A paper was read, entitled,—

A Case of Aneurism of the Axillary Artery. By H. Hancock, Esq., Surgeon to the Charing-cross Hospital.

The subject of this disease was a bargeman, aged 34, who was admitted into the Charing-cross Hospital in August last. The tumor presented all the ordinary characteristics of aneurism, and occupied the entire axilla, raising the pectoral muscles and clavicle. He assigned, as the cause of the mischief, the falling of a sack of beans upon him two years before. He was bled on admission, and a week afterwards the author placed a ligature on the subclavian artery, external to the scalenus muscle. The case went on favourably for a fortnight, when the tumor showed signs of inflammation. At the end of three weeks the ligature came away from the artery, six days after which the sac, which had suppurated, burst. Another opening was made lower down, which allowed the escape of a large quantity of offensive blood and matter. The wound made at the operation was then nearly healed. From this time it appeared to be going on well for ten days, when suddenly a gush of blood took place from the sac, and he expired in about three-quarters of an hour afterwards. A careful dissection was made of the parts, and the axillary artery was found healthy, except where it communicated with the sac. The divided ends of the artery were each closed by adhesive inflammation, and a plug of coagulum of about half an inch in length. Six branches were found proceeding from the artery between the part on which the ligature was applied and the opening in the side of the artery into the sac. From one or more of the largest of these, it is the opinion of the Author, that the fatal hæmorrhage took place,—the blood being thus brought backwards into the artery above the opening into the sac, and its impulse forcing out the coagulum which was interposed.

The Author makes some observations on the importance of the sac in all cases of aneurism, and introduces a statistical account of the result of operations for the cure of traumatic and idiopathic axillary aneurism, in confirmation of his impression, that the ligature should have been placed on the axillary artery itself, "in all cases where the mischief can be traced to a *direct injury*, and where the size of the tumor admits of our reaching this vessel;" the risk of hæmorrhage would, he considers, be thus materially diminished, if not altogether obviated, in case of the sac suppurating, as in the present instance.

Mr. Phillips, in opening the discussion upon the subject, coincided with the writer upon the desirableness of placing the ligature below the clavicle in general, but suggested, that in many cases the operation of ligaturing the subclavian artery had been had recourse to from the serious appearance of things in the axillary. In other cases he confessed that the impression upon his mind was, that many surgeons had long held that it was the proper course to take. He believed that the work which was considered a great authority (Mr. Hodgson's) did directly point to that; not perhaps in terms, but he gave a certain number of cases in which it had been successfully adopted. There were also other writers to which he might allude.

Mr. B. Cooper was not present during the reading of the first part of Mr. Hancock's paper. He would like to have heard his opinion in a case of idiopathic disease, which progressed but slowly, and in which nature provided means for carrying on the blood to the arm through collateral branches, and the impossibility of cutting down on the axillary for the purpose of tying the artery so close to the surface, where there was a possibility, in the traumatic form of secondary hæmorrhage, which was far more likely to occur there than if tied at a greater distance. He would like, also, to know whether Mr. Hancock would tie the subclavian artery at a lower angle below the clavicle, or in the axilla; because there was a portion of artery not exactly defined by anatomists, where the subclavian ends and the axillary commences. Above the clavicle it was infinitely more easily got at than below, and therefore he believed that that were the better operation. But, with respect to wounds or accidental cases of rupture, where no compensating effort of nature had been set up to carry the blood by collateral branches, he believed the best way would be to cut down upon the wound itself. In general, he considered the operation of tying the artery above the clavicle was altogether so difficult, that, without special reason for so doing, no one would prefer it. A reason there might be, where the axillary had risen so far in the clavicle as to be unapproachable otherwise.

Mr. Hancock said, in answer to the observations made by Mr. Cooper, he should certainly bow to so high an authority if his own opinion were not borne out by the circumstances to which, in his paper, he had referred. That paper had been compiled from the statistics and results of the different cases which appeared upon record, and the various works which had been written upon the subject. He had referred to Mr. Hodgson's work upon the diseases of the arteries, in which he did not find anything conflicting with his own opinions. In his paper there were four cases in which axillary aneurism had been induced, as the result of injury to that vessel; in every one of these cases the axillary was tied; in three suppuration occurred, and the whole of the patients recovered: but in the other instances, in which the axillary aneurism was the result of accident, and the ligature was placed upon the subclavian artery, the mortality was equal to the recoveries. He, therefore, maintained, that the opinion which he had stated was supported by facts. In answer to some further questions from Mr. Cooper, Mr. Hancock stated that, in all the cases which had come under his notice, where the ligature was placed upon the axillary artery itself, the patients recovered.

Mr. Cooper supposed that, in the cases of accidental lesion of the vessel referred to, where the ligature was placed above the subclavian, it was in a secondary hæmorrhage; for it could not be thought that any wound could be tied above where there was bleeding at the moment, or how was the blood stopped?

Mr. Hancock said, he had carefully excluded all cases of wounded artery. He considered that aneurism did not form until the external wound had healed, and which, therefore, placed the matter in a different position to a case in which the ligature was tied immediately upon the receipt of an injury. In his paper he had made two classes of aneurism; first, the idiopathic, or chromatic aneurism, where tied above the clavicle,—and second, where tied below. The whole of these cases recovered, not only where there was suppuration of the sac, but in one where secondary hæmorrhage occurred, and which was easily arrested by styptics.

Mr. Erichsen said, he had had occasion to look into the subject, and to go over many of the published cases. It was important to understand what was meant by aneurism, especially traumatic. The French writers spoke of a wounded artery generally as an aneurism; but he thought it should be restricted to cases in which it was circumscribed by the sac. He had collected eight cases where the ligature was applied above the clavicle in traumatic axillary aneurism; only one such proved fatal, the other seven recovered; while in those cases in which the ligature was placed below the clavicle, in none did death occur. Certainly, he did know of six or seven cases in which the artery was ligatured above the clavicle, and in which the termination was fatal; but it was very necessary to distinguish between spontaneous aneurism and circumscribed false aneurism. The mortality in spontaneous aneurism was very great, nearly as much so as the recoveries; but in the other cases the ligature was an exceedingly successful operation, as much so as any which was performed upon the arteries. With regard to the opinion which Mr. Hancock had stated, that, in cases of axillary aneurism, it might be desirable to ligature the vessel below the large collateral branches of the subscapular: if it could be done, which he should question very much, they would incur the great danger of cutting off the supply to the arm. If the ligature were applied, they would run the risk of cutting off the vascular supply after the operation, and would very probably have gangrene of the upper extremity, supposing even it were possibly to supply the arm through the collateral branches.

Dr. Webster referred to a case in which he tied the subclavian artery. The patient was thin; he cut down upon the scaleni, and everything seemed to be going on favourably. There was no difficulty in securing the artery; but, immediately after the operation, the patient was seized with a continuous short cough, and went on so till his death. A *post mortem* examination was allowed, sufficient to permit him to ascertain whether he had injured the nerve. He found that it was not cut into, but was excessively inflamed; some lymph was thrown out, and he had no doubt that he did with the probe injure the brachial nerve, and which was the cause of that continued coughing, which issued in death.

Mr. Hancock saw only in that an additional reason why the artery should be tied below the clavicle.

A second paper was read, entitled,—

Observations on Scarlatinal Albuminuria, and a short Notice on the Sequelæ proper to that Affection. With Cases illustrative of both. By James Miller, M.D., Physician to the Western General Dispensary.

The writer prefaces his Paper by a Table, comprising 219 cases of scarlatina observed during the summer of 1848. In 59 cases, the scarlatina was followed by renal anasarca; while, in 10 cases, the latter affection occurred unpreceded by any of the ordinary outward signs of scarlatina; the cases of renal anasarca making, altogether, somewhat more than one-third of the whole.

Giving a brief sketch of the prominent features of the renal anasarca following scarlatina, as it ordinarily occurs, and noticing the importance of œdema of the face as a characteristic symptom, he divides the disease into four species, according to the intensity of the general symptoms, the absence or presence of dropsy, &c.; and points to the relation observed to subsist between albuminuria and anasarca, namely, that the degree or intensity of the one is, as a general rule, in an inverse proportion to that of the other. The question, whether renal dropsy succeeding scarlatina should be considered a sequela or not, is then taken up. In accordance with the laws of the operation of the scarlatinal poison in the human economy, the notion of the kidney being involved among its *primary* actions, although usually second or third in the order of structures affected, is considered; and an attempt made to strengthen the supposition by a detail of eight cases, in which there was direct exposure to the scarlatinal miasm, but which were wholly unpreceded by eruption, throat affection, &c., a rigour alone ushering it in with slight and short preliminary fever. Such cases the Author distinguishes by the name of scarlatina renum; and he includes, also, under that appellation, the cases in which the kidney exhibits an equally intense morbid action, but in which the skin has previously been affected in a minor degree. He further

supports his position by the known epidemic character of the complication, and its occurring in families and groups of children, in accordance with the unknown law which stamps each epidemic with its special character from the commencement.

The present epidemic is noticed, as one essentially of a renal character; and the fact is remarked on, that former epidemics have been distinguished by the same feature, while others have been characterised by the partial, if not nearly complete, absence of renal symptoms.

The conclusion of the Paper is occupied by a few cases of inflammation of serous membranes, subsequent to, if not consequent upon, the renal disorder of scarlatina. Such inflammations, described as among the secondary and tertiary direct effects of the morbid poison by most writers, are here viewed as more properly falling under the head of sequelæ, being, indeed, the proper sequelæ of the affections in question.

Dr. Snow said: Taking the data of the writer of the paper just read, that one in every seven who have been recently attacked have died, it would seem that the disease is more fatal now than it has been for many years. It was, therefore, a most desirable point to ascertain how to treat that disease. It was then very different to what it formerly was, and they were obliged to have recourse to tonics and stimulants to counteract the debility which it produced.

Dr. Basham believed that the affection of the kidneys was secondary, and a result of the first effect of the poison.

After a few remarks from Dr. Miller and Dr. A. P. Stewart, the sitting was adjourned.

REVIEWS.

London Journal of Medicine: a Monthly Record of Medical Sciences. Nos. I. and II. 1849. To be continued monthly. London: Taylor, Walton, and Maberly.

The object,—the "chief aim,"—of this new medical journal is, as we are informed in the prospectus, "to supply early and faithfully an abstract of, or guide to, every book or paper of practical value, which may appear either separately or in contemporary journals;" and the editors promise to "strive to place the busy or isolated practitioner as much as possible on a level with those whose leisure and locality afford them daily access to the best libraries." We will not stop to consider whether or not the weekly, and monthly, and quarterly journals of the three kingdoms do not already perform all that our new colleague promises. Our motto is, that "the noblest motive is the public good;" and at the beginning of a new year we are inclined the more loudly to proclaim it. Ourselves, incapable of pandering to the vicious propensities of mankind, and of ministering to evil passions by leading our pages to personal invective, we claim for the *Medical Times* that which we readily believe will characterise our new colleague,—freedom of the press without its abuse, and the right of opinion while legitimately exercised without prejudice to the welfare of others. For ourselves we claim no superiority. We do not profess to be any better than our neighbours; but we do think, that if honesty of purpose, and a firm determination to be worthy of the daily-increasing support we have received since this journal came into our possession, —and if unworthy, then we do not desire it,—sparing neither toil, nor cost, nor trouble, to render the *Medical Times* all that our fondest hopes would desire to see it,—we do think that if these deserve consideration, we shall not call in vain upon the profession to give us their countenance and support. We desire to hail the advent of our new-born brother as a help, and aid, and adjunct, in the good cause to which we have devoted our pages,—that is to say, in supporting the honour and dignity of the Profession, proclaiming and praising when these are evidenced, and exposing and condemning when found wanting,—in raising the standard of medical education, and in placing our brethren and the class to which we ourselves belong second to none in the great business of life which is carried on around us. But of the politics of the new journal we know nothing. Its prospectus tells us not whether it is to be ranged for or against what we conceive to be the best interests of the profession; its editors merely pledging themselves to insert "original articles, which, it is believed, will form a leading feature of the work, and to supply, early and faithfully, an abstract of, or guide to every book or paper of practical value, which may appear either separately or in contemporary journals." True, they say they will use "every means in their power to maintain the dignity and extend the usefulness of the Medical Profession." But what this means we know not; and whether "the assistance and co-operation of a numerous body of eminent physicians and surgeons" are to be directed for or against what we conceive to be the best interests of the great bulk of the Profession, we are not told. The prospectus gives no profession of faith, and its first-born no indication of what, in this respect, its prime may be. But, still true to our motto, "the noblest motive is the public good," we hail its advent, for it contains six very good and valuable original communications,—first, "On the Use and Administration of Cod-liver Oil in Pulmonary Consumption," by Dr. C. J. B. Williams, the very talented and eminent Professor of Medicine in University College. We are ourselves inclined to think that far too much confidence is placed upon this remedy. We remember when it was as much used upon the Continent, and resorted to in all sorts of emergencies, as it now seems to be in England; and we much fear it must ere long lose its reputation with us, as with our neighbours of France and Germany. It is much to be lamented, that the practice of medicine resembles rather a mode or fashion than a solidly-established and grounded art First one remedy, then another is in vogue, and resorted to for everything. Like the shoemaker in the story, we exclaim, "There is nothing like leather;" and if we were to take up and inspect the prescriptions of the leading physicians of any given date, we fear we should find for all the varied hosts of ailments they had to treat, a wondrous sameness in the means employed. For one lustrum, quinine might have reigned triumphant; for another, the iodide of potassium; for a third, the acetous extract of colchicum, or, may be, the cod-liver oil. The second article is on "Cleft Palate," by that talented surgeon William Fergusson, in which he ably points out and illustrates a mode of operation for the relief of this malformation. We are inclined to think, that Mr. Fergusson possesses a great deal of the inventive genius of Dieffenbach, in which English surgeons in general are so deficient; most can follow, and follow well; but how few are they who point out new ways and originate novelties! The third paper is on "Cerebral Apoplexy," by Dr. Quain, valuable for its statistics on the causes of the disease, and its notice of the relative frequency of its occurrence, at different periods of life. No. 4 is "On Tropical Fevers," by Dr. Bird, who, from his experience as the late surgeon of the European General Hospital at Bombay, is worthy the attention of all who are likely to be called upon to treat this very important class of admissions into Indian hospitals. No. 5 is "On the Use of Chloroform," by Dr. Snow, a digest of all the facts stated in the journals upon the subject since Professor Simpson's first announcement of this anæsthetic agent. The original communications are concluded by No. 6, a strange and unique case of spinal affection, to be included, as we think, among the protean class of hysterical diseases, read by the Professor of Materia Medica three years since, before the Physical Society of Guy's Hospital.

The bibliographical section contains notices of several recent English medical publications; and the remaining thirty pages of the work are devoted to extracts from the journals, reports of societies and academies, and professional news.

Each Number contains 116 8vo pages, and costs 2s.; it is well got up.

The London and Provincial Medical Directory. 1849. London: John Churchill.

This work is one which cannot fail of being highly useful to the members of the medical profession, and even the public, containing, as it does, a pretty accurate list of qualified practitioners of medicine. We are aware of the extreme labour which such a volume must entail upon the Editors; and, however indefatigable they may be, it cannot be otherwise than that errors will occur. The great fault of the volume published last year was, that too much reliance was placed upon the veracity of the returns which the compilers received from those to whom they addressed circulars. In the present Directory this mistake appears to be rectified; for, so far as we have examined it, comparing it also with the published list of the English medical corporations, the qualifications of the members of our Profession appear to be correctly given. The Street-list, though defective, is yet an improvement on the previous editions, as is also the reduction of the number of titles, &c., formerly attached to the names of some medical practitioners. The work also contains useful information concerning our Colleges, Halls, Hospitals, and Societies, a table of fees claimable by medical witnesses, and a list of surgeons in the Army and Navy.

The compilers of the Directory are entitled to Professional support.

An Essay on some of the most Important Diseases of Women, with a Description of a Novel Invention for their Treatment and Relief. By W. Jones, M.D. London: H. Ballière. 1848. Pp. 40.

The Author informs us, that his chief object in publishing this pamphlet, is to make known to the Profession and to the public, the principle and application of a novel invention, for the treatment of some of the most important diseases of women.

The principle of this novel invention, which Dr. Jones calls the "Syphon douche," is that of the syphon, and is founded on the property which water has to find its own level, and to escape with a force proportionate to the height of its column. It consists of nine feet of gutta percha tubing, three-sixteenths of an inch in the diameter of its bore, divided into two parts, one seven, the other two, feet in length; to one end of the longer portion is attached a small leaden weight, and to the other the plunge portion of a union joint; to one end of this is attached a perforated bulbous tube of box-wood, for introducing into the natural passage.

The pamphlet contains twelve cases illustrative of certain diseases incident to females.

ON DR. STEVENS'S TREATMENT OF ASIATIC CHOLERA: BEING THE THIRD LETTER OF E. A. TURLEY, M.D., IN CORRESPONDENCE WITH G. ROSS ESQ.

[Concluded from p. 279.]

My Dear Sir,—In confirmation of the truth of the above statement, I shall let Mr. Wakefield speak for himself, by quoting his letter to the editor of the *Medical Gazette*, (vol. x. p. 133)

(Dated) Lansdown-place, Brunswick-square, 25th April, 1832.

"Sir,—So much has already been written on the subject of cholera, that I should not now appear before the public, but from the conviction that the facts which I am about to state, if generally known and properly authenticated, (which they can easily be) must be useful to those of the profession, who, in future, may be called upon to treat this new, but most malignant disease. The first case which I saw, occurred on the 5th of this month, in the prison at the Coldbath-fields. Three others quickly followed, and were immediately put under the common treatment; these four died, after a short illness, with all the symptoms of cholera distinctly marked. Soon after the commencement of the disease, a number of the prisoners were attacked with marked symptoms of derangement in the gastric organs; and, as all of these cases occurred in the infected part of the prison, it is more than probable from this, as well as the general appearance of the patients, that the diarrhœa with which they were attacked, was the effect of the poison which produces cholera. From having seen similar cases in the commencement rapidly transformed into a state of collapse, my conviction is, that every one of the patients were more or less in serious danger; and I believe also, that, had they been left to themselves, or improperly

treated, the majority of these cases would have run into a state of collapse, perhaps in a few hours; indeed, I have little doubt that the one-half of them would have been lost under the practic which is generally adopted in the treatment of this disease.

"Independently of the numerous cases where the individuals were labouring under the premonitory symptoms, I have now had twenty-five cases of decided cholera, where the patients were in a state of collapse; and, in justice to Dr. Stevens, who suggested the use of the saline remedies, as well as from a sense of what I owe to the public, I conceive it my duty to state, that, after having seen both the old and the new treatment fairly put to the test, I am fully convinced that the saline practice is not only the most scientific, but decidedly the most successful that has yet been adopted for the cure of cholera; and from what I have seen, my conviction is, that if this treatment is fairly and extensively tried, the mortality from cholera will be greatly diminished. When used at an early period, it either prevents or arrests the progress of the fatal symptoms; and even where this treatment is not used until a later period of the disease, its effects are distinctly marked, and I may safely say that I have seen several most malignant cases recover from the state of collapse under the saline treatment, where the patients, I doubt not, would have died under any other practice.

"We have now upwards of 1,200 persons in this prison; and from the commencement of the disease up to this date, there have been nearly 100 cases where individuals have been more or less evidently labouring under the influence of the cholera poison. Twenty-five of these assumed the malignant character of the disease, having the majority of the symptoms described in the printed document issued by Dr. M'Cann. Four of the first cases, as before observed, were treated in the common way, and every one of them died. All the others were, however, immediately put under the use of the saline practice as recommended by Dr. Stevens, and out of the whole number who have been thus treated, we have only had three deaths from cholera, and two of these were cases of relapse. I may state, also, that, within the last few days, I have had one most malignant case at the new prison at Clerkenwell, where the patient was in a state of complete collapse before I saw him. His extremities were cold; his pulse at the wrist was entirely gone; he had the cholera voice, and his tonge was icy cold. This man, like those in the other prison, was immediately put under the saline treatment with the happiest effects, and I consider him now in a state of convalescence.

"I am, Sir, your humble servant,

"H. WAKEFIELD."

It should here be observed, that Dr. Stevens's treatment of cholera in the above prison was witnessed by numerous medical visiters, who felt anxious to investigate it,—by Messrs. Whitfield and Whitmore, (a) surgeons, by Colonel Chesterton, the governor, who has given his evidence in one printed letter, by the three visiting magistrates, and by the chaplain of the prison, who was frequently in attendance, and wrote two letters on the subject; so that had Mr. Wakefield's testimony, contained in his letter, or the testimony contained in Dr. Stevens's work, published shortly after, been false, there were a host of gentlemen who would have contradicted it. I should also mention that Dr. Stevens obtained the services of Mr. Crook, who was just then finishing his studies at University College, to assist in the treatment at the prison, as he had formerly witnessed the same when with Dr. Stevens in the West Indies. Up to this time no one has ever contradicted one of the above facts.

It may here be right also to mention, that Dr. Stevens's paper, which was sent to the College of Physicians, September 5th, 1831, was printed and forwarded to several physicians, both in France and Germany, and was translated into the journals of these countries; and two German physicians, referred to by Dr. Barry, (b) employed a modification of the saline treatment in the Custom-house Hospital of St. Petersburg with success.

It was also communicated to the army physicians of Poland. Mr. Searle (see *Medical Gazette* for January 7, 1832,) used it in eight cases at Warsaw, and in each he brought on reaction. As the treatment by salines and plenty of cold water was mentioned in your fifth paper, in the third table, under the head of Greville-street Hospital, I will subsequently adduce the letters of the surgeon-in-chief of this establishment, on the early prejudice he had against the saline plan, and his latter conviction of its superiority.

It may here be also remarked, that, in his practice, you have quoted his treatment as being the best. I shall have, therefore, ultimately to prove that his treatment is essentially that of Dr. Stevens.

In my next letter, I shall have to examine and to adduce facts relative to the second virulent attack of the disease on both sexes, at the above prison, &c., &c.

Remaining, my dear Sir,
Very faithfully yours,
ED. ASTBURY TURLEY, M.D.

(a) See a most interesting letter of this gentleman's in Dr. Stevens's work on the Blood, in corroboration of the above facts; also in *Medical Gazette*, Vol. X., page 258, where the lochia were changed from black to red, under saline treatment.

(b) Drs. Yesnbeck and Brailow.

REPORTS OF THE MOHILL WORKHOUSE AND TEMPORARY FEVER HOSPITAL.

[To the Editor of the Medical Times.]

SIR,—I have the honour to forward herewith, the Half-yearly Reports of the Mohill Union Workhouse and the Temporary Fever Hospital, to which Institutions I was appointed Medical Attendant in May last. Being a stranger in this locality, I devoted my entire time to the care of the sick in these Institutions. Since my appointment, the results, I am gratified to state, fully compensate me, and justify the changes that have been made. Should you deem fit to publish these remarks, with the Tables,

You will much oblige,
Yours obediently,
ROBERT C. GWYDIR.

Mohill, January, 1849.

STATE of the MOHILL UNION WORKHOUSE, from the 30th day of November, 1847, to the 31st day of May, 1848.

Number of Paupers Admitted and Born in Workhouse.			Number of Paupers Discharged and Died in Workhouse.			Number of Sick under Medical Treatment, and Average of Deaths.		
Number in Union Workhouse on 30th Nov., 1847.	Number admitted from 30th Nov. to 31st May, 1848.	Born in house.	Total.	Number discharged from 30th Nov., 1847, to 31st May, 1848.	Number died.	Remaining in Workhouse on 31st May.	Total.	Number of Sick under Medical Treatment.	Average Deaths as to number of Sick.	Average Deaths as to number of inmates.
863	1,366	1	2,230	475	625	930	2,030	656	12 7/8 in 13	4 in 13

From May 31st, 1848, to November 30th, 1848.

Number of Paupers admitted and Born in Workhouse.			Number of Paupers Discharged and Died in Workhouse.			Number of Sick under Medical Treatment, and Average of Deaths.		
Number in Union Workhouse on 31st May, 1848.	Number admitted from 31st May to 30th Nov., 1848.	Born in house.	Total.	Number discharged from 31st May to 30th Nov., 1848.	Number died.	Remaining in House on 30th Nov.	Total.	Number of Sick under Medical Treatment, from 31st May to 30th Nov.	Average Deaths, as to number treated.	Average Deaths, as to number of inmates in Workhouse.
930	2,082	4	3,016	1,672	72	1,272	3,016	1,405	2 in 39	1 in 42

REPORT of the TEMPORARY FEVER HOSPITAL at MOHILL, according to Record of Admissions, Discharges, and Deaths, from Jan. 1st, 1848, to May 31st, 1848.

Number in Hospital on 1st Jan.	Number admitted to 31st of May.	Total.	Number discharged cured.	Number died.	Number remaining in Hospital on 31st May.	Total.
36	170	206	56	109	41	206

From the imperfect manner in which the Records have been kept, the number of Admissions, Discharges, and Deaths could not be accurately ascertained; neither could the Expense be known.

From 31st of May, 1848, to 30th November, 1848.

Months of the Half Year.	Number of Patients admitted.	Number discharged cured.	Number died.	Average number of days each remained in Hospital.	Cost of Maintenance, including the Nurses, and Salaries of Nurses.
					£ s. d.
Number in Hospital on 31st May	41				
June	63	61	2	20	14 3 3
July	51	56	1	22	14 17 0
August	31	34	3	26	12 6 0
September ...	29	33	—	25	9 15 0
October	50	42	—	21	12 9 7
November ...	66	64	2	21	12 17 7½
Number in Hospital on 30th November ...	...	43			
Total ...	331	323	8	22	76 6 5

Average cost of Maintenance, including Nurses' Salaries and Rations, 4s. 7 8-7d. per Patient.

MR. CORFE ON POISONING BY ALCOHOL.

[To the Editor of the Medical Times.]

SIR,—I willingly comply with the request of your correspondent, "F.," who does me the honour to ask my opinion upon a case of poisoning in a child four years of age, and who, it is stated, drank accidentally half a pint of brandy, which proved fatal in two hours. But, before I proceed to offer any remarks upon the subject of poisoning by alcohol, may I, in return, be allowed to ask your correspondent "F.," whether he can state that the quantity (half a pint) swallowed, was a fact from his own knowledge, or whether it was so stated by the friends of the child, and, if the evidence arose from the latter source, whether it was, in his opinion, of an unimpeachable character?

My reasons for seeking this information from "F." I may now detail. In all instances of poisoning by acrid, corrosive, or destructive agents, amongst which I rank hydrochloric, sulphuric, and nitric acids, liquor ammoniæ, and pure alcohol, as brandy, &c., &c., I have invariably noticed that the quantity actually swallowed bore no proportion to the volume intended to be swallowed. Thus, in a case which I furnished, and you kindly inserted in the *Medical Times*, in January last, of poison by sulphuric acid, the quantity bought, and attempted to be swallowed, was half a pint, but the *post mortem* appearance left no doubt that a wine-glassful would have suffioed to have produced the destructive ravages which the œsophagus and stomach exhibited, and a large quantity of the acid was spilt over the clothes and linen of the patient. Permit me to ask your correspondent whether any adult could deliberately swallow off, at one draught, 10 ounces of nitric acid or of pure alcohol, or even a large wine-glassful, without impediment from coughing and hawking, &c.? It appears to me, Sir, that if we reflect upon the physiology of the constrictors of the pharynx, we shall doubt the possibility of their accomplishing such an act; for, whenever these faithful sentinels to the stomach are suddenly influenced by a corrosive or pungent agent, they, like the neighbouring sentinels to the respiratory apparatus, namely, the epiglottis and crico arytænoid muscles, close their respective openings, and refuse to allow any further quantity of the deleterious agent to pass on. I am induced to make these remarks, because it is repeatedly asserted in toxicological works, that a patient has swallowed half a pint or more of such acids, whereas, as I before remarked, it is the intention, and not the act, of the suicide, which they

have thus represented; for I do not remember an instance where an individual has been wickedly bent upon self-destruction, and in whom the most resolute determination has existed to swallow a large quantity of such a corrosive liquid, but that, in such a case, a great portion of it has been found about his body, clothes, and on the ground, &c. Then, may we not conclude, that, where a pungent fluid like brandy is accidentally swallowed by a child four years old, that, after the first or second gulp, the constrictors would be roused on the defence, the epiglottis irritated and erect, and the creature would be set off into a fit of coughing, hawking, vomiting, &c.; so that I doubt if the patient could have swallowed more than a wine-glassful in this instance, although half a pint might have disappeared.

The immediate effect of alcohol upon the system is to narcotise the brain, and, through the medium of the respiratory nerves, but especially the pneumogastric, to produce death at the heart and lungs. Venous blood is found on both sides of the heart, and the pulmonary capillaries are also gorged with the same. But, I believe I do not exceed the bounds of truth when I state, that I have never witnessed an instance of death from unmixed intoxication, though there have been fatal cases of intoxication, followed by severe injuries to the head, &c. I attribute this circumstance to the fact, that we invariably employ the stomach pump in drunken fits, whether combined with injuries to the head or not; and this agent, as a means, has usually restored the mere sot. But, perhaps, your Correspondent may reply, that it is not every country practitioner who can command a stomach-pump at a moment's notice. We are well aware of this inconvenience; then, let the patient's mouth be gagged, and pass down the throat, in teaspoonsful, an ounce solution, containing a scruple of ipecacuanha and two grains of potassio tartrate of antimony, and continue to pour down a pint of warm salt water. If the stomach is so "drunk" that these agents fail to rouse it from its lethargy, so as to enable it to receive the nauseating influence, then I am acquainted with no therapeutical remedy so powerful as the electro-galvanic battery, or mere electricity. The current, or shocks, may be passed through the stomach, the muscles of respiration, especially the neck on the one hand, and the diaphragm on the other. But the nose, cheeks, and forehead, are favourite spots with us in directing the galvanic stream, for the patient soon begins, by his wincing, groaning, and obstinacy, to refuse pertinaciously any more of the exciting current. When the stomach has been made to disgorge itself of its deleterious contents, the common spirits of Mindererus and water, in the proportion of an ounce of the former to an ounce and a half of the latter, should be given, which usually has a most extraordinary effect in sobering the stomach and rousing the brain and nervous system to renewed vigour.

In conclusion, I may observe, that when we are plagued with ferocious, dogged, and pugnacious drunkards, who set all machinery, physic, and manual exertion at defiance, we contrive to roll him on the floor, hold his head by the hair to the boards, and keep up an incessant cold douche from an adjacent table or chair, until his bellowing terminates in a copious vomit, and thus the stomach is made to cast off some of its pernicious fluid. The culprit then sues for some respite, and we make him swallow down a solution of tartar emetic, or he is threatened with a repetition of the cold water on pain of refusal.

I remain, Sir,
Your's faithfully,
GEORGE CORFE.

Middlesex Hospital, January, 1849.

[Advertisement.]

DR. FREKE AND THE "BRITISH AND FOREIGN MEDICO-CHIRURGICAL REVIEW."

[To the Editor of the Medical Times.]

SIR,—Might I request, if it be not trespassing too far on your space, that you would favour me by the insertion, in your publication, of the following observations.

In this month's Number of the *British and Foreign Medico-Chirurgical Review*, (to which my attention has just been directed,) there is contained a notice of a work, recently published by me, suggestive of an Organic Atomic Theory. In that notice, the Reviewer has felt himself at liberty to give expression, in connexion with my name, to imputations of an act, from the voluntary commission of which I should instinctively shrink, as I have ever regarded it as an instance of great literary baseness. I allude to the charge of an attempt, upon my part, to appropriate to myself the opinions and arguments of others. Had the eminent physiologist who edits that journal cast his eye over my pages, I feel satisfied that that review would never have found its way into his periodical. Nothing could be more opposed to my inclinations, or repugnant to my feelings, than, in a manner like the present, to be forced to obtrude upon public notice either myself or my publication; but, when a charge has been gravely brought against me by a leading metropolitan journal, the tendency of which is to cast a reflection upon my character, alike as a gentleman and a scholar, I feel that the profession will be too generous to impute to me an unworthiness of motive, in thus attempting to shield myself from such imputation, and declining to resign silently to others that which I regard as being legitimately my own.

Having quoted a passage from my Work, expressive of my views as to the nature of organising atoms, the Reviewer thus proceeds with his criticism: "Now, if our Author, instead of the hypothetical 'organising atom,' had used the term 'cell-germ,' we apprehend he would have been much nearer the truth."

I shall, in the first place, take the liberty of informing that Reviewer, that, had he been more familiar with the principles of philosophic inquiry, he would have been more competent to pronounce correctly upon what constitutes hypothesis. I should be glad to be informed (being at a loss to understand) in what respect the expression "organising atom" is more hypothetic than is the term "cell-germ." The *existence* of the entity under consideration admits of *no* question; and, consequently, its existence can be no matter of hypothesis. Now, that this entity is an "organizing" *something*, can only be questioned by such as question that the cell germinated has received organization therefrom; and that the term "*atom*" is appropriately applied to it, can only be denied by such as deny that this organizing entity is physiologically indivisible. Does the Reviewer question either of these facts, both of which I have maintained? If so, I shall be glad to be informed of his grounds; if not, I call upon him to explain, in what respect the expression, "organizing atom," is either "hypothetical" or inappropriate. I would repeat, for that Reviewer's information, that "organizing atoms" are not (like inanimate atoms) the objects of conjecture,—their existence is as much a matter of demonstration as is the existence of muscle, or of man. The properties, or attributes of such atoms, is a question altogether distinct, and are arrived at by another and distinct order of inquiry. These attributes may, or they may not, be hypothetical; and, if the former, they may constitute a legitimate foundation upon which to construct a rational hypothesis or theory. It was their *attributes*, and not their *existence*, which, at the time of publication, I regarded as being *then* hypothetical in organizing atoms; but it may be, that, ere long, I may be enabled to present our Reviewer with certain evidence of a somewhat demonstrative kind even upon this branch of our inquiries; nor do I entertain a shadow of doubt, that, in the event of my being enabled to establish any such attributes, they, too, will prove to be no more than *an abstract* of the Reviewer's *concrete*. Here, then, in this single word "hypothetical," (as, indeed, throughout that review,) is to be recognised, either an inability or a disinclination, (and I regret to feel obliged to say, that I apprehend it is the latter,) on the part of the Reviewer, to discriminate between inquiries, in their nature distinct, while he feels himself at liberty to pronounce decisively upon my want of originality. But he proceeds: "Had he used the term 'cell-germ,' we apprehend, he would have been much nearer the truth." If, by the words "much nearer the truth,"—for I confess myself unable clearly to recognise their force,—the Reviewer mean to convey, that he apprehends I should therein have employed a more appropriate expression, I beg leave to inform him, that I apprehend the contrary. Here, then, is a difference of opinion, although, doubtless, propounded somewhat more *oracularly* than is habitual in the expression of *opinions*. The Reviewer has not favoured us with the grounds upon which his has been formed. I shall be more generous, and shall afford him an opportunity of pronouncing upon the soundness of mine. Simply, then, I conceive, that the term "cell-germ" would *not* "be much nearer the truth," inasmuch as I consider, that the employment of such term, so applied, would be a direct violation of the principles both of logic and of philosophy. If the views I have advocated in my publication be correct,—it is manifest that the formation of a cell is but *a stage* in a process which has, as yet, been *uncompleted*; and I assert, (notwithstanding the Reviewer's apprehensions,) that it is an outrage at once upon the principles of logic and philosophy, to designate any entity, it matters not what be its nature, by a term *expressive of a stage in its, as yet, unfinished function*. Vastly more appropriate would it be to call the acorn a shrub-germ, because the oak must have once been a shrub, than to designate that structure whose function is to form muscular fibre, "a cell-germ," because, forsooth, a cell must have been constructed before that fibre was formed. In this observation of the Reviewer's, then, one of two things is apparent, namely, either he could not (perhaps it "would be much nearer the truth" to say, would not) understand the opinions whose support I attempted, and, consequently, could not be justified in pronouncing upon my want of originality or otherwise, or else that my views were distinct from those he entertains; and, if the latter, how did he feel himself at liberty to pronounce that they were wanting in novelty? The Reviewer thus proceeds:—

"Indeed, the apparent novelty in his views in most instances, results from his having simply expressed in abstract terms what others have worked out in the concrete form; and we think he would have done well to acknowledge his obligations to the various physiological writers by whose hints, or more formally-expressed doctrines, he has obviously profited largely."

In these statements there appears to me to be a manifestation of an absence, as well of generosity as of justice. They are ungenerous, because, from the general and unspecific nature of the charge, the reviewer has withheld from me the possibility of a specific refutation; and they are unjust, because, if my views had been understood by the Reviewer, he must have known that his reproof was undeserved; and if unintelligible, it was injustice to pronounce judgment upon what he did not understand. How, then, am I to dispose of his concrete of my abstract? Its *complete* analysis *here* would in me be unbecoming, as it would involve an unbecoming obtrusion of my own peculiar views. I can, then, but apply it to *fundamental* inquiries. The fundamental inquiries in physiology ever must be into the nature of life, and its relation to death. I have attempted to point out what I regard as the nature of life, and have defined living to be "the act of being elevated in the scale of organization." To what physiological writer am I indebted for this? This is my abstract; I demand of the Reviewer his concretion of this. I have endeavoured to show what I conceive to be the nature of death and its relation to life, pointing to the nature of the essential dependency of the latter upon the former; I call for the Reviewer's concrete of that. But I may not thus proceed. To what physiological writers specially, I demand of that Reviewer, do I owe obligation? It is but justice that the Reviewer should point to the authors, and, at the same time, should point at the debts.

Does the Reviewer mean to convey, in this statement, an insinuation, that I have had the effrontery to feign an ignorance of the researches which, while physiology is science, will ever be held in remembrance in connexion with the imperishable names, Schleiden and Schwann? If so, I indignantly repel the insinuation, and appeal to the Profession,—could such be collected, by an impartial Reviewer, from my own words—"far-famed 'nucleated cell?'" To what writers, then, I again demand of the Reviewer, does he refer? I assert that, from the commencement of my volume to its close, I have not advocated a *solitary* opinion which has not originated with myself, except it may have been upon such topics as the physiologist is as familiar with as is the astronomer with gravity; and, had I been writing upon the subject of astronomy, I should scarcely have apprehended an accusation of plagiarism, even though I did not acquaint my readers that gravity was discovered by Newton. Nay, further, I conscientiously assert, that into that volume I have not introduced *one solitary argument* that I have not derived exclusively and alone from myself. Who, then, are "the physiological writers," by whose hints I have so obviously profited largely? So much for the moral, and now for the philosophic justice of this charge of obligation to physiological concretors. It would be difficult, as it appears to me, to find language which, in so many terms as have been employed in these statements by the Reviewer, could evince a more complete and total ignorance of the nature of philosophic research. For how stands the enthymeme which the learned Reviewer propounds? It is thus,—The Author's views are but the abstract truths before known in the concrete, and, therefore, his views are not novel. Alas! learned Reviewer, I much apprehend your suppressed premise will be found wanting as well in logical as in ethical truth.

What, I would ask that Reviewer, does *he* conceive would constitute a discovery (or, if he prefer it, a novelty) in natural science? If he knows not, I shall take the liberty of informing him. It is no more than reaching, in a more abstract form, truths which may have been known before in the concrete. What was the discovery of gravity, but a recognition, in the abstract, of the then concrete truths of astronomy? And were the laws of gravity, on that account, the less a discovery or the less novel?

To what physical writers was Newton indebted for the concrete of this abstract? Away, then, with this ungenerous attempt at mystification. The Reviewer thus proceeds:—"In the idea that the lower class of animate being elaborate nutrient materials for the higher, and that, in its entrance into the more complex organisms, the food is subject to a series of elaborating processes by which it is gradually prepared to enter into the composition of the solid textures of the fabric—ideas which constitute an essential part of his system, our readers will not find anything very novel."

Upon the correctness of this statement, *in its relation to that part of my publication to which it refers*, it is not for me to pronounce; but, although it is with extreme reluctance I could allow myself to be led to attribute unworthy motives to a Reviewer to whom personally I must be altogether unknown, I cannot help feeling, that, in the skilful ingenuity with which he has excluded from *his* version of my views a physiological position of the greatest importance which I had there been attempting to establish, he has given evidence that his judgment upon my work has been formed as the result, the rather of *a disinclination* than a disability, to recognize that which is "novel." Might I not, then, (I appeal to the Profession,) with justice, if I felt so disposed, retort upon that Reviewer his own charge? Might I not say, you,—with the aid of an influential and widely-diffused Journal,—you, in the retreat of your own personal irresponsibility, have, ungenerously and unjustly, availed yourself of the most efficient means that means could present you, of robbing of his right a young author, who is unknown, and who, consequently, you well knew, was likely to be *unread*.

And now, in taking leave of this Reviewer for ever, I have to assure him, that I have not been actuated, in these observations, by any unkindliness of motive. If I have been unjust, the Profession is my judge. If he feels that my remarks have been true, they may not be unproductive of good. Him, in his retirement, they never can harm. On me to have made them, I felt was incumbent. Considerations, widely apart from the mere desire of influencing such impression as that review may, at present, create, have told me that now, if ever, it becomes me, as due to myself, for the first, and, I trust, the last time, to do that which my nature dislikes,—for they have told me that, if now, at the outset of a long and laborious train of research, I silently and undissentiently resign my earlier products, (it matters not how unimportant their nature may be,) all my ulterior results must, as a necessary consequence, with ease and inevitably, become the property of others.

Your obedient Servant,

HENRY FREKE.

Dublin, 28, Holles-street, Jan. 13, 1849.

P.S. There is one other Journalist, and but one, from whom I have been led, by circumstances, to anticipate a somewhat similar treatment. I have only to request, that the Profession will have the goodness to allow their judgment to be influenced *alone* by *arguments*, and not by *mere statements*.

H. F.

BOOKS RECEIVED DURING THE LAST MONTH.

An Essay on the Cerebral Affections Occurring most Commonly in Infancy and Childhood, &c. By Valentine Duke, M.D., &c. Dublin: Fannin and Co. 1849.

On Infantile Laryngismus, with Observations on Artificial Feeding, as a Frequent Cause of this Complaint. By James Reid, M.D., &c. London: John Churchill. 1849.

The London and Provincial Medical Directory, 1849. London: John Churchill.

Resume des Rapports Publiés par M. M. Paolini et Maluccelli, sur la Clinique des thermes de la porrette et de Monte-Catini. Par Robert Maunoir, D.M. Florence: Mariano Cecchi. 1848.

La Porrette et Monte-Catini. Par Robert Maunoir, D.M. Florence: Mariano Cecchi. 1848.

La Presse Médicale, Bruxelles.

Repertoire de Pharmacie.

Provincial Medical and Surgical Journal.

Physiology; its Moral, Political, and Hygienic Teaching: an Essay in blank-verse, &c. London: John Churchill. 1848.

An Essay on some of the most Important Diseases of Women, with a Description of a Novel Invention for their Treatment and Relief. By W. Jones, M.D. London: H. Baillière. 1848.

An Inquiry into the Actual State of our Knowledge of Cholera, with practical directions regarding its Prevention and Treatment. By Alexander Knox, M.D., &c. Dublin: James M'Glashan. London: W. S. Orr and Co. 1849.

Practical Remarks on the Prevention of Cholera, and Removal of other troublesome states of the Bowels. By R. B. Richmond, M.D., &c. London: Nissen and Parker. 1849.

Cure of a True Cancer of the Female Breast with Mesmerism, &c. By Dr. Elliotson. London: Walton and Mitchell. 1849.

The Training Institution for Nurses and Workhouses; an Attempt to Solve one of the Social Problems of the Present Day. By Edward Sieveking, M.D., &c. London: Williams and Norgate. 1849.

The Dependence of Animal Motion on the Law of Gravity. By Henry Wiglesworth, M.B., &c. Part I. London: H. Baillière. Swansea: Herbert Jones. 1849.

Braithwaite's Retrospect of Medicine. London: Simpkin and Co.

The Edinburgh Monthly Journal.

British Record of Obstetric Medicine and Surgery.

Defects in the Practice of Life Assurance, and Suggestions for their Remedy, with Observations on the Uses and Advantages of Life Assurance, and the Constitution of Offices. London: W. S. Orr and Co.

The Journal of Public Health.

The Pharmaceutical Journal.

The Leading Phenomena of Epidemic Cholera, &c. By Ambrose Blacklock, Surgeon. Madras: P. R. Hunt. 1848.

GOSSIP OF THE WEEK.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of Medicine, and received certificates to practise, on Thursday, 25th January, 1849:—John Wilson; William Manthwaite Thompson, Lambeth-walk.

APPOINTMENTS.—Mr. G. B. Masfen was, on Monday last, elected House-Surgeon to the Staffordshire General Infirmary, in the vacancy occasioned by the resignation of Dr. Fergus, to whom, on the motion of Earl Talbot, a vote of thanks was awarded for his attention during the time he had held the appointment. Mr. Bleeck has been elected Surgeon to the Bristol Gaol, in the room of Mr. G. Hetling resigned, with a salary of 100*l.* per annum.

CHORLTON-UPON-MEDLOCK DISPENSARY.—MANCHESTER.—On Thursday, January 25th, Mr. Farquhar Milne was unanimously elected one of the Surgeons of this Institution.

OBITUARY.—On the 19th of November last, on his passage from the Mauritius, John Stewart, Esq., staff-surgeon, only son of the late Rev. Dr. Stewart, of Kirkowan Manse, Wigtonshire. On the 23rd inst., at Hastings, aged 46, Henry Colebourne, Esq., M.D., of Stockwell-villas, Clapham. At Aberdeen, on the 24th inst., of typhus fever, William Mackinnon, M.D., F.R.C.P., Edinburgh, in the 34th year of his age.

DEATH OF A PHYSICIAN FROM A DISSECTION-WOUND.—It is our painful duty to notice the death of Dr. Macfarlane, of Maybole, in Ayrshire. The body of a man had been found lying in an outhouse of a farm, in the neighbourhood of Maybole; and, as he was known to have travelled from Glasgow, it was presumed that he had died of cholera. The inhabitants in the district having become considerably alarmed, the authorities deemed it necessary to order a *post mortem* examination of the body. While executing the dissection, Dr. Macfarlane, who was assisted by two other medical men, received a slight scratch on one of his fingers, which became thereby impregnated with poisonous matter. The effects were soon visible, and, although every effort was used to arrest its progress, the unfortunate man died within a week after the receipt of the wound. This is the third physician, in Ayrshire, who has lately fallen a victim to dissection-wounds.

REWARD OF MERIT.—The prize of 100 guineas and a service of plate has just been awarded by the Society of Arts to Dr. Paris, President of the College of Physicians, and Mr. Fonblanque, for their joint work on Forensic Medicine.

CURIOUS DETAILS OF THE DISEASE AND DEATH OF COLETTI.—The celebrated Minister of Greece, Coletti, who died the 13th of September, 1847, suffered during his life from a rare and interesting affection, *anuria*. At the age of 50 he first began to suffer from pain in the urinary canal, the urine being high-coloured and scalding, with a difficulty of passing it, the secretion, at the same time, being loaded with uric acid deposits. Three years subsequently there were violent pains in the right lumbar region, with complete suppression of urine. From this period to 1835 Coletti suffered two or three attacks of *anuria*, which lasted 97 days, and terminated by a sudden and abundant emission of urine, mixed with sand and gravel. During a sojourn of eight years in Paris, from 1835 to 1843, from the use of bicarbonate of soda, he experienced a most remarkable relief from his sufferings; but on his return to Greece, in Oct., 1845, the complaint returned. In Oct., 1846, he suffered most severely, and his life was despaired of. On 27th August, 1847, after exposure to cold, he was seized with psin on attempting to make water, and the next day he was attacked with suppression, which lasted till death. The bladder contained no urine. At the autopsy, it was discovered that the left kidney was double its normal size, and the thickness of its walls reduced to about four or five millimetres, surrounding a cavity the size of a hen's egg. In this was contained a thick fluid, of chalky whiteness, in which were found concretions agglomerated in irregular and shapeless masses, of different dimensions, having a chalky appearance and a porous surface. The origin of the ureter was occupied by a large calculus, beneath which there were a number of small concretions. The right kidney formed a large pouch, containing three or four small stones and a thick red-coloured liquid. That which was most remarkable is, that the calculus found at the origin of the ureter contained 30 or 40 living larvæ, which M. Landerer believed to be those of the fly (Musca, Lin.) This is another remarkable addition to the cases already recorded of worms being found in the urinary passages.

THE CHOLERA IN NEWCASTLE AND GATESHEAD.—The epidemic makes slow progress in these boroughs. There have been but few cases in Newcastle. In Gateshead, including cases of diarrhœa, there have been 51; deaths, 23. Two of the cases were reported yesterday; no deaths. The disease is much milder and more manageable than in 1831-32. Indeed, there is hardly any disease so manageable if taken in its early stage; and our poorer neighbours in Pipewellgate and elsewhere, (for it has now appeared in various parts of the borough,) should make instant application for medical aid, when attacked with disorder in the bowels.

IN Breslau the cholera still rages; lately, cases of the most virulent kind have occurred. The disease is not, as before, confined to the poorly fed and clothed of the population, but finds many victims among the rich; yet it is capricious as to the localities in which it appears; it prevails only in some quarters of the city, sparing others entirely.

EPIDEMICS IN THE NORTH OF AFRICA.—Dr. Gyon, a surgeon in the African army, has just published the first part of "A Chronological History of North Africa from the most remote periods to the present time." The first part embraces a period of from the third year of the 87th Olympiad, 430 years before Christ, to the third year of the 183rd Olympiad, 46 years before Christ.

SYPHILIS AND PROSTITUTION.—The Commission, charged by the Medico-Chirurgical Academy of Turin to examine the best means of preventing the propagation of syphilitic diseases, has submitted to this learned Society a series of propositions based upon those which actually exist in France and Belgium, relative to prostitution. These propositions relate to the inscription of the girls upon special registers, their division into two classes, their submission to regular visits twice a week by four surgeons, under the direction of an inspector-general; and, should any girls be found affected with syphilis, they are to be removed to the hospital.

MEDICAL COLLEGE, BENGAL.—From a report of the progress of this Institution, just received in England, it appears, that 500 bodies had been dissected by the native students in one session, viz., November, 78; December, 137; January, 161; February, 104; and March, 20. The total charge

of the Medical Department of the College amounted to 66,955*l.* 7s. 3d., Company's rupees.

THE HOSPITALS OF PARIS.—There are seventeen hospitals for the sick in the French capital—ten general and seven special. The general hospitals are:—Hotel Dieu, containing 810 beds; Sainte Marguerite, 300 beds; La Pitie, 621 beds; La Charité, 494; St. Antoine, 320; Necker, 329; Cochin, 125; Beaujon, 438; Bon-Sécours, 323; De la République, 600 beds. The hospitals devoted to the treatment of special diseases are St. Louis, with 825 beds; Du Midi, 300; De Lourcine, 300; Des Enfants-Trouves, 600; Maison d'Accouchement, 514; Maisons des Cliniques, 120; Maison de Santé, 150 beds. The whole number of beds amounting to 7,174.

VETERINARY SURGEONS IN TURKEY.—M. Dubroca has been appointed by the Ottoman Government Director of the Veterinary School at Constantinople, and inspector of the sanitary service in the Turkish armies.

A BELGIAN FEMALE QUACK.—At Antwerp, in Belgium, one Widow Schoeffer practises the art and science of medicine, and that with a reputation and celebrity that many legitimate practitioners might envy. And yet what can be done?—for quackery is as rife, and even as much protected and encouraged, in Belgium as in England. The Medical Commissioners of the province brought the doctor in petticoats before the proper tribunal, where she was fined 25 florins,—about 2*l.* sterling;—but what then? The woman appealed to the higher tribunals, and therefore the fine could not be enforced; and, in the meantime, her condemnation has brought "grist to her mill," by adding to her notoriety,—better have a bad character than none,—and increasing her practice. But this is not all; and the remaining part of the story places the profession in Belgium in a very low position. Immediately after her condemnation, Madame Schoeffer produced a medical man, one Monsieur Grauls, lately practising at Wortel, who assumed the responsibility of her acts, and under whose name and auspices she continues her avocations: and for this, as report says, Monsieur Grauls receives a *quid pro quo*, in the shape of board and lodging, and an *honorarium* of five francs a day.

MEN AND PIGS.—In a paper lately read by M. Bourchardat before the French Royal Academy of Sciences, he made an assertion, founded upon statistical researches, that the population of men and pigs always increased in a certain proportionate ratio. He said that, in Provency, in France, in 1700, there was but one pig, and the population was 167; while that now there are many pigs, and 486 inhabitants. The same of Chexe and Dommecy. Perhaps M. Bouccbardat has neglected to observe, that, wherever there are many men, there also are many pigs.

NEW WET-NURSE.—Foreigners affect to laugh at the many strange advertisements that appear in the columns of the *Times* and other English papers. Our advertising absurdities are unequalled, however, by the following, which is literally translated from a late Number of the *Concordia* of Turin:—"The Marchioness Siffanti di San-Bartholomeo requires a wet-nurse, young and healthy, and, in order to prevent the loss or deterioration of the milk, unmarried, to suckle a young family of five high-bred English dogs, who lost their mother at the time of birth. The Marchioness requires the nurse to live in Her Excellency's Palace, and offers a salary of 100 francs a month."

LONGEVITY.—A woman, Madeleine Thure, who had lived at St. Germain-en-Laye, near Paris, for forty-nine years, died there lately at the age of 100 years, six months, and four days. She was but once married, and had given birth to twenty-two sons and one daughter, the latter born when the mother was *fifty-two years and four months old*. Nineteen of her sons fell in the battle-field, and three are still alive. Her body was opened, but no organic lesion was found to account for death.

CLIMATE OF CALIFORNIA.—The salubrity of the country is such, that the diseases of the Colons are always free from climatic influences. The former, as well as the Indians of the missions, being vaccinated under the superintendence of the religious community, are free from intermittent fevers and the small-pox, which rage among the wild Indians. Instances of longevity are often to be met with; and many individuals exceeding the age of 100 years are to be found in that country. There are no doctors in California. In fact, their presence would be of no use except in surgical cases, such as fractures occasioned by the falls from horses, or wounds received in quarrels.

CONSUMPTION IN PAISLEY.—Mr. Lorimer, the town chamberlain of Paisley, has, for several years, drawn up and published the bills of mortality for that town. From the bill for 1848, it appears that the mortality in Paisley during that year amounted to 1,630; 770 being males, 766 females; 43 sex not stated, and 78 still-born. The mortality during years 1845-46, and '47, was respectively 1,268, 1,522, and 2,167. The deaths during 1848 are, therefore, within a fraction of 33 per cent. below the deaths during 1847. Consumption proved the most fatal of all diseases in Paisley, no fewer than 296 having died of that disease during 1848. In 1847, the numbers were as high as 386. The deaths from consumption, therefore, formed 19 per cent of the total mortality in 1848, and 18 per cent. in 1847. The peculiar habits, but especially the nature of the occupation of a large proportion of the inhabitants of Paisley—a manufacturing population, confined to the close air of cotton and other mills and manufactories—is no doubt the cause of this unusual proportion of deaths from consumption.

YELLOW FEVER AT BARBADOES.—In the garrison at St. Ann's, yellow fever rages with unabated violence. Not a day passes without several interments of soldiers. This disease attacks, indiscriminately, men, women, and children. Almost every officer at the garrison has been ill; many have recovered, but the mortality has been most deplorable. Thirteen have fallen. There has not been for the last sixty years so protracted or so fatal an epidemic among troops stationed in this island as the present disease, which has now been raging for twelve months.

MORTALITY TABLE.

For the Week ending Saturday, Jan. 27, 1848.

CAUSES OF DEATH.	Total.	Average of Five Winters.
ALL CAUSES	1,208	1,169
SPECIFIED CAUSES	1,193	1,164
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	329	221
SPORADIC DISEASES:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	54	54
Tubercular Diseases	175	203
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	159	141
Diseases of the Heart and Blood-vessels	22	49
Diseases of the Lungs, and of the other Organs of Respiration	245	243
Diseases of the Stomach, Liver, and other Organs of Digestion	63	67
Diseases of the Kidneys, &c.	14	13
Childbirth, Diseases of the Uterus, &c.	13	9
Rheumatism, Diseases of the Bones, Joints, &c.	19	7
Diseases of the Skin, Cellular Tissue, &c.	2	1
Malformations	4	3
Premature Birth	16	23
Atrophy	20	15
Age	45	73
Sudden	8	14
Violence, Privation, Cold, and Intemperance	23	37
Causes not Specified	15	5

INDIAN SURGERY.—The published Reports of the Government Charitable Dispensaries (in the Report of the Medical Colleges of Bengal, just received,) exhibit the following catalogue of severe surgical operations performed by native Sub-Assistant Surgeons, with their results:—

Operations.	No. of Cases.	Cured.	Died.
Amputations	47	38	9
Tumors removed	55	53	2
Lithotomy	181	168	13
Paracentic:s Abdominis	10	10	..
Extirpation of the Eye	2	2	..
Medullary Sarcoma removed	2	2	..
Hypertrophied Scrotum removed	15	15	..
Sarcomatous Breast	3	3	..
Testicle removed	4	4	..
Carsinoma of the lip and cheek removed	1	1	..
	320	296	24

TO CORRESPONDENTS.

"Senex."—The hospital appointment is in the gift of the Trustees,—a list of whom may be obtained on application to the Secretary, at the Institution.

"Mr. Sams."—The Lectures were published in Vol. XVI.

"Junius."—We would not advise our Correspondent to enter the service. The rank, pay, and treatment are not such as are due to the members of the Medical Profession.

"Anglican."—(1.) The Edinburgh College of Surgeons will receive the Certificates. (2.) The examination, we hear, is a stringent one.

"Beta."—The letter is inadmissible, as it would provoke a controversy, which would neither be interesting to the Profession, nor creditable to the parties engaged in it.

"Medicus Londinensis."—The work is published by Mr. Baillière.

"Chemicus."—Dr. Wollaston was the first who observed the phenomena.

"A Student of St. Thomas's."—A collection of matter within the cavity of a bone.

"Lector."—Our correspondent appears to be more curious than wise. The doctrines involved some of the wildest absurdities, and have long ceased to have any influence in the professional world.

"Anglican."—A kilogramme is rather more than 2lbs. 3ozs. and 4 drams, avoirdupois.

"A General Practitioner."—(1.) The person is liable to a prosecution under the Apothecaries' Act. (2.) We cannot say whether the Company would render any assistance.

"A Constant Reader, Maidstone," informs us, that in three cases of cholera, he administered chloroform by inhalation, with complete success; and, that in cases of premonitory diarrhœa, he gives 15 minims of the anæsthetic agent, in a wine-glassful of water every four hours, which has always checked the disease.

"T. C. D."—Yes; with thanks.

"Æsculapius."—The statement is not sufficiently clear for us to offer an opinion.

"Amicus."—We do not prescribe through our columns.

"Dr. Bentham" is thanked for his obliging communication.

"A Reformer."—We have not heard that "The London College of Physicians is at the present time using efforts to induce the Home Secretary to allow the President and Censors to examine the future general practitioner in the Science of Medicine."

"A Subscriber, Cork."—The Certificate of the Dublin Apothecaries' Society confers no legal title to practice medicine in England.

"Inquirer."—The lateral operation is the common one.

"Vindex."—Communication received.

"Scrutator" writes, "Dr. Crisps' pamphlet is a subject much discussed at the present moment. It is brought forward on all occasions; and the following inquiry is invariably made: Why was Dr. Crisp told on the 20th December, that his examination was so far satisfactory, when it is a fact that his papers had been destroyed on the previous Monday, and thus, according to the rules of the College, his case decided?"

"Academicus" shall receive an answer next week.

"Mr. Collenette, Guernsey."—Dr. Clay is the Editor of the "British Record," and a note addressed to him, at Manchester, will reach its destination.

Dr. Moffatt's paper will appear next week.

"M. N."—We are sorry that we are compelled to decline the poetry.

"Dr. Gondret, Paris"—Communication received.

"J. B., Manchester."—The letter reached us too late for insertion in the present number.

"Lecteur."—(1.) Yes. (2.) Yes.

"An Aggrieved Manx."—Letter received.

ORIGINAL LECTURES.

LECTURES ON FEVER.

BEING AN ATTEMPT TO DEVELOPE MORE DEFINITE VIEWS OF ITS NATURE AND TREATMENT, BY THE CONSIDERATION OF THE PHENOMENA, AS OBSERVED IN THE PRACTICE OF MEDICINE AND SURGERY; BEING A CONTINUATION OF "MEDICINE AND SURGERY ONE INDUCTIVE SCIENCE."

By GEO. MACILWAIN, F.R.C.S., Author of the abovementioned Work, "Unity of the Body," "Tumors," &c., &c., &c.

LECTURE IV.

Morbid Anatomy not Pathology, but only one Element of it.—Symptoms only one Element.—Both only good as necessary to further investigation.—Skin.—Mucous Membranes.—Throat.—Alimentary Canal.—Lower portion of Serous Membranes.—Arteries.—Veins.—Internal Organs.—Glands.—Liver.—Spleen.—Pancreas.—Kidneys.—Lungs.—Heart.—Brain, &c.

In endeavouring to collect the more important facts disclosed by the various organs, in those who have died in fever, as well as certain alterations in organs observable during life, we must not expect more than, from the nature of the subject, they are calculated to convey. The facts of morbid anatomy should never be disregarded; but there can be little doubt, that a too exclusive reliance on the first impressions they produce, has been abundantly prolific in error. This is greatly to be lamented. It cannot be too often repeated,—morbid anatomy is one thing—pathology is another. The one is a science establishing requisitions alone to be supplied from sources alike various and multiplied.

Morbid anatomy is one, and one only. Nay, more, were it not unphilosophical to talk of anything subordinate, in regard to what was an acknowledged element in a science, we should desire to express the real position of morbid anatomy by some such phrase. I believe I have known a man not unfrequently entirely spoiled for a pathologist by his pursuit of morbid anatomy; and I hardly ever knew any one—and I by no means except myself—who was not, in one way or other, harmed by it—a thing the more to be regretted, as it is a most time-consuming pursuit. Even when we connect the symptoms with the morbid appearances the work is only begun; we have only then another element to guide us in examining the actions of living organs, the agents by which they are influenced, the steps by which the diseased actions are produced, and the relative and absolute conditions which they involve, of which even the symptoms, as well as the morbid changes, are merely results. All the foregoing relations must be made out by the intellectual faculties. We have no instances, that I know of, in the whole range of cosmical inquiries, in which successful conclusions, as to the relations of phenomena to the laws which govern them, have been deduced directly from the facts of sense; yet he who reasons directly from morbid anatomy *only*, or from the symptoms only, does no more than this. In these lectures, as in everything else in this work, I would humbly desire to do something towards improving the science. Let us suppose, then, that a man dies of fever. Well, we know his symptoms. We examine him, and we find he has congestion, inflammation, effusion, &c., in the brain. Well, then, directly from this evidence, some would say, fever is inflammation of the brain. You see where we are getting; and yet I am putting no hypothetical case. The mischief is, that here has been an exclusive reliance on a portion only of the facts; they are, therefore, necessarily inadequate to sustain the conclusion drawn from them. The smallest reflection, then, must convince us, that the morbid changes in the structures of the body, must, in their primary relations, be regarded as effects; nor does the fact, that they may, in relation to prospective phenomena, become causes, in the slightest degree interfere with the necessity of regarding their primary as their most important relations in leading us back to the origin and nature of disease.

In sketching the principal morbid appearances, I am desirous of adopting some plan that shall be easy for the student, and which shall yet be sufficiently comprehensive for him to fill up, and to throw into a tabular form, should he desire it, and also one by which he will most readily comprehend the scope of the general argument. Now, two things are very obvious, viz., that in fever there are an immense number of morbid appearances, which are manifested on the surface of the body; and we shall see certain very significant relations between the gradual alterations; the different varieties of these; the increasing development of changes in the internal surfaces and the organs properly so-called, and the characters of fevers: which it will be necessary, by-and-bye, more particularly to consider. I have no opportunity of making a diagram here, but that is the mode I adopt of impressing the more salient facts of a subject. We will begin, then, with the skin. It may be said, I think, that of all organs in fever, singly considered, this, is the most interesting. Whether in the condition when the blood leaves the capillary vessels (a), or returns to them with augmented vehemence, (b) or when this is followed by profuse secretion (c), we still recognise the most significant phenomena of fever. This secretion may be varied in character, colour, (d) odour, (e) and so on; it may range in quantity from the most profuse inundation, so as to constitute the most alarming feature in the disease (formerly recorded under the name of sudor anglicus), or it may be in all the degrees of a liberal (f) secretion, down to the most ordinary (g) perspiration. The excitement of the skin, then, in fever, like that of most organs of the body, in its most simple form, is manifested in an augmentation of the quantity, and usually more or less altered quality of its secretion.

The colour of the skin is often altered in fever. It frequently exhibits a tarnished or dirty shade of its natural colour, (h) not unfrequently sallow, whilst in some fevers it is yellow, (i) brown, or even orange. The next process to this, seems to be something allied, in its essential condition, to what we surgeons are accustomed to describe as erythema, and consists in a scarlet efflorescence, (k) which usually begins about the chest, and gradually extends over the body. (l) In a less marked form a similar blush is found to precede phenomena of a different character, as the pustules of the small-pox. The efflorescence above noticed seems little more than a determination of blood to the part, but it evidently implies an excitement of some gravity; for, whenever it is fully developed, it is always followed by a complete separation of the cuticle, a process suggestive of great caution, (m) one attended in all animals by provisions which appear significant for the time of a more than usual susceptibility to surrounding impressions; and which a very little neglect too often exemplifies in the sequel of scarlet fever. (n) There are, however, a multitude of phenomena in the skin which are not usually included in the term fever, because they are not usually preceded or accompanied by it; but there are scarcely any that are always and entirely free from some fever-like phenomena. The manifestations, too, on the skin in fever preserve the same general form as when they occur without fever. Thus, pimples, vesicles, pustules, ulcerations, simple effusion, sloughing, alike characterise the morbid appearances in the skin, in those diseases in which little or no fever is present, and (in their respective cases those) which are acknowledged examples of fever. (o) The blushing of scarlatina, like the common, or, with some folks, uncommon phenomenon of blushing, is, like it, extremely significant of the disturbance within; and I would even here remark, how beautifully nature instructs us, generally by the denotements which she places on the surface. Regarded as abstractions they tend to views equally narrow and erroneous; but, examined in the whole of their relations, they are very teaching. Here surgeons may probably be more struck than physicians, because we are accustomed to see, in various forms, how important the hints are which are afforded by the phenomena of surface; and that, howsoever inadequate they may be, *alone*, to direct us to the special cause of individual affections, they are, in a general sense, admirable exponents of the *powers* of the economy—of *all single facts*, the one thing needful to the practical physician and surgeon.

Of the fevers whence we selected our phenomena, the measles present the next form of cutaneous exhibition, in a pimply eruption, more or less joined with a general discoloration of a tint somewhat less red than that of scarlet fever. Pimples appearing like little spots of vascular excitement, which terminate in a sort of resolution; but which is, nevertheless, for the most part, attended with a separation of the cuticle, in a multitude of small portions, or in a sort of branny or mealy powder.

Another morbid appearance on the skin is the more elaborate one of pustules, which is seldom *merely* a suppurative process. It is generally attended with a process partly ulcerative, partly sloughy, and, in the latter case, leaves marks indicative of the loss of substance. (a) This form of cutaneous affection, as an exponent of the state of the system, seems to mark in the strongest form the combination of a dangerous malady with considerable power. When we consider how serious a malady small-pox proves itself to be, and then contemplate the occasionally successful issue of a case of the confluent form, in which the whole skin nearly represents, as it were, a new organ in an enormous surface of sloughy ulcerations, we are rather struck by the occasional recovery, than surprised at the multitudes who perish.

We now come to processes on the skin, which, like those we have noticed, are indicative of very different, and continually varying conditions of the economy. We have observed the gradual development of efflorescence, of pimple, of pustule, coincidentally with severity of kind or intensity of individual exemplifications of fever, and with development of considerable but greatly varying power; we now begin to observe appearances on the skin which attend maladies habitually of a more serious character. I say habitually, because, although, in certain forms, no diseases destroy more certainly than many cases of small-pox, or more rapidly than scarlet fever, yet we have all these diseases in mild forms; but in all other fevers I know not that physicians, however varied their severity, meet with any which they do not regard rather more seriously than they do the *lighter* forms of exanthematous fevers, as they are called. In some fevers we observe on the skin rose-coloured spots, small clusters of vesicles, (sudamina as they are called,) certain larger forms of vesicle, or blebs, vibices, &c.; and, lastly, the simple form of spots of effused blood or petechiæ; and thus from the most simple imaginable form of disturbance exhibited in the blush of mild scarlatina, we arrive, through the hundreds of new organs exhibited in the pimples of measles, up to the enormous organ represented in the secreting surface of confluent small-pox; then, again, we begin to lose sight of these new organs, and observe spotty discolorations, which may be either reddish, dark red, (b) brown, or even black; or we may observe merely small vesicles; or, lastly, marks so little indicative of new organization, that they are rather suggestive of disorganization, viz., effusion of blood near the surface (c). All these last-named appearances are usually characteristic of some form of fever, accompanied by greatly prostrated power. The foregoing are the principal types of the morbid appearances seen on the skin in fever; but there are hundreds of varieties which accompany different disorders of the body which are not *usually* accom-

(a) Cold stage.
(b) Hot stage.
(c) Sweating stage.
(d) Blue, red, but not peculiar to fever.
(e) Small-pox, and so-called typhus, &c.
(f) Intermittents.
(g) In common continued fevers.
(h) Continued fever.
(i) Yellow fever.
(k) Scarlatina, small-pox, sometimes measles.
(l) This course general in such eruptions in fever.
(m) Scarlatina.
(n) Roseola Urticaria, Lichen, Herpes Zoster, &c. &c. &c.
(o) See Phenomena of the shedding of the coats of horses, moulting in birds, shedding of shells of crustacea, &c. &c.

(a) Small pox.
(b) Generally allied to those called typhoid, or typhus.
(c) Petechiæ.

panied by *fever*; and, on the contrary, be it remembered, that these processes which I have mentioned as characterising the state of the skin in fever, may all occur without fever. These are facts we shall find to be very useful. Thus we have petechiæ sine febre. I will only add here, that the eruption is indicative of want of power in both cases. As we leave the skin, to proceed towards the interior of the body, we may remark on the phenomena of the subjacent cellular tissue, because in some of these the skin is involved; thus we may have erysipelas, in various forms of fever, affecting the skin only, or extending to the cellular tissue; as, also, abscess, bubo, or carbuncle, &c. (a)

The other phenomena observed in the cellular tissue underneath the skin are chiefly, more or less, tendency to effusion, usually indicative of severe disease or diminished power.

You have thus seen, that a vast number of phenomena occur in fever, implying a determination of blood to the surface of the body; and I think you may discern certain relations between the disturbances within and these external indications, of which we shall have more to say. But we shall have now to observe that, although the relation between these phenomena of the surface and the internal disturbance never wholly disappears, that they are accompanied by actions which creepingly, as it were, leave the surface of the body first, for sites and *surfaces* more internal; and, lastly, though, *ceteris paribus*, in infinitely less number, if the power of the disordering influence be exalted, or that of the body diminished, then these are again replaced, or conjoined with morbid actions in the structure of the great viscera of the body.

MUCOUS MEMBRANE.

In all repressions of the cutaneous circulation, you observe a great tendency to an excited state of the mucous membranes of the nose and back of the throat, evinced generally by excitement of the vascular system, followed by an increase of secretion. (b) This is also the site in which we find the earliest extension,—if I may so speak,—of the cutaneous disturbance in fever; but instead of excitement and secretion merely, we have usually more or less swelling, ulceration, and sloughing, according to the severity of the case, (c) or we may have a repetition of the same processes which in the individual case are observed on the surface, as in the repetition of pustules. (d) In many forms of fever, however, as we follow the mucous membrane of the mouth and fauces through its various continuations, —through the bronchi and its ramifications, and the alimentary canal,—we still observe a great tendency to terminate excitement by secretion. The cough and various expectoration of catarrhal affections, the occasional tendency to diarrhœa, the sometimes sudden and excessive secretion of various matters, which, whether they come from organs previously in a state of inaction, or as compensating secretions from the mucous membrane, equally evince the tendency, I say, to terminate excitement by secretion; but wherever this is not accomplished, the excitement either destroys the part, sets up a new organ, (e) or, what is the same, enlarges those which already exist. (f) Accordingly, in fever, we find in the mucous membranes evidences of vascular disturbance; increased vascularity of the surface, enlargement of the mucous organs, or follicles, and generally in parts of the canal most distant from the sites in which the primary, and, as we may suppose, most essential processes of assimilation take place. Thus, in all fevers with which we are most familiar, there is a great tendency to enlargement of the mucous organs, or ulceration of the surface of the very lower portion of the small intestines; and it is very interesting to observe, in many forms of the sequelæ of fever, as well as the severe accompaniments of it, as in diarrhœal and dysenteric affections, the *tendency* to locate the mucous disturbance in the lower part of the alimentary canal. Scarlet fever is almost limited, in *moderate cases*, to irritation of the two extremities of the alimentary surfaces. In a great number of continued fevers the disturbance is seated in the lower portion of the ilium; but, if the fever be exalted in severity, we then not only get mere enlargement of natural structure, but ulceration, and sloughing, extending to other parts, and overleaping the more ordinary tendencies either to the ilium or elsewhere. In many fevers, the upper part of the canal exhibits marks of irritation, and not excepting the duodenum. (a) Vascular spots, softening, enlargement of existing structures, ulceration, and sloughing even to the penetration of the tube, and death, by the effusion of the contents of the canal, or, rather, the inflammation it excites, are the consequences sometimes observed in this district of the body in different fevers; nor are those lines which mark the point at which the skin and mucous membranes unite without their contributions to surface action, as I may call it.—In most of the eruptive fevers, we have frequent evidence of excitement about the nose, lips, and anus, and often aphthoid and other eruptions in these situations. We have also, in the mucous membranes, occasional instances in which all these processes are replaced or accompanied by direct hæmorrhage, analogous in its relations, in some cases, to the petechiæ of the surface; for, accidents apart, such as lesions of vessels by ulceration, fevers attended with hæmorrhage are very indicative usually of the same deficient power which seems to characterize invariably the occurrence of petechiæ; as if, in both instances, the more ordinary and more powerful indications of a contest represented by suppuration, ulceration, and even sloughing—(for, though a deadening result, it is a living process)—were merged in the simple effusion of the blood itself, without the interposition of any organism at all. The mucous membrane lining the bronchi, and its ramifications, is frequently, in fever, the seat of considerable vascularity, sometimes of a more, sometimes of a less florid red, sometimes of a more venous colour; and this may or may not be accompanied by considerable effusion. The mucous surfaces of the urinary organs have not been, I think, much examined in fever; any of the diseases of these organs may, of course, co-exist with fever, and in some of them one kind of fever is common enough; but, as co-existent with, or consequent on, the ordinary varieties of fever, they seldom present anything very remarkable. In yellow fever, the kidney has been found vascular; but this is common enough in a variety of diseases.

SEROUS MEMBRANES

frequently exhibit, in those who have died of fever, their characteristic evidences of disturbance, viz., adhesion and effusion. From what we know of the habitudes of these structures, and the relations of fever to power, we observe, as we might have expected, adhesion imperfectly developed; effusion is the more common result; both are, more or less, frequently conjoined. Effusion between the membranes, or into the ventricles of the brain, is very common. The pia mater is found vascular, the arachnoid more or less increased in opacity. The medulla spinalis and its membranes have not been so extensively examined, but similar conditions of the membranes have been very frequently observed. Conditions similar to the foregoing are sometimes found in the chest and abdomen, but effusions to any extent more frequently, perhaps, occur as the sequelæ of fever, than as its direct accompaniment. In puerperal fever, however, the peritoneum becomes, as it were, the surface next in approach to organs, from less fatal sites of vascular action; and the complaint, which begins in disturbance of the uterus, or of its vascular apparatus, is frequently exhibited in alarming peritonitis, evidenced by copious effusions of lymph, puriform, or other effusion, as has been mentioned already, in connexion with puerperal fever.

ARTERIES, VEINS.

In connexion with the phenomena of membranous surfaces, we should not forget the changes that are sometimes observed in arteries and veins. In the former, a certain vascularity of the lining membrane of the great vessels is not uncommon. In the veins, discoloration, coagulable lymph, and even pus, are sometimes extensively deposited; and it is right to remark, that, in all such cases, the fevers are commonly of a dangerous and often very powerless type, exceedingly embarrassing to those who regard the treatment of such fevers as always requiring depletion; since to them there is no relief for the inflammatory features so sure as bleeding on the one hand—no defeat so sure as anything which really tends to multiply the already too significant indications of deficient power.

The blood has been a good deal observed, of course, in fever. There can be little doubt that it undergoes changes, and that these are very different in different cases. It is also extremely probable that very important differences take place at different periods in the same case. In fact, nothing, I conceive, even in the absence of positive facts, could seem a more violent hypothesis, than to suppose, that in cases many of which consist of more or less disordered action in every organ in the body, that the blood should remain unaffected. Still, before we can arrive at any statement of more than a general nature, it seems to me that the blood must be more carefully examined, not so much, I mean, with regard to refinement of analysis, as to a *comparison* of it in *fever* with *other states* of the body. Various obvious conditions have been observed. It is certainly more dense in some cases, more fluid in others, and these changes occur at different periods sometimes in the same case. Then again, the heat has been observed to be preternaturally great; and, on the other hand, it is said to have been found below the ordinary temperature. (a) Confused, however, as the facts are at present, and complicated with the probable effects of treatment, &c., I dare not, in collecting our facts, aver more, I think, than that the blood is in an altered condition, and that the states of marked density or rareness are both indicative of serious disorder; yet that *density* is generally consistent with *considerable power*; rareness, unusual fluidity, deficiency of the usual salts, &c., a pretty sure indication of *debility*.

SALIVARY AND ABSORBENT GLANDS

are intermediate, as it were, between surfaces more or less open to our view, and organs altogether placed out of the sphere of direct observation. Affections of these structures usually designate a fever of a more or less serious kind; or, if they occur in fevers ordinarily of mild character, they betoken a severe specimen of it, pretty much as they are more or less affected. In scarlatina, the swelling and inflammation of the absorbent glands often proves a sign of a severe case, and, in various ways, greatly increases the danger. In small pox, too, the affection of the salivary, and often the absorbent glands also, but especially the former, is characteristic, and designative of the highly injurious influence, acting on the body. Inflammation, suppuration, and sloughing of some absorbent glands is not a very uncommon occurrence; but it is chiefly known in connexion with fevers of a dangerous type, and especially with the plague, but in which it is by no means a constant symptom. The mesenteric glands have been often found enlarged, hardened, containing pus or unnatural depositions; but, with the exception of some forms of fever chiefly seen in warm climates, there seem to be none which are not found in other states of the body.

INTERNAL ORGANS.

In inspecting the internal organs in cases of fever, we have not the same chances of defining the changes they undergo and their relation to the disease, that we have in respect of those which occur on the skin and such portions of the mucous membrane as are subject to observation during life; and hence it becomes very important to distinguish what appearances have been produced during the existence of the fever from such as may have preceded its occurrence. It is not but that any pre-existing condition of an organ holds a relation, and a very

(a) Plague and other severe forms.
(b) Common catarrh.
(c) Scarlatina.
(d) Severe small-pox.
(e) Pustule, ulcer.
(f) Enlarged mucous follicles.

(a) In some bilious remittents of warm climates especially.

(a) Morgagni de Causes et sed. M. L. 49.

instructive one too, to the fever; and this, however different in kind, is not a whit the less important merely because it may not be the *seat* of any *recent* lesion. This distinction is very important to mark, because, with a very moderate accumulation of experience, it will enable us, I think, *if we will only take the requisite pains*, to arrive at the means of estimating power much more correctly than is *usually achieved* in fever. In fact, we shall find, if I mistake not, that, *at some period or other*, in most cases of the more ordinary kinds of fever, that the symptoms are often very *imperfect*, sometimes *equivocal*, not unfrequently *deceptive* exponents of power. In my experience, and in my reading also, I think I have perceived many instances in which the real state of a patient's power has only been developed by an error in the treatment, which it is too late to remedy. Surgery is rich in that kind of lesson which teaches us with how different a condition of the system the very same phenomena may, *for a time*, co-exist; differences, in fact, as great as those represented by a high and healthy reparative power, and a total absence of it. Well, then, I say, we should try to separate the previous condition of organs from that immediately resulting on the febrile action, if we would understand the true relations of the phenomena to each other. For the ascertainment of the *previous* conditions of organs will often enable us to form a *true* estimate of the existing power; of which the *symptoms* so often, for a time, induce a very fallacious and exaggerated idea.

In tracing the *morbid appearances* hitherto, we have followed them in a sort of course from without inwards, and we will continue to trace them in the *apparent* course of their occurrence. We have already seen, that the abdominal organs are frequently affected in fever, and, *ceteris paribus*, we shall find that the liver and spleen are much more frequently affected than other organs; for, whilst they are both seldom entirely free from some appearance of disturbed action; in some of the worst forms of fever they are the specially affected organs. The liver is subject to hardening, softening, discoloration, adhesion, abcess, and even sloughing. (a) It is sometimes much enlarged, sometimes much diminished, even very small, in which case the spleen is very commonly found enlarged. Sir James M'Gregor, in describing certain fevers occurring in the Peninsula, seems to have observed, that conversely when the liver was found enlarged, the spleen was small.

In estimating the appearances, as of more remote or recent occurrence, you must depend a good deal on your knowledge of the phenomena during life, or the *previous history of the case*, your acquaintance with the effects of various influences on the body, and your general familiarity with morbid appearances. To exemplify what I mean, by a familiar instance, I may observe, that fever is often found with a nutmeg liver, as it is called; now this is a common effect of many injurious influences, it is best known in conjunction with; one, alcohol. Now it is not an appearance consequent on the fever, but it has a very *great influence* on its result. The liver undergoes other remarkable alterations in its structure. In some forms of fever it becomes changed in colour (b), being grey (c), ash coloured, livid brown, bronzed yellow, or various shades (d) between yellow and brown, dry and easily broken down, tinged with blood or bile, or *remarkably* free from both. The gall bladder is also variously circumstanced in fever; but I know of no appearance that is not seen without fever. It is sometimes, in yellow fever, without any bile, but more generally in fever it contains bile of more or less varied character, and occasionally unusually black. I say nothing of calculi, as they are found in various conditions without fever. The spleen very often presents important morbid appearances in those who have died with fever, but I suspect *comparatively few* of them are peculiar thereto, though certainly of the very greatest consequence to note in conjunction with fever. The frequency, almost constancy, with which enlargement, or other change occurs in this organ in connexion with the intermittents of hot climates, and if the attacks have been repeated, or severe, in more temperate countries also, is well known, and significant as regards intermission generally. In hot climates, however, abcesses, ulcerations, and even a sort of sloughy, breaking down of the structure of the organ, are not unfrequently observed. There are various states, too, of enlargement; great vascularity, unusual darkness of its blood, a sort of unusual softness, not sloughy; and again, a sort of consolidation of structure observed in this organ, which occurs in patients dying with fever, but which is also seen in other conditions of the body. I say nothing more of changes of this sort, as they would lead us from the argument proposed in the sequel.

(a) Intermittents and Remittents of warm climates.
(b) Common continued Fever (c) Yellow fever.
(d) Bilious remittents, warm climates.

STOMACH.

I have observed that, in regard to the morbid appearances of the mucous surface of the alimentary canal, that there is a great tendeney to place them on a site distant from that in which the primary processes of assimilation are carried on. Nevertheless, vascular determination, softening, inflamed spots, and other indications of disorganizing processes are sometimes found in the stomach, and in fevers of a powerless form not unfrequently. The black vomit I know not where to place,—it occurs chiefly in the yellow fever; and I know not whether it be quite decided, whether it be a secretion from the liver, or a vicarious action on the mucous membrane of the stomach, duodenum, or both. I have seen one case in this country, in which a black vomit occurred, and in which a most *enormous quantity* of a sort of bilious thickish fluid was discharged, of an apparently black colour, or, as I should say, a green so deep as to appear black. In that case, the morbid appearances were, I think, greatly in favour of the opinion, that it came from the alimentary surfaces. The liver was of a sort of nutmeg colour throughout, and the gall-bladder *nearly full* of very dark bile. The patient was a lady; many years previously, she had been, for a short time, in the West Indies.

Various lesions are occasionally found in the lungs, chiefly consisting of excessive congestion, consolidation, and sometimes gangrene. The heart has been frequently found flabby; but this seems rather to have resulted from the exhaustion common to the fever, than any condition specially connected with it. The pancreas has been frequently found changed in fever. I think Sir James M'Gregor (a) mentions examples of it, and also Dr. Clarke, (b) in the account of a yellow fever occurring in Dominica; but ordinarily, it would seem to have been especially free from disease.

THE BRAIN

may exhibit, in fever, any of those changes which we find at other times; there are none, that I know of, that are strictly characteristic. To the membranes I have already alluded. The organ is sometimes found softened, sometimes, perhaps generally, vascular. The colour, too, of the cortical, as well as the medullary (c) portions, have been observed to be changed in some degree. But it seems to me, that there is no organ in the body in which we can so little connect any change that is at all peculiar to fever. Every change that I know of, except certain appearances observable in some of the more malignant fevers of hot climates, are not only seen, but, I should say, very commonly, without fever. For my part, I cannot help being struck with the harmony of all this with that arrangement of morbid actions which I have elsewhere expressed under the term of the "Law of Inflammation,"—inflammation there implying, not merely what we usually understand by that word, but depositing actions in general. How many diseased appearances we see in the skin, as compared to all other structures,—how many in the mucous membranes, as compared to the more internal surfaces—these being, in fact, still external, strictly speaking; how many, again, of the serous surfaces, when compared with the organs in the infant; and this in spite of so many of them being instances (nearly all, in fact) in which the primary disturbance is directed to the organ invested by them. And here, even when organs themselves become affected in fever, how numerous and varied are the disorganizations of other organs, as compared to those of the brain! Its functions are constantly disturbed as fever advances towards a fatal issue; and yet nearly the whole of the morbid appearances are transferred to the surfaces, and take place in the membranes by which it is variously traversed and invested.

There is something exquisitely beautiful to me, in the conservative tendency implied in this arrangement, and the perfect harmony with the law to which I have referred; but we must to business, and, in the next Lecture, proceed to consider the Common Characters of Fever.

(a) M'Gregor, Sir James. Reports of Diseases in the Peninsula.—Med.-Chir. Tr., Vol. VI.
(b) On the Fever in Dominica.
(c) Yellow fever.

A COURSE OF LECTURES
ON
SOME OF THE MORE IMPORTANT POINTS IN SURGERY.

By G. J. GUTHRIE, Esq., F.R.S.,
LATE PRESIDENT OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

(Published with the sanction of the Lecturer.)

Lecture III.

HOSPITAL GANGRENE CONTINUED.

A wound, attacked by hospital gangrene, in its most concentrated and active form, presents a horrible aspect after the first forty-eight hours. The whole surface has become of a dark red colour, of a ragged appearance, with blood partly coagulated, and apparently half putrid, adhering at every point. The edges are everted, the cuticle separating from half to three-quarters of an inch around, with a concentric circle of inflammation extending an inch or two beyond it; the limb is usually swollen for some distance, of a shining white colour, and not peculiarly sensible, except in spots, the whole of it being perhaps œdematous or pasty. The pain is burning, and unbearable in the part itself, whilst the extension of the disease generally in a circular direction, may be marked from hour to hour; so that in from another twenty-four to forty-eight hours, nearly the whole of the calf of a leg, or the muscles of a buttock, or even of the wall of the abdomen, may disappear, leaving a deep, great hollow, or hiatus, of the most destructive character, exhaling a peculiar stench, which can never be mistaken, and spreading with a rapidity quite awful to contemplate. The great nerves and arteries appear to resist its influence longer than the muscular structures, but these at last yield; the largest nerves are destroyed, and the arteries give way, frequently closing the scene, after repeated hæmorrhages, by one which proves the last solace of the unfortunate sufferer. I have seen all the largest arteries of the extremities give way in succession, and until the progress of the disease was arrested by proper means, the application of a ligature was useless. The joints offer little resistance, the capsular and synovial membranes are soon invaded, and the ends of the bones laid bare. The extension of this disease is, in the first instance, through the medium of the cellular structure of the body. The skin is undermined, and falls in, or a painful red, and soon black patch, or spot, is perceived at some distance from the original mischief, preparatory to the whole becoming one mass of putridity, whilst the sufferings of the patient are extreme. A complaint of this kind cannot long be local, even if a local origin be admitted; and the accompanying fever is usually dependent on the previous state and general constitution of the patient, modified by the season of the year, or the prevailing type of febrile disease.

This gangrenous disease does not always prevail in this, its most concentrated form; the destroying process assumes more of a sloughing than a gangrenous character, whence Delpech has denominated it pulpous, rather than gangrenous. It is in its

nature almost equally destructive, although not quite so formidable in appearance. It may attack the whole surface of an ulcer at once, or in distinct points, all however rapidly extending towards each other, until they constitute one whole. The red of the granulations becomes of a more violet colour, and the change is accompanied by a burning pain, not usually felt in the part, while a layer of ash-coloured matter is soon seen covering them, which adheres so firmly as not to be readily removed; or, if separated, shows that it is a substance formed upon the surface, and constituting a part of the granulations themselves, which are ultimately confounded within it.

About the end of the first week, and sometimes much later, this kind of ulcer becomes more painful, the edges, or the circumference of the wound assume a browner hue, and the parts become somewhat pasty, the whitish colour of the part particularly affected being opaque, grey, and soft. It may be said that the false membrane having become very thick, has lost the little vitality it possessed, and become putrid; the discharge which had been partly suppressed, now re-appears, not as pus, but as a fetid ichor exhaling the peculiarly offensive stench of this disease. This pulpy, yellowish, putrid substance becomes thicker, and extends deeply: it invades the whole substance of a muscle, under which a probe may be passed, and the instrument brought out through it, with the loss, perhaps, of some striæ of blood, from parts which are not yet actually destroyed; the mass is, however, adherent, although its extent diminishes by the putrefaction and wasting away of its surface.

Dr. Tice, who, as I have stated, had, perhaps, greater opportunities than any other officer of observing the progress and fatal effects of this disease, in 1812, in the great hospitals of Coimbra, gives a lucid account of this disease.

There are two characters always peculiar to this disease, and differing from all other gangrenous ulcers from ordinary causes, which are, the circular form it assumes after a very few days, even in its slighter varieties, and its peculiar odour or stench.

If this disease were entirely a local complaint, caused by the application of a morbid poison, as Mr. Blackadder would wish to prove, or a constitutional disease, according to Dr. Boggie and others, giving rise to the destructive changes described on the surface of an ulcer, it should, with Mr. Blackadder, be only followed by febrile or constitutional symptoms at the end of several days; and Delpech is disposed to think that in such cases these constitutional symptoms take place from and after the sixth day. According to Dr. Boggie, the febrile symptoms should precede the changes in the ulcerated surface. It may be safely admitted, that whilst these gentlemen are all right in the theory of what it ought to be, none of them have been able to persuade the disease to accord entirely with their notions of what it ought to do. That the febrile symptoms do appear to follow the appearance of the local alteration is in many cases indisputable; that they precede or accompany the local symptoms in many cases is indubitable; and that the disease in a mild state, although yet capable of committing much mischief, is neither preceded nor followed by febrile or constitutional symptoms, cannot be doubted. The febrile symptoms themselves differ essentially from each other when they do occur, generally partaking the character of the endemic fever prevailing in the country at the season in which it appears. The fever is sometimes inflammatory, sometimes typhoid, and occasionally resembles the bilious remittent of the summer and autumn in hot climates, and ends in typhus. It is probable that a want of attention to these circumstances has decided the opinions entertained by different individuals as to the general character of the febrile symptoms and of the treatment to be pursued for their removal. That this disease was generally considered a constitutional complaint, until nearly the end of 1813, must be admitted; and it was the very indifferent success which attended its treatment by constitutional means and simple detergent applications everywhere except during the last three months of 1813, at Bilbao, which caused the surgeons of the British army to view it more as a local disease, capable of giving rise to severe constitutional symptoms. A change of opinion which was materially influenced by the knowledge that the French surgeons more generally considered, with Pouteau, that it was, in the first instance, local, and treated it by the actual cautery. In my hands, constitutional treatment, and every kind of simple mild detergent applications, always failed unless accompanied by absolute separation, the utmost possible extent of ventilation, and the greatest possible attention to cleanliness; and not even then, without great loss of parts in many instances, which induced me, at Santander, in November and December, 1813, to try the mineral acids, not as then generally used as stimulants or detersives, but as caustics. This proceeding was always, however, accompanied by a constitutional treatment, regulated by the nature of the symptoms which at that station were never benefited by bleeding, although it had proved so effectual, without the local remedies, at the neighbouring sea-port of Bilbao.

Dr. Boggie, the great advocate for constitutional treatment, and to whom I particularly refer, says, that under him, at Bilbao, in 1813, where caustic applications were not used, or only as detersives, the disease was arrested by bloodletting to the amount of one or two pounds, and, in some cases, to the extent of three or four. He admits, however, that bleeding must be resorted to with the greatest caution, in persons of less robust constitutions, who may have lingered long in hospital, or suffered much from ill health; and that in some cases it is altogether inadmissible—an acknowledgment which is decisive in my mind, that constitutional treatment is only auxiliary. He says, he never saw the puncture made by the lancet affected by this disease; a convincing proof to me, who have seen it, that the virulence of the complaint, as an infectious disease, was subsiding at Bilbao, when the treatment he introduced proved so effectual. The late Dr. Hennen says, that he has seen an ulcerated bubo almost suddenly, yet so terrifically, affected in forty-eight hours, as soon to destroy the patient; and I am satisfied, that ulcers presumed to be specific have no immunity from an attack of this disease. In one case in which hospital gangrene and tetanus existed together, at Santander, in the hand and arm, they were both cured by venesection, which failed as signally in doing the least good, in a case in the next bed, nearly under similar circumstances. Dr. Boggie says, in fact, page 94 of his work—

"In that form of gangrene named phagedena, a very great destruction of parts may sometimes take place without the constitution being much affected by it. Now, if bloodletting be used in such a case, or even in the advanced stage of the true inflammatory gangrene, when disorganization has taken place, and the system is sinking under the consequent debility, the vital powers being nearly exhausted, the result must be obvious; but when it is used with caution, and in cases where it is really applicable, it will be found to be a most valuable remedy. In all cases, Dr. Boggie, like every one else, had recourse to emetics, purgatives, and such other general treatment as the febrile symptoms appeared to indicate. As local applications, he recommends cold water, alone or mixed with a small portion of acetic acid, constantly applied and frequently renewed. Poultices and warm applications he objects to; and after the sloughs separate, he approves of dry lint and weak solutions of sulphate of zinc. Should the sloughs adhere after the inflammation has abated, warm stimulating ointments, and sometimes weak solutions of the nitrate of silver, or of the mineral and vegetable acids.

Dr. Boggie, however, admits, that, in cases of relapse, when a small dark spot of ulceration occurs on an old indolent ulcer, escharotics should be applied, the disease being then, he says, (p. 107,) purely local; and he recommends chiefly the nitrate of silver and the red precipitate in powder, which last he thinks causes less pain than any other.

On the subject of the use of arsenic as a caustic he says, "When I was made acquainted with it, the malady had abated so much, and was so manageable by the means then in use, that it was not thought necessary to have recourse to any other;" and he had therefore no occasion to try it, the mineral acids, or the actual cautery—an admission which, with the one before alluded to, clearly establishes the fact of the mitigated state of the disease he had to treat.

Mr. Blackadder, who is long since dead, and is opposed to Dr. Boggie as a determined localist, gives the account (p. 129 of his book) of a case of hospital gangrene, which might be supposed to have arisen without any local application of contagious matter, which opinion he combats in the following manner:—"The disease made its appearance in the form of a vesicle on the outer side of the thigh of a patient, who had a wound near his ancle affected with the disease. This patient had a peculiar habit of scratching his thigh whenever he felt or dreaded pain during the dressing of the wound, and from the same cause he was frequently induced to bring his hands more or less in contact with his sore. Aware of the amazingly small abrasion of the cuticle which is requisite to effect inoculation, I had little doubt as to the manner in which this man came to be affected with his new sore. That a hair had been extracted, or a small portion of cuticle removed at its root, while the specific matter was, at the same time, directly applied by the nails or points of the fingers is, I think, more than probable; and I believe that all such cases may be accounted for in a similar manner.

To Mr. Blackadder must be attributed the introduction, in November, 1813, when at Passages, of the use of Fowler's solution of arsenic as an escharotic, which answered remarkably well in arresting the progress of the disease, and was afterwards found equally efficient in the hospitals at Antwerp. The only objection to it I am aware of is, that it did cause in some few cases slight symptoms of its poisonous effect having taken place on the bowels, apparently from aborption, an inconvenience which might become a serious evil, and causing a preference to be given to the mineral acids, which act equally well without incurring a similar risk of evil. Mr. Blackadder, stationed on the same coast, and within about forty miles of Dr. Boggie, took a diametrically opposite view of this complaint to the Doctor, and believing the disease to be purely local, in the first instance considered venesection as almost always unnecessary, although he admitted that cases may occur in which the abstraction "of a small quantity of blood would be likely to be attended with more good than harm;" but certainly, he adds, bloodletting is an operation which ought to be avoided as much as possible in gangrenous phagedena, particularly when the previous injury has been extensive, such as that of a penetrating gun-shot wound.

The late Dr. Hennen, who served at Bilbao previously and subsequently to Dr. Boggie, attributes the advantages which took place from the bloodletting introduced by the latter gentleman to a change in the accompanying fever from a typhoid to a catarrhal form. He says, "If it (bloodletting) was neglected on the appearance of an inflamed ring around a sore, attended with violent throbbing pain, and a foul bottom smeared with unhealthy pus—or if on a suspicious stump, already healed, redness, pain, tension, with bounding pulse, occurred, gangrene assuredly took place if full and early bloodletting were not employed. Much to our surprise, we never observed any of the lancet-wounds assume a gangrenous appearance, although previously, in almost every other instance, the slightest puncture festered." Of local applications, Dr. Hennen gave a preference to the most simple, and in 1815, when this disease appeared at the Jesuits' Hospital in Brussels, under his charge, he relied "on separation, the application of the carrot-poultice, free venesection in the commencement, and steady purging afterwards, to effect a cure;" the fever, he says, was of the inflammatory type. In some of the other hospitals in Brussels it was certainly the reverse. In the Gensdarmerie Hospital, under the late Dr. Gordon, a most able and scientific physician, the symptoms he thus described to me:—"The patient becomes restless

and uneasy, with a pricking and burning pain in the stump; rigors supervene, the whole arterial system is implicated; the pulse becomes quick, jarring, and irritable, without much power; the heat great; skin suffused and discoloured; tongue furred; delirium, followed by rapid prostration of strength." Dr. Gordon did not bleed; and, in the German Hospital, under Dr. Poekels, in which these and other febrile diseases were most fatal, Dr. Hennen admits that the fever was typhoid.

Dr. Walker, who had before been a regimental surgeon, and was the physician of the Barsena Hospital at Bilbao, from September, 1813, to January, 1814, and who is now in practice in Lower Seymour-street, has favoured me with a copy of his monthly reports on hospital gangrene for those four months, and they are entirely confirmatory of the opinion I had entertained of the altered and milder state of the disease during the latter part of that period.

"Sept. 20th, 1813.—Our greatest mortality has been from hospital gangrene, although we have not lately had so many fresh cases; yet still some appear every now and then, notwithstanding every attention to ventilation, to the nitrous fumigation, and to the instant separation of those attacked. The treatment followed has been the exhibition of emetics, as its attack is almost universally preceded or accompanied by fever; then the free exhibition of bark, opium, and wine. When there was a yellow tinge of the eyes, and that appearance of the tongue common in all biliary affections, the use of calomel, in doses of two or three grains, was beneficial. The external applications have been the common poultice, or with wine in it, while the sera was at the same time sprinkled with the powder of bark or charcoal, which latter seemed to have more effect in correcting the fetor than bark. *A solution of one drachm of nitric acid in one pint of water has likewise been employed, apparently with advantage.* I do not yet, however, know of any application in which I would place much confidence.

"The weather during the month has been generally mild; the nights rather cold, and frequently a fog in the morning, covering the low grounds; a few days sultry, and a few days rain.

"Oct. 20th.—A very great mortality has again occurred this month, from hospital gangrene, notwithstanding everything that has been tried. In addition to the external applications mentioned last month, we have used a solution of nitre in vinegar, which has seemed to be of benefit in some cases, apparently hastening the separation of the sloughs. The fermenting poultice has likewise been employed with advantage, but it has not had a sufficiently extensive trial, on account of the difficulty of preparing it. I have pushed the use of camphor, opium, and bark, to a considerable extent with many of them, but I cannot say anything positive of their good effect. The state of the bowels is very generally preternaturally loose, and can only be corrected by absorbents with opium. I must, however, conclude with observing, as I did before, that I do not yet know of any method of treating this disease with a certainty of success.

"For the greater part of the month the weather has been dry and cold, but we have also had some days almost sultry, and for a few days a good deal of rain.

"November 20th.—The cases of phagedenic ulcer that have occurred this month have been likewise milder and fewer in number. On the 25th of October, all the cases of it were removed to the Palace Hospital, appointed solely for the reception of such cases. The whole amounted to sixteen. Since that, seventeen have appeared, of which eight were removed; the others, having a milder appearance from the first, and yielding readily, were kept here. More or less general derangement of the system being always present, the treatment has latterly been directed with the intention of removing that, and the practice has been the same as in fever accompanied with excitement—purgatives, diaphoretics, low diet; an emetic was generally premised, the state of the tongue and the colour of the eyes almost always indicating a disordered state of the biliary system. The local applications were the common poultice, with the powder of bark or charcoal sprinkled on the sore. This treatment seems to answer better than the stimulant plan formerly followed; but I think that the disease has been likewise of itself much milder, and that the ulceration has not proceeded with that rapidity which formerly was very frequently observed.

"The weather during the month has been variable, but chiefly rainy and cold. While rain was falling on the low grounds, the hills were covered with snow.

"Dec. 20th.—Of the cases of hospital gangrene, three were sent to the Palace Hospital, one died, and six were cured. The treatment was on the antiphlogistic plan in general, with the emollient poultice as an application to the wound. Salt water was used in two cases, and seemed to answer very well. Venesection was employed only in one case, and certainly with advantage. His pulse was full and hard, but no derangement of the system had taken place, such as loss of appetite, &c. It was the same man that I have mentioned above was blooded several times for dysentery."

"General Hospital, Bursena, Bilbao, 20th September, 1813.

	Remained.	Admitted.	Total.	Died.	
Simple gun-shot wound	405	142	547	3	
Sloughing ..... (20th Oct.)	67	61	128	55	
Vulnus simplex	406	...	406	4	All the admissions are transfers of patients from other wards, on account of gangrene having attacked their wounds.
" gangrenosum.. (20th Nov.)	44	54	98	36	
Vulnus simplex	134	...	134	3	
" gangrenosum.. (20th Dec.)	24	21	45	5	
Vulnus simplex	97	...	97		
" gangrenosum...	...	9	9	1	

The conclusion of his general report is as follows:—

"Lately, however, the disease put on a milder form, and the sloughing did not proceed with that rapidity that it did at the first, nor was the fever so violent. And more lately still, since the setting in of the cold weather, the type of the fever seems to have changed entirely, and to have put on the inflammatory type, so as to require strong evacuations, and even bleeding, which has been used with the greatest success by staff-surgeon Boggie, who has for a considerable time had the more immediate care of the patients of this description at the Cordeleria Hospital.

"Thomas Walker, M.D., Physician to the Forces."

ORIGINAL CONTRIBUTIONS.

ON SCARLATINA.

By J. W. TRIPE, M.D., M.R.C.S., and L.A.C., London.

(Continued from page 128.)

Table B. c. β. 6. May.
FOR THE METROPOLIS.

	No. of Deaths from Scarlatina, corrected.	No. of Deaths to 100 in each preceding Month, corrected.	Mean Temperature.
			°
1840	189	106	57·6
1841	32	80	56·8
1842	56	147	53·2
1843	92	94	52·2
1844	162	112	52·9
1845	75	112	49·4
1846	63	108	54·6
1847	33	160	56·4
1848	222	117	59·9
Mean.	107·1	115	54·8

This month presents very great variations in the comparative mortality, and in the mean temperature, when compared with April, the mean actual mortality, when corrected, amounting to 107 instead of 95; the mean comparative mortality, to 115 instead of 89; the mean temperature to 54°·8 instead of 47°·2; and the greatest variation in the comparative mortality of one month, compared with another, reaching, in May, 80, in April, only 38. The corrected actual mortality was above the mean in three years only, viz., in 1840-44-48, being the years in which the disease was epidemic; the rate of increase for these years over that of April was, however, not so great as for several other years, being in fact, with the exception of the present year, below the mean. The temperature in one of these years was below the mean, and above it in two; in the other six years, the temperature was plus in four, and minus in two.

On examining the next column, we perceive that the comparative mortality was above the standard in three, and below it in six years; the temperature being plus in two, and minus in one of the former three, and plus in two and minus in four of the latter six.

A high comparative mortality was, therefore, co-existent with a high temperature in two out of three years, and a low comparative mortality with a low temperature in four out of six years. In the nine years, there were three exceptions, viz., 1840-41-42; in the former of these, the malady had been epidemic during the summer and autumn of the previous year, and the months of January and February had been unusually warm, and March and April unusually cold, which was unfavourable to its increase in May, and, also, as before mentioned, the mortality continues to fall until July of the year subsequent to that in which the disorder had been epidemic. This fall occurred whether the temperature was above or below the average, being, however, much accelerated in January, February, and March by a low temperature. It is also a singular circumstance, that, if the mortality for this month becomes lower than that for April, and again rises considerably in June, that the disease becomes more or less epidemic in the following months. In 1842, the exception was of a different character to that of 1840, the comparative mortality being unusually high, whilst the mean temperature was minus 1°·6; but this may be explained by examining the previous months, the comparative mortality and the temperature being unusually low for January, and high for February and March; so that, although the temperature fell a little in April, the mortality still remained rather high, and continued so for May.

The mean comparative mortality for the four warm months of May, was 115, and for the five cold months, 114,—showing, as the above analysis did, that although a high temperature rather assisted in increasing the mortality from scarlatina, yet that it could not do so to the extent indicated by the mortality table for the month, viz., 107·1 to 95·6 in April, or 115 to 100.

We can, therefore, only conclude, that any temperature between 50°·0 and 59°·0 is equally, or almost equally, favourable to the propagation of, or rather, to the mortality from the disease, and that some other more active agents must be present to cause this increase.

Table B. c. β. 7. June.
FOR THE METROPOLIS.

	No. of Deaths from Scarlatina, corrected.	No. of Deaths in each month to 100 in preceding, corrected.	Mean Temperature.
			°
1840	167	88	63·2
1841	52	162	56·4
1842	110	196	62·9
1843	135	144	56·3
1844	279	172	60·7
1845	64	85	60·7
1846	59	94	65·2
1847	44	60	58·0
1848	316	142	58·7
Mean.	136·2	127	60·2

The mean mortality for June, when corrected, as in the above Table, is 136, the mean comparative

mortality, 127, and the mean temperature, 60°·2,—the absolute mortality being in excess only in the three years in which the disease was epidemic. The comparative mortality was in excess in five, and minus in four years; the five former being coincident with a high temperature in one, and with a low temperature in four months; and, on the contrary, the latter four were accompanied by a high temperature in two, and a low temperature in the two remaining months.

A comparison between the comparative mortality and the comparative temperature will not assist in elucidating the subject. In two years the temperature for the month was less than that of the May previous, and yet the number of deaths in the one was 162, and in the other 142 (years 1841 and 1848) to 100 in the previous May. In June, 1842, the number of deaths to 100 in May were 196, the temperature being 62°·9 or + 9°·7; in 1846 only 94 deaths happened to 100 in May, the temperature being 65°·2 or + 10°·6 over that of May; and in 1847 they amounted to 60 only to 100 in the previous May, the temperature being 58°·0 or + 1°·6.

The mean comparative mortality for five warm months of June is 127, and for the four cold months the same number.

From these data we cannot draw any other conclusions than stating that, although 127 deaths occur in June to 100 in May, yet, as a comparison of the variations in the mortality with the variations in the temperature does not show that any necessary relation obtains between them, that the increased mortality from Scarlatina in June must be due to other causes than to an increase in the temperature over that of May.

Having thus treated of the influence of temperature in the months of April, May, and June on the progress of Scarlatina, we will next pass on to a consideration of these three months conjointly, as forming the spring quarter.

Table B. c. β. 8. Spring.
FOR THE METROPOLIS.

	No. of Deaths from Scarlatina, corrected.	No. of Deaths to 100 in preceding Quarter, corrected.	Mean Temperature.
			°
1838	328	121	53·2
1839	529	105	59·1
1840	606	96	55·5
1841	153	76	57·0
1842	224	158	57·2
1843	366	108	53·6
1844	654	112	55·0
1845	215	47	51·9
1846	187	80	55·2
1847	177	89	52·2
1848	816	132	55·3
Mean.	385	102	55·3

The mean corrected number of deaths for this quarter in the metropolis is 385; the comparative mortality 102, and the temperature 55°·3. The mean comparative mortality for England and Wales in the years 1838-42, differs very much from that for the metropolis in the eleven springs included in this Table: that for the metropolis being 102, for England and Wales 86, a strong confirmation of the conclusions already arrived at, that the mortality for this quarter does not appear to be so much influenced by temperature as that for the winter quarter.

On looking over the second column, we must be struck with the great variations presented in the comparative mortality, especially in the years 1841 and '45. These two years are, however, in a different position to the others, as they followed the epidemics of 1840 and '44, when the comparative mortality would necessarily be unusually low, whether the atmospheric variations were favourable to its increase or not; they will not, therefore, be considered with the others, observing, however, that the mortality was the least in the year in which the temperature was lowest.

In the four years that presented the highest mortality two were above, and one below the mean temperature, and one of the mean. In the five that were below the mean mortality, three were below, and two above the average temperature.

The accordance between the comparative mortality and the mean temperature is not much greater than between the latter and the number of deaths for the quarter; thus, the former was above the average in six, and below in five springs; in the six that were above the mean temperature, it was plus in three, minus in two, and mean in one; in the three that were below (excluding 1841 and '45) the temperature was plus in one, and minus in two. The greatest correspondence occurs between the comparative mortality and the sum of increase in the mean temperature over that of the previous winter quarters: the average of this increment amounts to 16°·1. In seven years the increase was plus this sum, the comparative mortality in these springs being plus four times, and minus three times; but, in these last three, were included the two years 1841 and '45, which, as before stated, ought to be excluded from the analysis. In the other exception, the mean temperature was plus 0°·2, whilst the comparative mortality was minus only 5 per cent.—a difference so slight as scarcely to deserve notice. In the four years which were below the mean temperature, the comparative mortality was above in two, and below in two, the latter (except the years 1841 and '45) presenting the lowest comparative mortality, and the smallest increase in the temperature.

The mean comparative mortality for the four warm spring quarters is 119, and for the four cold springs, is only 103.

It is, therefore, evident, that variations in the temperature for this quarter do not exercise that influence on the mortality of scarlatina, that they undoubtedly do in the winter quarter; yet, still the balance of evidence most decidedly preponderates to the same results as were arrived, when speaking of the winter quarter, viz., that the mortality is less in a cold than in a warm quarter; and that, therefore, a temperature plus the mean has a slight tendency to invest the disease with an epidemic form.

Table B. c. β. 9. July.
FOR THE METROPOLIS.

	No. of Deaths from Scarlatina, corrected.	No. of Deaths to 100 in preceding Month, corrected.	Mean Temperature.
			°
1840	194	116	62.2
1841	66	127	57·8
1842	121	110	60·2
1843	147	109	60·9
1844	303	108	61·4
1845	67	102	59·8
1846	71	120	64·5
1847	63	143	65·4
1848	381	120	61·5
Mean	156·7	117	61·5

The absolute mortality was above the mean in three of the above months, viz., in 1840, '44, and '48, the years in which the malady was epidemic; the temperature for these years being 62°·2, 61°·4, and 61°·5 respectively; so that in one of them only was the temperature above the mean. In the remaining six months the temperature was plus twice, and minus four times.

In the second column, four are above, and five below the average, the former four being coincident with an excess of temperature in two, a mean in one, and a minus in one; the latter five presenting a plus of temperature in one and a minus in four. The three exceptions occurred in 1840, '41, and '48. In 1840 the mortality was minus 1, and the temperature plus 0°·7, a difference exceedingly slight; but, although the mean for the month was plus, yet the mean, when compared with that of the previous June, was minus 1°·0 of the ordinary increase. In 1841, the comparative mortality was plus 10, and the mean mortality minus 3°·7; but in comparing the increase of the temperature for this month over that of June, we find that the temperature had increased 1°·4, the mean increase being 1°·3. In 1848 the comparative mortality was plus 3 and the temperature mean, being, however, 0°·6 above that of the previous month. With the exception of 1841, none of these were departures from the rule which seems to govern the others.

The comparative mortality during a warm July, from an average of three months, is 126, and during a cold July, from an average of five months, is 111.

We may, from these data, assume, that an unusually high temperature for July has a decided tendency to increase the mortality from scarlatina, whilst a low temperature has comparatively a decided tendency to depress it; but the comparative mortality for this month, ordinarily increases over that of June, even if the temperature decreases. An increase or decrease in the temperature cannot be the sole agent in producing this increment in the mortality.

Table B. c. β. 10. August.
FOR THE METROPOLIS.

	No. of Deaths from Scarlatina, corrected.	No. of Deaths to 100 in each preceding Month, corrected.	Mean Temperature.
			°
1840	178	92	63·0
1841	65	98	60·5
1842	139	115	63·4
1843	187	127	62·1
1844	351	115	57·7
1845	57	87	57·3
1846	59	83	63·2
1847	83	132	62·1
1848	438	114	58·5
Mean	173	107	61·3

Allowing the average mortality of this month to be 173, four of the months under consideration had a plus, and five a minus, the temperature being also plus in five, and minus in four of the months; but the plus of temperature, and the plus of mortality, did not happen in the same months, except twice, the two months which present the highest mortality being minus in temperature.

The comparative mortality was five times in excess, and four times in a minority, the five former being co-existent with a high temperature twice, and with a low temperature thrice; the latter four were accompanied by a high and a low temperature in two months respectively. The temperature was in excess over that of the preceding month four times, and below it five times: in the five years in which it was minus, the comparative mortality was plus three times and minus twice.

In the five warm months of August, 113 deaths occurred to 100 in July, and in four cold months 103 only happened; but the two latter included the two years 1841 and 1845, being the years following the epidemic, and, therefore, characterised by a tendency to a decrease in the mortality, from the want of persons to attack; whilst the two former included the years 1843 and 1847, which preceded the epidemics of 1844 and 1848, being, in fact, the months in which the epidemic of 1844 may be said to have commenced. It is rather singular, but the comparative mortality for 1843 was 127, and for 1847 was 132, the temperature of each being the same, viz., 62°·1, or plus 0°·8.

[To be Continued.]

DR. RIGBY'S REPORTS.

ANTEVERSION OF THE UTERUS AS A CAUSE OF STERILITY.

[Continued from page 350.]

In continuing the subject of Anteversion of the Uterus as a cause of Sterility, I must refer your readers to the case of "Mrs. H.," which I reported in the *Medical Times* for January 31, 1846. This patient had been married sixteen years, had been once pregnant, but miscarried when advanced four months and a half in her pregnancy. The anteversion had been evidently produced by severe exertion which she had been obliged to take shortly afterwards, and then had been aggravated by similar causes. I had seen her only once after her first visit, when I communicated the report, (being then on the subject of displacements of the uterus.) On that occasion, I replaced the uterus,

being still inclined somewhat forwards, although by no means so much as before, and put her upon a course of mild alteratives and tonics, which she seemed to require.

I will now continue the case, in illustration of my present subject. Not seeing her again as I had expected, I wrote to know how she was going on, and, receiving but an equivocal sort of an answer, I requested her to call, when she confessed herself to be two months advanced in pregnancy.

1846. Feb. 13.—Has passed the fourth month of her pregnancy. During the first three months she suffered greatly from pain and pressure about the symphisis pubis, with constant urging to pass water. She had also a good deal of morning sickness,—all which symptoms have recently disappeared.

℞ Extr. aloes aquosi, ℈ii.; extr. hyoscyami, ℈iss.; masticbes, gr. xij. M. ft. pil. xx. sumat. i.—ij. horâ somni.

July 2.—Was delivered last night of a fine boy, after a pretty sharp labour, and is doing well.

Sept. 29.—I was sent for to her a few days ago on account of the child, which is in a very weakly state, the mother having no milk, and having procured an unhealthy—wet-nurse, who, finding that she also had no milk, had been secretly feeding the child. Its bowels were much deranged; it was much emaciated and very feeble. I sent the child an excellent wet-nurse, and prescribed for the mother, who was suffering from passive menorrhagia, apparently the result of general debility, as follows:—

℞ Pil. hydrarg. gr. iij.; ferri sulph. gr. ij; extr. lupuli, gr. v. M. ft., pil. ij. o. n. s.

℞ Magnesiæ sulphatis, ℥i.; acidi sulph. dil., ℥ss.; infus. rosæ ad ℥viii. Sumat. coch. magn., ij. bis die.

Oct. 12.—The change in the appearance of the child is striking; it is now a fine, robust, healthy infant. Although the mother is better, she is below the mark in point of strength, and has still a disposition to menorrhagia and leucorrhœa.

℞ Decoct. cinchonæ c.; acidi sulph., t. d.

℞ Ferri sulph., gr. ij.; extr. lupuli, gr. vj. Ft. pil. ij., o. n. s.

Rept. mist. magnes. sulph., o. m.

After this she improved considerably, for a while, at the sea side.

Dec. 4.—Complains that she does not gain but rather loses ground. She has a constant watery discharge, which, when she is quiet, flows from her in a small stream, and gushes from her when she sneezes or moves suddenly. It is colourless. The catamenial period seemed to relieve her; but in two days afterwards the other discharge returned, and was then offensive.

As she had given me no information respecting her bowels, tongue, &c., I merely ordered the lotio plumbi, and urged her coming to see me as soon as she returned to town.

April 9, 1847.—The menorrhagia and discharge have continued; she has lost flesh and colour.

Exam. per Vaginam.—A small polypus is felt, adhering, by a narrow pedicle, to the posterior part of the canal of the cervix; it is smooth, and moderately firm.

I applied a ligature to it shortly afterwards, and removed it in about eight days; it was a good deal decomposed when it came away, but appeared to consist of condensed cellular tissue covered by mucous membrane. Her health improved rapidly with the aid of tonics, and in June she again became pregnant; during her pregnancy she enjoyed excellent health, and did not suffer the slightest inconvenience until after the seventh month, when the frequent recurrence of pain in the back and loins required her to be careful in the management of herself. She was delivered, after a natural labour, of a small but healthy child. She recovered quickly, and nursed him for eleven weeks, during the first six of which he throve favourably, but then began to decline, and, at my request, she had a wet-nurse; she immediately improved after this change. In the July following, she had evidently again become pregnant, and was by no means in such good health as on the former occasions. She never felt thoroughly well, but suffered from thirst, want of appetite, constant flushing of face and head, and much restlessness. On entering her third month, she suffered continually from pain and sense of distension about the pelvis, so that, when flooding came on, it seemed at first to be a relief to her. Abortion took place about the twelfth or fourteenth week, and left her considerably exhausted by the discharge. She, however, rallied quickly, and again became pregnant last November. She appears this time to have been more attentive to herself, and to have gone on more favourably.

Whether or not the polypus existed previous to the termination of her pregnancy, must now remain undecided; at any rate, it was not of sufficient size to attract the attention of the medical man who attended her in labour; or, perhaps, he did not make his first examination until the head had advanced considerably, and had flattened the polypus by its pressure. Knowing the great activity of the system during pregnancy, we may presume that this growth had commenced before labour, and afterwards by its presence and irritation had kept up that leucorrhœa and passive menorrhagia which had reduced her so severely. It may appear prejudice on my part to prefer using the ligature in such simple cases of uterine polypus as this, when the more speedy removal by the knife or scissors has been so extensively advocated; nor, perhaps, am I quite justified in deprecating this method of removing polypi, not having tried it in a sufficient number of cases; but having seen profuse hemorrhage result from cutting of a polypus, which was checked with great difficulty, and not before the patient had been seriously reduced, I must confess myself favourable to the slower, but safer, process of removing polypi by ligature. Where a patient has been drained by repeated and continued discharges, the powers of the system are unequal to bearing any amount of loss, however trifling. Re-action is defective, and the patient is prostrated by a discharge of blood, which, under ordinary circumstances, she would scarcely have noticed. The flabby, relaxed, atonic state of the system, which necessarily accompanies the passive menorrhagia in these cases, prevents that full contraction of the divided vessels which would have effectually controlled hæmorrhage in a state of health, and thus disposes the enfeebled patient to greater loss than otherwise would have been the case. I am sure I am justified in stating, that a moderate-sized pedicle, easily reached, are not the only indications for *cutting* off a polypus, the state and powers of the patient must be carefully attended to, and if she be much reduced by previous discharges, the ligature (which instantly stops them) ought in my opinion to be preferred.

Pregnancy rapidly followed the removal of this cause of sterility; she went her time favourably, and, being unable to nurse her child, soon again became pregnant. This time she appears to have been much deranged in health, as regards the state of liver and bowels; and there can be very little doubt that, if she had given her medical man the opportunity of putting her under a slight alterative and laxative course of treatment, the symptoms of irregular flushing pain of head, want of appetite, thirst, and pain, and sense of distension about the pelvis, which terminated in abortion, might have been avoided. The uterine circulation must ever be greatly influenced by the state of the abdominal viscera, and their circulation. A torpid and engorged liver, a loaded state of intestinal tube, must necessarily tend to obstruct the returning circulation; the uterine circulation which, with commencing pregnancy, is now in great activity, becomes greatly congested by such causes of obstruction; the delicate vessels ramifying in the soft pulpy decidua become over-distended; they give way, extravasation follows, with destruction to the life of the embryo.

CASE OF MARASMUS ARISING FROM ALBUMINURIA AND OXALURIA COMBINED.

By WM. BIRD HERAPATH, M.B., Lond., &c., Surgeon to St. Peter's Hospital, Bristol.

Summary of Case.—An individual, the subject of acute rheumatism fifteen years ago, and of calculus eleven years since, became afflicted with constant and progressive emaciation, dating from seven or eight years ago. Loss of sexual appetite some months past; great predisposition to catarrhs, which invariably increase the emaciation; psoriasis, dyspnœa, palpitations, nocturnal diuresis, albuminuria, oxaluria, deficiency of lithic acid and the lithates, presence of torulæ in the urine. No valvular disease of the heart; granular kidneys diagnosed.

Bronchitis, œdema of cellular tissue to slight degree; pleuritic effusion to considerable extent; disappearance of hydro-thorax temporarily; occurrence of diarrhœa, vomiting, and obstinate hiccough, accompanied by gastritis; re-appearance of hydro-thorax; great systemic depression; epileptiform apoplexy; and death.

Confirmation of diagnosis by autopsy.

Mr. Wookey, aged 45, a grocer's foreman, of pale anæmic lymphatic appearance, dark brown hair; of moderately abstemious habits, but originally somewhat addicted to indulgence in strong beer; consulted me in reference to his constant and progressive emaciation.

He stated, that seven or eight years ago he weighed 12 st. 4 lbs. (172 lbs.), but now he only weighed 143 lbs. He dates his present illness from May last.

Previous History.—Fifteen years ago he had a violent attack of acute rheumatism, for which he was bled. He subsequently had several relapses of the same disease. About eleven years ago, after suffering from retention of urine during many days, he passed a calculus, about the size of a small French bean, which, in its passage, fractured in several pieces. Composition unknown. Does not recollect whether he suffered from the symptoms of renal calculus previously to evacuating the stone.

Oct. 15.—*Present Symptoms.*—Complains of no pain or uneasiness in any part of the body; no cough or expectoration; not troubled with excessive perspirations; skin generally dry; bowels regular, one evacuation daily. Urine in natural quantity; heart beating with its accustomed regularity, and its sounds perfectly normal; respiration destitute of any morbid peculiarity. Sometimes troubled with dyspnœa and palpitations, if excited or over-exerted. The inferior eyelids appeared puffy and œdematous, but the feet and legs not so. He has been married fifteen years, but has no family, and his wife never became pregnant,—never subject to spermatorrhœa. The sexual appetite has been much below par for many months past.

Having obtained a specimen of his urine, I found it to have the following characters:—Frothing easily on agitation, and the bubbles persistent, pale, watery, acid; sp. g. 1·018; slightly albuminous, with heat and nitric acid; precipitate more copious when tested by boiling *per se*; no pain in the lumbar region, but slight tenderness existed on pressure.

I ordered the diluted nitro hydrochloric acids, and a small cupping upon the loins.

Oct. 22.—He postponed the cupping until to-day; syncope ensued before eight ounces of blood were withdrawn. Urine same characters, sp. g. 1·008. He now told me that he had latterly noticed a great change in his urine. Some months ago, it always deposited the lithates in abundance, but he never sees them now. The urine was at first darker in colour, almost like weak coffee, but latterly it has become much paler than natural, and increased in quantity; it now becomes rapidly offensive, that passed over night acquiring a disagreeable odour by the morning. He had also noticed the frothiness of the urine. A difference existed in the quantity, &c., of urine voided. He passed about three or four pints of pale watery urine at night, getting up seven or eight times to do so; but the day urine was only one to two pints, and much higher in colour; in fact, more natural.

He furnishes me, to-day, with a table of his weight since May, 1848:—

		St.	lbs.	lbs.
May 27	..	10	8	148
Aug. 1	..	10	5½	145½
Oct. 2	..	10	3	143
— 21	..	10	3	143

From which it appeared that he had only lost 5 lbs since last May.

Oct. 28.—He complained of having taken a severe cold; symptoms of slight bronchitis, dyspnœa, mucous râle, and frothy expectoration. He had lost 2½ lbs. in weight this week; therefore 140½ lbs. He had carefully measured the daily quantities of urine voided, and found them almost constantly four or five pints. It possessed the same characters; sp. g. 1·008. Now, assuming the whole to have been the same, each pint would contained 164·68 grs. of solid matter.

$$\frac{\text{For } 8835 \times 18{\cdot}64}{1000} = 164{\cdot}68$$

And,

$$\frac{164{\cdot}68}{1} \times 5 = 823{\cdot}4 \text{ grs. per diem.}$$

This 823.4 grs. daily passed × 7 days = 5763.8 grs., or less than 1 lb. avoirdupois in the week; but had lost 2½ lbs. avoirdupois, therefore, for two reasons, the albuminuria could not be the sole cause of his marasmus; first, because ALL the solid matter in the urine voided would not account for his lost weight; secondly, the albumen itself made but a *very small* amount of the total constituents of the urine.

Oct. 28.—℞ Quinæ disulphatis, gr. vi.; acidi sulphurici diluti, ʒi.; syrupi aurantii, ʒss.; tincture cardamom. comp., ʒvii; aquæ ad O ss.; M ft. mist. Cap., ʒiss. ter die.

℞ Pulveris ipecacuanhæ radicis, gr xij.; extracti hyoscyami, ℈ i.; extract papaveris, ℈ i.; pilulæ scillæ comp., ℈ ij. M; ft. massa dividenda in pilulas, xij.. Quarum capiatur una pil. ter in die.

Nov. 2,—The bronchitis is better, but the marasmus continues; weight, 9 st. 12½ lbs.; lost 2½ lbs. these 5 days. I now found the urine to be 1.006, and to be almost destitute of albumen; heat and nitric acid only developed a slight opalescence; no coagula; such being the case I tried for sugar, none present. I then determined to examine the thorax most carefully. I failed in detecting any alterations in the appearance or movements of the chest; the percussion sounds were clear in every region; but I fancied there was *comparative* dulness in the right supra spinata fossa; there was also bronchophony to a slight degree here; this was also slightly present in the apex of the right lung.

I learnt at this visit that he had some difficulty in obtaining his mid-day meal comfortably, in consequence of business arrangements; that he sometimes, in consequence, went without it, rather than eat what was provided by the old woman appointed by his master to prepare it. Having a precarious appetite he easily experienced disgust.

Nov. 7.—He appeared in better spirits to-night, and felt improved in all respects; urine 1.010, not albuminous; not saccharine; weight 9 st. 13½ lbs., being an increase of 1 lb. since the 2nd instant; the catarrh has left him; appetite improving.

Nov. 11.—About the same; urine, 1.013; this was "day urine," all other specimens examined were "night;" more highly albuminous; quite as high as first specimen examined; weight, 9st. 13 lbs.; difference between two sides of thorax so slight that I cannot make up my mind that there is any solid deposit in the lung; I think the muscular development on the right side is greater, and might account for the dulness; cutaneous eruption on face and thorax; psoriasis; quantity of urine passed, 3 pints at night and 1 pint in the day: total quantity drank, about 4½ pints. He has had a disposition to diuresis at night for some time past, frequently having been obliged to get out of bed four or five times to evacuate his bladder. He also complains of a great predispositon to "colds," the slightest exposure being sufficient to induce a catarrh; appetite very precarious; thirst great; skin generally dry, and indisposed to perspire.

To-day I noticed a great difference in the specimens of urine preserved. The two first specimens brought me had acquired a dark colour by keeping, they had assumed a more natural colour; the other two specimens were still as pale as water; all the samples had a slight flocculent white deposit, as a very thin layer at the bottom of the vessel. This deposit, examined in the microscope, presented—1, tables and prisms of phosphates; 2, a very few octohedra of oxalate of lime; 3, pavement epithelial cells of large size; 4, considerable quantities of debris of broken fibrinous casts of tubuli uriniferi; and amongst these debris, here and there, could be seen some very few perfect casts; 5, some smaller epithelial cells, having their nuclei clearly shown; 6, many of those peculiar highly-refractive beaded cysts, described by Dr. Prout: they appeared, to me to be light in sp. g., and floating about easily in the fluid. I conceive them to be organic, and probably of vegetable origin; no lithate of ammonia, or crystals of lithic acid, anywhere apparent. The urine had a highly offensive odour, hydro-sulphate of ammonia being present in it.

Nov. 20.—Catarrh again present, not so well therefore; weight, 9 st. 12½ lbs.; loss of ½ lbs. Urine (two specimens): day urine, higher coloured; amber; of usual appearance; 1.014 sp. g.; albuminous, but requiring much nitric acid and long boiling to precipitate it, the fluid becoming coffee coloured after boiling, passing through pink to brown; after boiling, sp. g. 1.012, without acid.

Nov. 20.—Night urine pale, watery; sp. g. 1·008, becoming very slightly opalescent upon boiling, and nitric acid, some few coagula separating on cooling; appetite better.

Nov. 30.—During the past ten days the catarrh has been considerably increased; bronchitis and hoarseness have existed also; he has been confined to his room, and been under careful medical regimen; the marasmus has increased; weight has now dwindled to 9st. 7½lbs.,—a loss of 4½lbs. in ten days; urine as usual. Mist. quinæ, ter die.

Dec. 11.—He left his home at the date of last Report, and again attended to business; still a little bronchitic cough; weight still decreasing, 9st. 6lb.,—a loss of 1½lbs. in ten days. He has been taking quinine all the time; to continue it; and, in addition, to have an emulsion of ol. jecoris asselli, eggs, and spt. cinnam. co., ʒij. of the oil to half-pint; coch. magn. tris bis indie; urine, day, 1.012; night, 1.006; albuminous as before.

Dec. 20.—Loss 1lb., during ten days; now, 9st. 5lbs.; urine as before.

Dec. 21.—I examined, to-day, the urine of Dec. 11th,—it was darker in colour, and it had become turbid, a thin deposit of light specific gravity at the bottom; it had been kept tightly corked all the time. Upon placing a drop of fluid and sediment under the microscope, immense numbers of highly refractive oval cells presented themselves to my notice; most of them were distinct and separate, several were joined in twos and threes, at times half-a dozen were in a string; here and there were to be seen a set ramified, radiating from a point, and the cells much elongated as if growing; some of the cells small, especially the terminal ones; in fact, they presented all the appearances of torulæ; the urine also contained a few phosphatic crystals, and occasionally a crystal of oxalate of lime; the casts had disappeared. This was "day urine."

Upon examining a drop of the sediment of night urine, passed on Dec. 20, several of the same cells were to be seen; but they were smaller, and but few were joined together. They were nothing like so numerous as in the specimen examined first, and passed Dec. 11. The day urine of Dec. 20 was perfectly transparent, a very *slight* cloudiness at the bottom; broken casts of tubuli, and a few cells very sparingly disseminated through the field of the microscope; much more albuminous than the specimen of day urine voided on Dec. 11, and which contained the immense number of cells. Query: Does the albumen act as the pabulum for the growth and vegetation of these cells?—I believe so.

Dec. 23.—He complains of greatly-increased dyspnœa; the slightest exertion makes him pant for breath; the cough is very troublesome, but the expectoration is slight, consisting of frothy mucus; he feels great anxiety and depression of spirits; a sinking sensation in the stomach; anorexia, flatulence, and some gastralgia; complains much of headache, and nervousness, and debility. Urine the same.

Ordered, pil. scillæ comp., 3ss.; ext. hyoscyami, ℈i.; conii, ℈i. Mist. divid. in pil. xvi. cap. i. quart. quâq. hora.

Dec. 25.—Dyspnœa increasing, and most oppressive; cough very troublesome; short hacking cough: scarcely gets any rest; expectorates a little more freely. I examined the chest carefully to-day: the upper portions perfectly free from disease, and the respiratory movements regular, and the sounds normal; the lower portions of the lungs, on both sides, were rather dull on percussion, and the lower ribs were not much moved on respiration; œgophony was also present, especially on the left side, where it was strongly marked at the angle of the scapula; the respiration was accompanied by a mucous râle, probably the result of congestion; heart sounds perfectly normal, and its rythm regular; pulse, 96—100. I examined the deposit most carefully, to-day, chemically and microscopically.

Some of the "oval cells" are decidedly not of vegetable origin. They resist the action of heat and boiling acetic acid, even concentrated. But the larger and true oval cells disappear. Those which remain are much more minute, and of a higher refractive power, and of greater specific gravity. They are also clearly destitute of colour, and perfectly transparent. They are not unlike little glass beads. Those disappearing under the action of these re-agents were slightly yellow tinted.

Those which were insoluble in acetic acid, dissolved readily in nitric and hydrochloric acids, without effervescence; upon ignition there is left an alkaline residue, containing lime and magnesia. I believe them to be a modified form of the dumb-bell variety of oxalate of lime.

It was evident that effusion existed in both plurœ, and this fully accounted for the dispnœa.

A blister was ordered to the left side of the thorax.

A purgative draught was prescribed containing—

℞ Pulv. jalapæ, ℈j.; potassæ bitartratis, ʒiss.; spt. æthiris nitrici, ʒss.; inf. caryophyllorum, ʒij. M ft. haust., mane sumendus.

℞ Pulv. scillæ, gr. xij.; digitalis, gr. xij.; Pil. hydrarg. gr. vi.; ext. conii gr. xxiv.; M. et divid. in pil, xij. Cap. i. ter die.

This treatment was in consequence of a consultation with Dr. Symonds, to whom I referred my patient, with a full report of his case, in every particular, which I was obliged to do, as the patient would not consent to give up employment again and go to bed.

Dec. 26. I visited him to-day at his residence. He was in bed, partially supported by pillows, on account of the dyspnœa. It almost amounted to orthopnœa. The blister had risen well; it was removed, and poultices directed to be applied. The respiration is somewhat relieved since the confinement, probably in consequence of the rest, quietness, and warmer atmosphere of the bed-room. The cold weather must have been a source of great irritation to him. Bowels not moved. Repeat the draught.

Dec. 28.—Respiration steadily improving; he can now lie down; pulse 96; respiratory movements, 28; skin is now perspiring; tongue rather creamy; bowels only moved once. Repeat the draught, with ʒss. pulv. jalapæ.

Dec. 29.—Examined the chest to-day; respiratory murmur is now heard on both sides, posteriorly and inferiorly; the dulness has likewise disappeared, as well as the œgophony; complains much of debility; cough almost gone. Omit the pills. Bowels smartly acted on.

℞ Acidi nitrici diluti, ʒi.; tincturæ scillæ, ʒiij.; syrupi papav. albi, ʒss.; mist. camphoræ, ʒvij. M. ft. mist. Cap. ʒiss. ter die.

To eat a more liberal diet.

Dec. 31.—Still in bed; blister healed; cough and dyspnœa are now very slight; he talks with more easy and freedom; there is slight œdema of the feet and ancles; pulse, 96; respirations, 24; tongue still creamy. Repeat the draught and continue the mixture.

Jan. 2, 1849.—Having indulged in a little roast pork yesterday, he is now suffering from the consequences. Excessive vomiting and purging have ensued. The draught had but little to do with it,

as he rejected it the moment he swallowed it the day before. He is excessively faint and much prostrated; hiccough also troubles him. Ordered,

℞ Pulv. opii., gr. i.; conf. aromat., gr. v.; M. ft. pilula, statim sumenda.

℞ Confectionis aromatici, ʒi.; liq. opii sedat. (Battley's) gtt. xx.; mist. cretæ ad ℥ ss. M. ft. Mist. cap. ʒiss. omni horâ si opus fuerit, vespere.

Much easier. The medicines have had the desired effect.

Ordered ʒiss. of tragacanth emulsion every four hours.

Jan. 3.—The diarrhœa has disappeared. He complains of sickness, or nausea rather, and violent urging. Some epigastric tenderness exists, probably arising from the vomiting.

To have one drop of creasote in a pill every hour, if necessary.

Repeat the emulsion.

Jan. 4.—Somewhat relieved; very weak and faint; complains of soreness at the epigastrium; probably muscular, as it does not amount to an indication of inflammation.

To have a teaspoonful of sal. volatile occasionally.

Jan. 5.—The sickness has disappeared; nausea remains; cough and hiccough trouble him,—the latter more especially. He can get no rest for it. This has been the most troublesome symptom ever since the diarrhœa.

Apply a mustard cataplasm to the epigastrium. Resume the creasote.

Jan. 6.—Not so well to-day. Some griping came on this morning, and he feared diarrhœa was again about to appear. The bowels were once moved, and this gave relief; but he took one dose of the aromatic chalk mixture as a safeguard. He complains of hiccough, nausea, dryness of the fauces, a constant hauking, expectoration of a thick viscid phlegm, no appetite, want of sleep, cramp and pain in the legs. There is great anxiety depicted in the countenance, and a fussiness in his manner, and mental excitement. His memory is worse than usual; ankles more œdematous. Urine has the same characters, but less in quantity. Does not pass more than a pint and a half in the twenty-four hours.

℞ Acidi hydrocyanici, gtt. xij.; liq. opii sedat., gtt. xv.; mist. amygdalarum, ℥viij.; M. cap. ʒiss. quart. quâq. horâ.

Jan. 7.—About the same; vomiting and hiccough somewhat improved; little more rest at bedtime; urine one pint.

Repeat mixture.

Jan. 8.—Much worse to-day; the dyspnœa has again come on; examination shows that there is effusion in the cavity of the pleura; probably on both sides. There is more œdema about the ankles; but even this is slight; the skin is bedewed with a clammy perspiration, and the pulse is 104 and weak; the vomiting is more troublesome, and the hiccough has disappeared nearly; did not sleep last night. Repeat the blister to the left side.

To take—Potassæ nitratis, gr. vj.; sodæ carbon., ʒ ss.; pulv. saccharı, ℈ ij.; m. ft. pulvis, in effervescence, every four hours, with citric acid. To have an anodyne draught, with ¼ gr. morphiæ horâ somni.

Jan. 9.—He is somewhat improved to-day as far as respiration is concerned; but his general symptoms are not so good; there are twitchings and startings of the limbs; a restless anxiety in the countenance and manner; a loss of memory greater than usual; somewhat delirious during the early part of the night, then slept for a short time, and dozed at intervals. The powders appear to relieve him; complains of frequent faintness, and a great sinking; pulse 110, small, soft, regular, weak; the tongue creamy, very thin film only on it; sickness still torments him, so does hiccough; no tenderness in stomach.

Continue powders, and repeat the draught (with ½ gr).

Jan. 10.—We had been anxiously expecting a consultation with Dr. Symonds, but the multiplicity of engagements prevented Dr. Symonds from meeting me until to-day. He carefully examined Mr. Wookey, and concluded that the heart was perfectly free from valvular disease and all abnormal sounds. He also satisfied himself of the presence of thoracic effusion and albuminuria. The treatment fully accorded with his views. We agreed in forming a gloomy prognosis, but had no expectation of a very speedy termination, as no decidedly mortal symptom presented itself. It was decided that a combination of creasote and di nitrate of bismuth should be tried in pills, with extract of hemlock.

℞ Bismuth di nitratis, gr. vi.; ol. creasote, gtt ij.; ext. conii, gr. ij.; pulv. trag. co., q. s. M ft. pilulæ iij. dividend. ter die sumendæ. Mitt. xviij.

Jan. 11.—I was not a little surprised to receive a message from Mrs. Wookey to say, that her husband had expired at a little after nine this morning. She subsequently told me, that he had taken only two doses of the pills; shortly after having taken the dose this morning, he complained of cramp in his right leg, and requested her to rub it; whilst doing so, she found it tremble violently—"the bed was shaken by it;" a loud noisy breathing followed, his countenance was distorted, and "he frothed at the mouth," and from this fit he never recovered himself, but died about five minutes after the first seizure. She requested a *post mortem* examination.

Post mortem—36 hours after:—

Sero sanguineous effusion on both sides of the thorax, about two pints in quantity. The lungs perfectly free from all abnormal deposit; the tissue congested and œdematous; the pericardium universally adherent to the heart, by old organised fibrin; the left ventricle dilated, and the walls considerably thickened; the cavities empty; the valves perfectly healthy and acting efficiently; the endocardium free from morbid action, and the lining membrane of the aorta also healthy; the peritoneal cavity contained about a pint of clear serum. The stomach, when opened, presented a vivid *red* surface, intensely injected in the minute capillary ramifications, on its villous surface, undoubtedly arising from gastritis. The mucous membrane was thickened and softened, and a viscid, slimy, purulent mucus stuck to its rugæ, and filled the hollows or sulci between them. The remains of the three pills were found close to the pylorus. The intestines healthy, as far as examined; no peritonitis anywhere evident; the large intestine, transverse colon, loaded with scybalæ, notwithstanding the diarrhœa and repeated vomiting, but little food having been taken for some days previous to his decease. Upon carefully examining the kidneys, they were both found to be granular; so decidedly so, that the external surface felt "shotty" to the fingers in passing them over it. The kidneys were of the usual size, and free from all appearance of conjestion. Upon dividing them longitudinally, several of the mamillary bodies were found destroyed, and their positions occupied by granular deposit in the cortical substance prolonged between and around them usually, but now considerably increased in bulk, at the expense of the tubular portions. The colour of this deposit was a dull orange red; and it was rather easily broken up. There were no "milk-white" spots to be seen anywhere on the surface, or in the substance; the whole texture of the gland appeared indurated, and it cut firmer than usual. The external tunic was not thicker or firmer than natural; the right kidney had an old cyst in its walls, communicating with the pelvis and ureter; it contained nothing now, but might have formerly held the calculus; the bladder contained some urine, but no calculus; cranium not opened, in consequence of the widow refusing to permit its being done.

Jan. 29.—Upon re-examining the sediment, and with a higher power microscope, I found that the "oval, beaded cysts," previously described, had vegetated into beautiful torular growths; that other particles, which had appeared highly refractive granules, were really very minute octohedra of oxalate of lime, and these latter, mixed with the oval cysts, had together formed the microscopic and chemical characters before detailed; the oval form of oxalates also occurred, and occasionally a dumb-bell.

CHLOROFORM IN CHOLERA.

By JAMES MOFFATT, M.D., North Berwick.

About six weeks after the discovery of chloroform I published a letter in which I pointed out the great likelihood of its being of essential service in cholera. Everything since that time has tended to confirm the views I then entertained, and it only requires a more extended and impartial experience of its use to show its power in this formidable disease. To insure success, many things are required on the part of the medical practitioner, which hitherto seem to have been too much neglected, and hence the unfavourable results reported in many cases.

We beg to submit the following as the best rules to be guided by in the treatment of cholera; but it must be recollected that our remarks are chiefly applicable to chloroform, and that other remedies are to be used as circumstances may require.

1. Great care should be taken that the chloroform is pure. From its high price it is too often adulterated; in which case, instead of doing good, it will do harm, by increasing the nausea and sickness.

2. The patient should, in every case, be chlorized in a well-ventilated apartment; for, if the air be at all vitiated, the chloroform will altogether fail in its effects.

3. The medical practitioner must remember that, besides the chloroform, other remedies must not be forgotten.

4. The anæsthesia must be kept up for some time after every symptom of the disease may apparently have disappeared.

5. During the time the patient is in the anæsthetic state, the body must be kept warm, the circulation in the extremities kept up by friction, and, above all, the most minute attention must be paid to every symptom or change which may occur.

6. Should there be any appearance of danger from sinking or exhaustion, the anæsthesia must be immediately relaxed, and brandy and other stimulants given in the intervals; but this must be done with the greatest caution, as there is always, in such cases, danger to be apprehended from asphyxia.

7. When the disease is fully subdued, and the chloroform withdrawn, the next consideration is to support the system; but here, also, the greatest care must be taken to give nothing which can have any tendency to bring back the vomiting. It must be kept in view that, for some time, the stomach will be weak and irritable.

I conceive chloroform to subdue cholera by its anti-spasmodic and narcotic powers. It stops the spasms of the stomach, and thus prevents further vomiting, while its narcotic powers act beneficially on the whole system.

In very bad cases, chloroform is almost the only remedy which can be applied, for every medicine given internally is instantly vomited up. Suppositories, baths, &c., can have little effect in a disease which runs so rapidly to a termination.

Chloroform is the greatest discovery of the present age, and has hitherto triumphed in spite of every opposition; but its greatest triumph yet awaits it in its power over cholera.

January 26, 1849.

STRANGULATED FEMORAL HERNIA.—MR. GAY'S OPERATION.—RECOVERY.

By H. H. BROUGHTON, Esq., Dodcross, near Manchester.

Mrs. Buckley, of Wigley-mill, aged 56, on Thursday, the 28th of December last, whilst lifting some coals, felt something snap in the left groin. On examining it, she found a small hard lump, not then very painful. It gradually became more painful, and tender, and she says, gradually increased in size. On Thursday, her bowels were moved, and again, on Sunday, slightly. She vomited the whole day on Sunday. I was called on Sunday at six p.m. She complained of great

tenderness over the whole of the abdomen, her pulse small and wiry, countenance most anxious and pinched. I tried the taxis about a quarter of an hour, but, from the tenderness, I was obliged to desist. I then proposed the operation, to which she in a short time consented. I proceeded home to prepare, and returned as soon as possible; with the assistance of my friend, Dr. W. Garstang, having had the loan of Mr. Gay's book on "Femoral Hernia," I determined to try that operation; but, not having a bistoury cache, I was obliged to modify it so as to use a straight director. I commenced by making an incision obliquely downwards and inwards on the neck of the tumour one inch long, dissected carefully down, and soon came to the neck of the sac. Having divided the cribriform fascia on the director, I then passed the director on the inner side of the sac, through the stricture, and divided it inwards. This at once relieved the intestine. I examined the sac, and it appeared so dark coloured, that I made a small opening into it to examine the state of the intestine; it was of a dark chocolate colour. I returned it at once, closed the wound with suture and plaister, over which I placed wet lint, gave her an opiate, and left her, to use her own words, "quite comfortable," at eight o'clock.

Monday, Jan. 1. She complains of some pain in the belly; ordered fomentations and a saline. Tuesday evening, gave her a dose of ol. recini. She has gradually progressed, and sat up on Sunday last; she is now convalescent.

I consider Mr. Gay has added much to the relief of the operation for hernia, rendering it more simple and less dangerous, and, had I had a guarded bistoury, I should have explicitly followed his directions.

HOSPITAL REPORTS.

[From our Dublin Correspondent.]

RICHMOND SURGICAL HOSPITAL.

DISEASE OF THE KNEE JOINT, WITH ANCHYLOSIS, REQUIRING AMPUTATION AT THE END OF FOURTEEN YEARS.

Under the care of Mr. HAMILTON.

John Naugle, aged 35, was admitted into the Richmond Hospital, under Mr. Hamilton, Jan. 9, 1849, with disease of the left knee, of long standing. The knee was anchylosed at a right angle, the head of the tibia carried a little back on the posterior aspect of the condyles of the femur; the foot rather everted. The knee itself was of a purplish red colour, with three fistulous openings with raised flabby granulations round their orifices, and leading down to diseased bone. They discharged profusely thin yellow matter. The limb was rigidly fixed in the bent position, and the femur could be felt thickened for about a hand's breadth above the joint. He suffered a good deal from pain in the knee, particularly at night.

Fourteen years before, while running, he fell, and came upon the knee; violent inflammation followed, and he was confined to bed for two years, during which time several abscesses formed, and were opened or broke; and though he then was able to go about, the openings still kept discharging, and the knee was bent and stiff. For the next eight years, he was pretty well, and suffered little from the knee; but about four years since it became again painful, and the discharge profuse, particularly just before coming to the hospital. Latterly, his general health has begun to fail. He is now labouring under well marked hectic; he sweats profusely at night; pulse, 120; tongue, thickly coated with grey fur; skin hot; no appetite; thirst; is losing flesh and strength.

Considering the unfavourable position of the anchylosis, the carious state of the bones, and the danger of allowing him to be further run down by the hectic fever and the profuse discharge, Mr. Hamilton proposed amputation, which was performed on Wednesday, Jan. 24. The man was put under the influence of chloroform, and was quite unconscious of the removal of the limb. Mr. Hamilton observed, that there were two points of interest in the operation. 1st. That the muscles were pale and consolidated together by old lymphy deposition, and did not retract, as usual, so that the bone had not to be separated as high as usual to form a good stump. 2ndly. That the bone itself, besides being considerably larger than natural, was of such extreme hardness, that it was sawn through with great difficulty.

The examination of the knee presented much interest. From the ivory hardness of the bones, Mr. Smith, who was kind enough to make the section of the joint, was nearly half an hour sawing through it. There was complete bony anchylosis, so perfect, that it was difficult to detect the point of union where the femur and tibia had become consolidated together, the central cancellated medullary portion of the one bone being continued into the other, the outer cancellated portion being the same. This last was seen to be unusually thick, hard and white, like ivory; the medullary portion was filled with a marrow more like tallow than healthy marrow. The patella was firmly united by bone to the top of the pulley surface of the femur. In the centre of the head of the tibia was the cavity of an abscess, which went by a rather tortuous passage anteriorly into a purulent cavity, which opened by fistula a little lower down. The abscess in the tibia opened also backwards into the popliteal space. It was lined by smooth membrane, and contained little pus.

The most important practical conclusion from this case is: that, though a long time may have elapsed from the commencement of the disease in the knee-joint, it may yet become the subject of amputation. Where it has become anchylosed at an unfavourable angle, this is more likely to be the case, as the unnatural position of the soft parts, especially the blood-vessels, must have a depressing effect on the vital actions of the limb, and, by impairing its nutrition, render it less able to repair disease, or fortify against its recurrence, or resist the injuries from accidents, which the same cause, the distorted position of the limb, renders it more obnoxious to. That the nutrition of a distorted limb is lessened, is well seen in pes equinus, where, after the position of the foot is rectified, the previously emaciated limb plumps out again, and the shortened foot actually grows longer. This is the third case where Mr. Hamilton has had to amputate in case of anchylosis of the knee-joint of long standing. In the last, the young man had had disease of the joint sixteen years before, which had ended in true anchylosis at a right angle; the head of the tibia, as in this case, drawn back, and the foot everted. He walked with a crutch, and, a few weeks before admission, he had fallen down and struck the knee; violent inflammation ensued, and abscesses leading down to carious bone, with hectic fever and rapid wasting, so that the leg had to be amputated.

PROGRESS OF MEDICAL SCIENCE.

IRELAND.

[From our Dublin Correspondent.]

DUBLIN PATHOLOGICAL SOCIETY.

PARTIAL AMPUTATION OF THE FOOT—SUCCESS OF THE OPERATION.

At the Meeting of this Society, held on the 20th of January, Mr. Hutton exhibited drawings and casts of two cases, on whom he had, during the last year, successfully performed Chopart's operation of partial amputation of the foot. The first was that of a man aged 43, a labourer, who had been admitted into the Richmond Hospital on the 14th of June, 1848, with disease of bones of the left foot. According to the patient's account, about two years and three months previously he was in the act of ascending a ladder with a sack of flour on his shoulder, about twenty stone weight, when the step he was on broke, and he came suddenly down on the one immediately below it. He felt at the time as if a nail had been driven into the centre of his foot; indeed, so similar was the sensation, that as soon as he got off the ladder he took off his shoe and stocking to examine if such had been the case. He could not, however, discover anything of the kind, and the pain went away for the rest of that day; on the next morning, he again experienced pain in mounting the ladder; notwithstanding which, he continued to work, hoping to get well without treatment, during nine months. At last, an abscess formed on the upper part of the foot; it broke, but scarcely any discharge came from it. Immediately afterwards the sole of the foot swelled, the swelling extended up the leg and the thigh; the swelling in the thigh subsequently subsided, but that in the leg continued for a year. He then came into the Richmond Hospital, and remained about two months: amputation was proposed, but he would not submit, and left the hospital. After trying some of the other hospitals in Dublin, he returned to the Richmond, where he came under the care of Mr. Hutton. Chopart's operation was performed on the 22nd of June, and afterwards he went on very well; and on the 24th of July the stump was healed, with the exception of two fistulous openings, which continued to discharge for some months. At length, these were injected with tincture of iodine; after which he got an attack of erysipelas in the stump; but, on his recovery from this, the fistula healed, and he left the hospital quite well.

The operation performed in the foregoing case differed from Chopart's in these respects, that the flap was formed from the sole of the foot after the incision across the dorsum of the foot, from the scaphoid to the cuboid bones, and previous to the disarticulation of these bones from the astragalus and calcis. The cartilaginous surfaces of these latter bones were removed. The formation of the flap in this manner has been recommended by Mr. Syme, in his work on Surgery.

The second case, operated on by Mr. Hutton, occurred in the person of a man aged 48, who had injured his constitution by every description of excess. In this instance, the disease of the bones supervened on acute periostitis, which he ascribed to cold, but which was probably connected with a syphilitic taint. His foot was in part amputated in the manner above described, on the 25th of October, and he was discharged cured on the 29th of November.

In the remarks which Mr. Hutton made on these cases, he observed that Dupuytren had objected to Chopart's operation, on the ground that the powerful muscles inserted into the heel would overcome any antagonism in front; so that, in time, what remained of the tarsus would become twisted backwards, and the limb be, consequently, unserviceable. According to his (Mr. Hutton's) experience, however, this objection had no practical foundation. He had performed this operation many years ago, and no retraction of the stump had since occurred; but, on the contrary, the limb was much more useful than if amputation had been performed above the joint. He would remark, in reference to the two cases which he had just described, that he considered disease of the bone from accident much better adapted for this operation than when it occurs idiopathically. In the former case, the disease is more likely to be defined in its extent.

MR. GILBERT'S SURGICAL CHAIR.—We have had an opportunity of again examining this most ingenious chair, and consider it a highly meritorious invention. To the dentist and the surgeon it will prove most important while performing their operations. We have already given a description of this instrument, and it is only necessary for us now to say, that it allows of the extraction of teeth in the most scientific and easy manner,—the forceps, when introduced into the patient's mouth, resting on a fulcrum, thus rendering its application more easy and more effectual. In performing certain other surgical operations, the chair will prove of inestimable value to the surgeon, as it is capable of being placed at any angle. Mr. Gilbert is entitled to professional patronage for his ingenuity.

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THE MEDICAL TIMES.

SATURDAY, FEBRUARY 10, 1849.

ADMIRALTY INJUSTICE TO NAVAL SURGEONS.—PRIZE-MONEY AND WIDOWS' PENSIONS.

If there be just cause for complaint from the medical officers of the Navy, in the iniquitous regulations of the Admiralty Board, concerning their rank and pay when on active service, so have they cause for remonstrance in the anomalous and unjust manner in which their half-pay, their prize-money, and their widows' pensions are regulated. Even the rights of promotion are sadly neglected; and, although the Assistant-Surgeon of the Navy has a better chance of advancement than his contemporary in the Army, yet his position is by no means bettered, —on the contrary, with every advance, the more acutely does he feel the false and degrading position in which he is placed.

There is no denying the fact, which ought to be known to all those who purpose entering the medical department of the Navy, that the Army service, despite the chance of being kept on the list as Assistant-Surgeons for twenty or more years, offers much greater advantages, both in respect of pay and rank, than are accessible to the medical officers in the Navy. The Army medical officer may continue on full pay from the day he enters the service as Assistant-Surgeon, or, more correctly, from the day he is appointed or attached to a Regiment, the whole time counting as active service, and therefore carrying a gradual and certain increase of pay. The Naval medical officer has no such privileges or advantages. He is liable to be placed on half-pay every three or four years, in consequence of his ship being paid off, and then he is often compelled to spend months, and, frequently, years, before another appointment is conferred upon him; the whole of the intermediate time not rating as full service, and, consequently, entailing on him a heavy pecuniary loss.

After the exposition of the difference in the full pay of the medical men in the two departments of the public service, which we gave in our last Number, it is totally unnecessary to enter at length into the question of differences in half-pay, as every one will understand that the anomalies so apparent in the one are equally visible in the other. The Assistant-Surgeons in the Navy get from two to five shillings per diem as half-pay; but their more fortunate brethren, holding the same position in the Army, have from three to seven shillings per diem as half-pay, according to the length of service. The Deputy-Inspector in the Army receives eighteen shillings per diem; but a Deputy-Inspector in the Navy only receives fifteen shillings. Indeed, the half-pay holds nearly the same ratio in relation to the full-pay in both services, and, consequently, the two grievances might well be ranked as one.

The distribution of prize-money to the medical officers of the Navy must be considered *per se*, and when properly viewed, shows one of the most glaring instances of official tyranny and disregard of the commands of the Sovereign that can possibly be adduced. It will be remembered, that, in regard to rank, a Deputy-Inspector in the Navy has, by command of his Sovereign in Council, the same position as a Captain *above* three years' standing; but by the regulations of the Admiralty Board, he is ranked with a Captain *under* three years. Now, rank regulates, not only pay, but prize-money also; and therefore, it is to be presumed, that the Deputy-Inspector receives prize-money in the same proportion as the officer in the Executive with whom he is ranked. Not so, however. The Deputy-Inspector must now be degraded another step, and get his prize-money with a Commander. Herein lies the consistency of the Admiralty Board; it disregards an order in Council, and then it disregards its own regulations. Indeed, orders, rules, and regulations appear to be considered as so many baubles, formed for the amusement of those who conduct the affairs of the Navy, at least of the Medical Department.

If a Surgeon in the Navy have not been ten complete years on the Commission List, and not married for one year previously to his demise, his widow receives *no pension*. Is this the case in the Army? We believe not. Certainly, we never heard of such a regulation being in force in that service. But, if a pension be awarded to a widow, the amount, as will readily be supposed, after what has been already stated, differs in the two services. For example: the widow of a full Surgeon in the Army receives 50*l.*, and, under special circumstances, 70*l.* per annum; the widow of a Surgeon in the Navy never receives more than 40*l.* per annum as pension. Again, in the Army, special provision is made for the children of deceased medical officers, according to a certain scale; the children of a deceased Naval medical officer, however, are entirely dependent on the discretion and compassion of the Admiralty Board.

Thus, in every grade of the service, in life or in death, the medical officer of the Navy, or his relict, have great cause of complaint,—rank, pay, prize money, and widows' pensions, are all below what he is justly entitled to receive. All the sources of complaint, however, are caused by a system, having for its purpose the degradation of the Naval medical officer. But this system carries in its wake an effect which will ultimately destroy it, if it must die a natural death: that effect being the total destruction of the efficiency of the whole medical department of the service. Nor can any other result be anticipated, when rank, and its concomitant privileges and advantages are virtually, nay, actually, abrogated by the manner in which the Admiralty regulations are put in force.

HOSPITAL MISMANAGEMENT.

The late discreditable transaction at the election of a surgeon to the Suffolk General Hospital, to which we drew the attention of our readers in a former Number, having been settled by the tardy resignation of Mr. Heane, who had found it necessary to place himself at the mercy of the Governors, affords a favourable opportunity of noticing the unjust manner in which medical officers are elected to many of the hospitals in town and country. The Suffolk election does not stand alone; the same thing has been done, or attempted to be done, elsewhere.

By Section Four of the "Rules and Orders for the Government of the Suffolk General Hospital," as remodelled in 1842, it is appointed,— "That every annual subscriber of two guineas shall be a governor so long as his subscription shall continue to be paid, and that he shall have one vote at a General Board for every two guineas annually subscribed." The same rule, with some slight modification, exists, and is acted upon, in the management of other hospitals. The ostensible object in view, when framing this rule, was the additional stimulant which would be given to the funds of the Institution by inciting individuals to obtain by purchase greater power in the management of affairs, making the qualification of Governor a MONEY, instead of a PERSONAL one. But, when it is stated that the rule was formed and passed almost expressly to afford the opportunity of which Mr. Heane's friend and predecessor availed himself, an outrage is committed on the judgment and common sense of every subscriber to the Institution, who could never have entertained the idea that the rule would be taken advantage of for the open and undisguised purchase of a highly responsible office, in direct opposition to the declared voice of the subscribers at large. No one would suppose, for an instant, that the interests of any Institution can be advanced by a transaction at variance with the wishes of the majority of its supporters. The triumph is that of an individual for interested purposes; but the defeat is more honourable than the victory, which must carry with it loss of reputation, and a want of confidence in the principles of the individual.

There is no disguising the fact, however, that, if the sum subscribed was intended as an annual subscription, the votes were obtained in strict accordance to the rule; and, moreover, that the votes so obtained differ in degree and in time only from those which had been procured and given on every occasion, like the one under consideration, without complaint or comment. The stratagem was successful, because the rule allowed any one to record any number of votes he thought proper to purchase, at the eleventh hour, and when the election was thought to be decided. It is, therefore, impos-

sible to find fault with the individual who took advantage of the opportunity afforded him, although he is not entirely free from blame; on the contrary, the whole of the Governors are reprehensible for allowing money, not worth or personality, to be the qualification for a voter, and the number of votes allotted to each subscriber. The rule, and the rule alone, is deserving of our attention, because it opens the way for interested purposes, which have, in this instance, been fortunately frustrated by the just indignation of the parties most directly interested in the welfare of the Institution.

Some time since, a somewhat similar transaction was attempted to be put in force at one of the Metropolitan Hospitals, which gives the votes to the money, not to the individual. At one of the General Boards, a distinguished member of the Profession finding a large number of new votes created by recent subscriptions and donations, and being conscience-stricken, thought that the business to be transacted affected a very near relative,—one of the officers of the Institution—and that this relative was to be dismissed. To prevent such a catastrophe, he immediately paid down a large sum of money, which entitled him to a sufficient number of votes to quash the proceedings. Here the biter was bit. The business to be transacted involved only the election of an apothecary to the Hospital!

The only instances of mismanagement resulting from misconstructed rules, which have come under our notice, have fortunately terminated in such a way as to frustrate the stratagems and manœuvres of designing men, desirous of gaining a point interesting to themselves, but detrimental to the interests of deserving Institutions. But this may not always be the case. If rules be made so as to open a way for trickery, without involving great moral degradation, such trickery will be perpetrated from time to time, as advantages are to be gained and circumstances require. And, therefore, it is absolutely necessary that such rules be modified, as in this case they might easily be, by rendering a subscriber ineligible to vote until his subscription shall have been paid a given time, or they should be at once expunged from the books in which they are to be found.

LIFE ASSURANCE COMPANIES.

Among the many sources of annoyance to which medical men are subject in the performance of their daily avocations, is one which has occupied much of the attention of the Profession, and which has drawn forth many able remonstrances and protests from several of its members. Allusion is here made to the practice of Assurance Offices, requiring information from medical men as to the health of persons making proposals to insure their lives, and omitting to tender the proper fee. When we consider the great use of these institutions, not only to one, but to every class of society, and more especially to professional men, whose incomes too often are entirely personal—how much suffering they alleviate—the apprehensions and fears they help to allay—we readily confess their value, and would willingly do all in our power to render them still more generally esteemed and appreciated. But, in the very outset, we meet with a stumbling-block. We find a practice that works an injustice to the whole body of the Medical Profession; and it shall be our task to show to the offices themselves, that it is their interest no longer to commit this injustice.

Fortunately, a Director of one of these Companies has thought it incumbent on him, in his official capacity, to place on record a statement, whereby he seems to think that the question of payment or non-payment to medical men, for information furnished exclusively to himself, and others placed in the same situation, is for ever settled. The force of his argument may be given briefly in the following words.—As we pay our own referee, the individual seeking to have his life assured should pay the medical man to whom we are referred for answers to those queries, without satisfactory replies to which, we feel ourselves called on, in the majority of instances, to withhold a policy of assurance. Although this special pleading meets with its best and readiest answer in the fact, that some of the most respectable offices now not only pay their own medical agent, but also the medical man to whom they are referred for further and, we may add, *more important information*, we believe that the question may be settled on a sounder and a broader basis.

An Assurance Company, not satisfied with the information received from its own medical officer, who can only certify as to the apparent existing state of an individual's health, and cannot take cognizance of any organic changes resulting from previous diseases, which, at no distant period, may destroy the life of the patient, desires such information from the usual medical attendant. This they do by a series of questions, framed so as to elicit the truth for their guidance in accepting or refusing an obligation. Passing over the point obtruding itself on our attention, whether the medical man so appealed to is justified in disclosing secrets entrusted to him—one of the great responsibilities necessarily devolving on his practice—we come at once to the subject,—who is to remunerate him for the time and trouble involved in giving conscientious replies to the questions propounded? We answer, the Company applying for information. It CONSULTS the medical man, and, consequently, it ought to pay the consultation fee. The former furnishes truths for the EXCLUSIVE use and benefit of the latter, for or against the individual wishing to assure a life. This proceeding cannot justly be viewed in any other light than as a CONSULTATION, and the Company is bound to present the usual *honorarium;* and this is, *par excellence*, the principle on which the Profession ought to make a determined stand.

Already have medical men shown, that when they are denied justice, they can, without any compromise of their integrity, retaliate in a way which may entail a heavy loss on those who wish to receive information while they withhold the reward.

A striking instance of this is given by Dr. E. Crisp, in his lately-published examination of a rejected candidate at the Royal College of Physicians, where it appears that a patient, who had organic disease of the heart, resulting from an attack of acute rheumatism, managed to assure his life for 2000*l.* in an office that refused to pay the proper fee to Dr. Crisp; and consequently, having no knowledge of the morbid change, they lost the above amount, after receiving only one annual payment from the assured. A similar case was given in a contemporary journal last week.

How many medical men would this have satisfied; and how much additional amount of loss might the office have been spared. Besides, it is the duty of the Directors, for thereby the insurers of equitable lives derive increased advantage in the benefit thus obtained, whilst the discarded applicant sustains no wrong—for, unhappily, his life being hazardous, he must apply to an office adapted to his case.

Further comment we deem unnecessary; and we conclude that even the Director, whose statement we have quoted, will change his opinion, and give us satisfaction by declaring, that in the loss of the large sum alluded to, and in the other circumstances we have noticed, he sees, at least, 2000 reasons for complying with our request.

We will only add, that we understand the following offices have already adopted the payment we recommend; namely, Britannia—British Mutual—Commercial and General—English Widows' Fund—Engineers, Masonic, and Universal—London and Provincial Joint Stock—Medical Invalid—Medical, Legal, and General—Metropolitan Counties—Professional—Royal Farmer's—Westminster and General—Yorkshire; and we believe the time will soon come when the practice will become general.

CHOLERA IN DUBLIN.

Two cases of cholera occurred in Dublin last week, in Luke's-lane,—a filthy, undrained alley near the river. A girl of nine years of age was first attacked, and died in twenty hours. Her mother was then seized, and died in sixty-four hours. In both cases the symptoms were well marked. No argument could so strongly prove the inadequacy of Dispensary treatment for cholera, as the history of these cases. Nothing that the medical attendants directed would be done, and everything they interdicted was done. There were no means in the house for putting treatment into operation. The very discharges from the patients had to be flung out in the street, to be swept away by the scavengers. The whole scene was disgraceful to a country calling itself civilised.

NECESSITY OF MEDICAL PROVIDENT BENEVOLENT INSTITUTIONS.

IN every trade and profession throughout society, there exist amongst its members sentiments of mutual aid and support. We fear, however, that when we say every profession, we fall into an error, for we must be compelled to except that of which we are members. Scarcely is there any other section of the community in which we do not find a provident and benevolent establishment. The question, then, naturally arises, Why do the members of the Medical Profession neglect, to a great extent, the natural and moral responsibility of anticipating the risks and uncertainties of human life? Why, apparently, of all other men, are they regardless of the ills to which

flesh is heir? Is it because they are amply provided for in the decline of life, having, most of them, opportunities, in the practice of their Profession, of acquiring certain wealth and affluence, and thus insuring, for those who are bound to them by the strongest ties of nature and affection, one of the best defences against the corroding cares of life? The history of the Medical Profession shows, that so far from its members being able, generally, to provide for the exigencies of declining life, or of leaving their families in comfortable circumstances, that the contrary is generally the case. It becomes, then, a body so intelligent and respectable, seriously to consider this subject, and to employ the most efficient means of providing for the support of those whose daily bread is dependent upon their daily labour,—who have no ample resources in the hour of personal affliction, and who have no prospect of leaving to their families enough of worldly wealth to keep them in that respectable sphere in which they are accustomed to move.

Doubtless, there are amongst us a few who are in opulent circumstances, and who, in consequence, can devote a portion of their incomes to insure a moderate independence when the infirmities of age shall unfit them for the active duties of human life. These, however, constitute but a small minority, compared with those who are not rich. In Great Britain alone, nearly thirty thousand medical men toil and labour without amassing a competency for old age. Another serious consideration is, that the very nature of their avocations tends to shorten the space which is usually considered as constituting the average of human existence. What, then, must be the prospects and anticipations of men whose profession constantly associates them with disease and death,—whose daily labour results in the public good,—whose time and talents are consecrated to the melioration of the miseries of our race, and whose services are alike implored by the monarch and the mendicant?

Up to the year 1845, when the noble project of a Medical Annuity, or Relief Fund, was originated by the zeal and philanthropy of Mr. Daniell, of Newport Pagnell, the great body of the Profession had no efficient available means of meeting the exigencies of sickness, of disease, and of death,—in fact, they had scarcely an opportunity of providing against the uncertainties of life. This infant society, to which we now refer, is yet comparatively unknown to the great body of the Profession, while its merits appear to be unappreciated by the majority of those who are acquainted with its existence.

It is to be regretted, that so large a number of medical men give no marked indications of a provident forethought, and that the really affluent are so backward in patronizing and supporting institutions which have for their object the support of their needy brethren. The duty and responsibility of doing this attaches to all within the pale of the Profession. They are appealed to by the widow's tears and the orphan's sighs, and they should be stimulated to exertion by the examples set by others of different professions. Even the non-professional public, we consider, who derive important advantages from medical science, ought to feel an interest in supporting institutions which have for their object the relief of aged medical men, or of their widows and children. That the public is not wanting in acts of benevolence, the large sums annually appropriated to scientific and eleemosynary institutions, abundantly testify. That certain services merit and meet their reward, witness the contributions in aid of the families of those whose lives have been spent or sacrificed in the defence of their country. If an appeal be made to the public in behalf of any religious or charitable undertaking, it is immediately responded to in a manner worthy of a generous and enlightened people. Even individuals, who have employed their time and talents for the amusement of the public, have funds raised for them with cheerfulness and alacrity, should such be required. Hitherto, however, the claims of the Medical Profession to sympathy and support have been disregarded by "a discerning public." If, from any cause, a medical man should become incapable of practising his Profession, or be overtaken by death, society appears unwilling to acknowledge his claims to sympathy, or those of his family to support.

Such being the case, it becomes medical men themselves, as intelligent and respectable members of society, to secure, by union and forethought, a provision against the contingencies of life. It is their duty to provide, whilst life and opportunity allow, for those who are dependent upon them. Even those amongst us, who may be termed Fortune's favourites, should sympathize with their less fortunate brethren, and do something for them or for their families, should it ever be their lot to require aid. We trust, the time has arrived for a powerful and united movement in this matter; and it will be no small merit in us, while so actively engaged in alleviating the wants of others, that we take care of those especially belonging to our own household.—[*From a Correspondent.*]

REPORTS OF SOCIETIES.

DEVON AND EXETER PATHOLOGICAL SOCIETY.

SPONGOID INFLAMMATION.

By R. TUTHILL MASSY, Esq., M.D.,
Licentiate Royal College of Surgeons, Ireland, &c.

Read at the Monthly Meeting of the Devon and Exeter Pathological Society, February 2, 1849,

Dr. Miller in the Chair.

Mr. President and Gentlemen,—The case which I am going to read to the Society is one of much interest, claiming your attention, and calling for your candid opinions and views on the remarks which I am about to make on a malady fully as fatal as glanders.

On the 14th of June, 1847, Michael O'Neal, aged twenty-one years, consulted me for a pain and swelling in the amputated stump of his left arm, for which his former medical adviser ordered a poultice of linseed meal, and which I desired to be continued twice a day.

I saw him a few days after, in company with two other surgeons; the stump then had a globular appearance; the entire surface felt hard with the exception of that part near the cicatrix, which had a pearly aspect and felt slightly elastic, appearing over the cicatrix semi-transparent, and presenting an erysipelatous blush in the axilla. The inflammation differed so widely from any we had seen before in stumps, after amputation, that we prescribed the following:—

The poultice to be continued, and small doses of blue pill and opium to be given every third hour.

The swelling and redness increasing daily, the poultice was discontinued, and, at the end of a fortnight, the pills were stopped, as they acted slightly on the bowels; and, in their place, mercurial ointment was gently applied over the stump (a plan most successfully adopted in erysipelas by Dr. O'Beirne, of Dublin). After four weeks of this mercurial treatment, which had not the slightest effect on the gums, nor on the tumor, which continued increasing, and becoming livid, this caused me great alarm; and I asked the patient to describe the diseased appearance of his arm when amputated.

His history was, that up to last November he worked as a sailer. His ship was then at Quebec, where the men were suddenly ordered to the windlass, in which his elbow got a squeeze. Four days after, on his way to England, it swelled, and became painful, and continued increasing in size during the seven weeks he was at sea. He arrived here on the Tuesday before Christmas, and, on the Tuesday after, the arm was removed, about three inches from the shoulder-joint; the stump was fully healed in three months, and then it became painful, and thus continued preventing his seeking for employment.

He stated, that he was once in the Cork Infirmary for venereal, and then could not be salivated, though he took nine dozen calomel pills.

He attributed the disease in his elbow altogether to neglect while on his voyage from America; and further, believed that the disease would not again have recurred had the shoulder-joint been removed. You observe, this history led to the supposition, that the accident was the primary cause of this disease of his elbow-joint.

I then examined the stump most particularly. It felt hard almost throughout its entire extent, with some few elastic parts, as if fluid were under; towards the cicatrix the cuticle was slightly elevated by the serum which exuded occasionally; the veins were filled with blood, and their course was well marked by the diseased surface being elevated and *feeling sharp and hard along the channel of the veins*, and giving a dark arborescent appearance; and, for the first time, I pronounced the tumor "fungus hæmatodes," as described by Mr. Hey, of Leeds.

I desired two grains of opium to be given every night at ten o'clock, to produce sleep and allay the pain.

On the fifth week, the entire of the pectoral muscles were engaged in the disease, the scapular muscles were greatly enlarged, and the tumor extended above his ear. The poor fellow lay on his right side, the tumor resting on his left cheek.

At the end of the sixth week the cuticle came off, and a sanious discharge exuded from the abraded surface, which had a reticulated appearance, like lace work.

On the seventh week the tumor rose above his head, hiding the face and head *in toto*. Soft pads were placed between the head and tumor, to prevent the discharge from trickling into his ear, eye, and mouth; his sufferings, at this time, were immense; his moans most piteous, and, as for his aspect, it was truly appalling: this large mass rising above the emaciated trunk; then, as he rolled round to answer a question, you saw his haggard eye, his sallow sunken cheek, and greenish yellow complexion, all indicative of this alarming constitutional disease, the true black cancer of Dupuytren.

The right arm, on which he lay, became œdematous; the hand in particular; his groans then reached my heart, for I had no means of relieving his anguish; he inquired how long he could live.

With this case I felt the incompetency of our art, for the disease kept steadily advancing against every treatment.

About the eighth week a fungus protruded, and bled a pint a-day; large masses of the diseased surface came away with the soft pads and the lint which was applied to prevent hæmorrhage.

On Thursday, the 12th of August, then the middle of the ninth week, he died, exhausted by pain and loss of blood.

Circumstances prevented an autopsy.

Remarks.—There has been nothing very novel in this case to call for publication; but I lay it before the Profession as one of the many cases of medullary sarcoma, where an operation had been performed without the hope of benefit. In this case an elastic tumor of rapid growth, engaging the elbow and bend of the arm, in a young man, was operated upon, and the arm removed above the tumor; the stump healed in three months, and the disease, with its pain and suffering, again began, and terminated with his death at the eighth month. Had the diagnosis been that this tumor was the cephaloma of Dr. Carswell, I do say, an operation, which gave not the slightest chance of success, was uncalled for, and should not have been performed in the present advanced state of our knowledge of this encephaloid disease.

In the *Medical Gazette* of August, 1847, there are two cases reported by Mr. Rooke.

"Case 1.—Medullary sarcomatous tumor of the lower third of the leg.—Operation.—Recovery.

"Amputation performed the 6th of March; and he was discharged quite well on the 14th of May."

"Case 2.—Medullary sarcomatous tumor of the calf of the leg.—Amputation above the knee.—Recovery.

"Amputation above the knee on the 3rd of April; left the hospital well on the 2nd of June."

I should like to know if the disease has reappeared in those two cases.

I recollect a case which was in the Richmond Hospital, Dublin, under Dr. M'Donnell's care of fungus hæmatodes of the eye (December, 1840.) After six months' suffering, this man died. We found the fungoid disease in the chest and abdomen more particularly; the liver was twice its usual size. We made sections of the tibia and long bones; they were all studded with a soft matter, having a reddish brown colour deposited in cells; in the folds of the omentum were large tubercular masses.

If the removal of this man's eye could add to his day's comfort, I have no doubt but that it would have been excised.

Mr. Blaine's case, at Tenterden, exhibits this disease as constitutional. A child, aged nine months, had a medullary sarcomatous tumor in the right thigh involving the buttock, scrotum, and penis; and this formidable disease had also showed itself in the right shoulder. At two months old, the disease was observed in the thigh—three months after, it showed itself in the right shoulder.

If it were practicable, in this case, to remove the disease from the thigh, what advantage could be gained? when the same spongoid inflammation appeared in a few months after in the arm. What strikes me as extraordinary, is the length of time a person may live with this disease, surrounded with a heap of suffering. In Dr. Morris's case, as published in the transactions of the Provincial, Medical, and Surgical Association, vol. xvi. p. 59, and also in Mr. Prankard's case in the *Provincial Journal*, of the 20th September, 1848, this is visible. In the former case, a medullary sarcomatous tumor, pressed on the bladder and rectum the nine last days of this lad's life. He could not micturate, and for more than that time he did not defecate.

The removal of this tumor would have been justifiable, if practicable; but although the sectio cadaveris proved the viscera healthy to the naked eye, yet a constitutional predisposition was here, as the origin of the disease is traced back to the accidental entrance of an iron hook between the anus and tuberosity of the ischium.

In the latter case, there were nine years of suffering from a fungus in the left hemisphere of the brain, in a woman, aged 44 years. This case is most interesting, tending very much to prove, as Mr. Prankard observes, Dr. Wigan's views on "The Duality of the Mind." (a)

(a) *Post Mortem.*—History not known. Left aspect of the face has a sad expression; features are lengthened.

I am aware that many of our best surgeons recommend amputations and other operations in this disease, at the same time perfectly aware of its sure return. It is almost as bad as what I once witnessed in a first-rate Continental operator, advising the removal of a tumor from the antrum of the superior maxillary bone, and the unfortunate patient in the last stage of phthisis.

I have seen the eye extirpated, and portions of the lower jaw removed for this disease, and legs cut off; and although I wished to follow those cases, and see the result, yet I almost invariably lost sight of them. It is very difficult to trace a patient six months after leaving an hospital in any of our large cities; and on this account many surgeons may think they have prolonged a life of happiness for that of misery; and this is praiseworthy in any one. Surgery is only a severe medicine, and as such should be used; but surgical cases for capital operations ought to be selected. Doubtful cases should have their chance; *hopeless* cases must be kept sacred from that severe medicine,—the *knife*.

REVIEWS.

On Infantile Laryngismus, with Observations on Artificial Feeding, as a frequent cause of the Complaint, &c., &c. By James Reid, M.D., &c., &c. London. 1849. Small 8vo. Pp. 204.

So far as all practical points go, this is a most complete and able little work, and proves Dr. Reid to have been fully competent to have laid before the profession a concise and simple exposition of the malady of which he treats. Dr Reid is, moreover, well known to have paid considerable attention to that disorder frequently attacking infants during the period of the first dentition, and now generally known in this country by the name of *laryngismus*, or *spasm of the glottis*. Under the terms of *thymic asthma, Kopp's asthma, spasmodic laryngitis, Millar's asthma, stridulous laryngitis, false croup, spasmodic asthma, spasmodic croup, nervous croup, child crowing, "peculiar species of convulsion in infant children,"* &c., &c., various affections have from time to time been described, many of which are now considered to be identical with our *laryngismus*, whilst others are held to be different disorders altogether. Those of our readers who desire to see a critical analysis of the symptoms, &c., of these several affections, and how far they coincide with and differ from each other, should refer to the "Thesis" of M. Herard (Paris, 1847,) or to the fifth volume of the "Bibliotheque du Médecin Praticien," under the article of "Spasm of the Glottis." With these, and Dr. Reid's work, they will have a complete theoretical and practical exposition of the whole subject.

Dr. Reid describes four different forms of laryngismus. M. Herard distinguishes three. Dr. Reid's first form is a "slight and temporary spasm of the glottis, not associated with convulsive action of any other part of the body." In the second, "the area of the glottis is still more diminished by the nearer approximation of its margins; the closure, however, not being perfect, except perhaps for a moment." The third form "is a combination of the foregoing varieties of the disease, with the fearful addition of *general or cerebral convulsions*." Whilst the fourth is "produced by a sudden and convulsive closure of the glottis, which proves as speedily fatal as if the infant were plunged under water, or strangled by a cord round its neck."

The period of dentition, as Dr. Reid remarks, appears to be the boundary within which infants are liable to attacks of this complaint; but Dr. Ley saw a case which occurred in a child between six and seven years old. Dr. Reid has met with an instance, in which the little patient was only two days old, and another in which, within a few hours after birth, "crowing inspiration" was heard, unattended, however, by any apparent feeling of distress.

Dr. Reid proves that *laryngismus* attacks individuals of certain families in preference to those of a different constitution, but he has not been able to trace any peculiar relation between the aggression of the disorder and the scrofulous diathesis,—a contrary opinion, we may remark, to that maintained by many. As a general indication, our author ventures "to say that infants of a *nervous temperament*, who are easily excited, who are awakened by slight noises, and who are not satisfied unless they are kept constantly 'on the move,' are much more susceptible of this affection than other children."

Dr. Reid next enters in detail into the particular symptoms of the malady, and its known or assumed causes. His *resumè* of the latter we can alone afford space to. It is—

1. That for the occurrence of this complaint the cerebro-spinal system is required to be in a peculiarly excitable state, which thus acts as a *predisposing cause*. The period of "teething" is the most likely one to produce this condition.

2. That during this irritable state of the nervous centres, the two most frequent (and in the majority of instances, the combined) causes are "the *improper description of food*" which is administered to the infant, and "the impure and irritating atmosphere which it breathes."

Dr. Reid's experience corroborates that of Dr. H. Davies as to the danger of the disorder being much greater during the period of dentition, having "never yet seen a fatal termination of the complaint after the appearance of all the deciduous teeth, and only three cases (two of which occurred in the same family) where the disease appeared at all after that period."

In reference to the *post mortem* appearance in fatal cases, our Author, after a review of them, remarks, "from all the evidence adduced by different authors, either as to the occasional presence of some one or more pathological changes which have been observed in children dying from the effects of laryngismus, or as to the total absence of such morbid conditions, it may, I think, be fairly inferred that spasm of the glottis, in the great majority of cases, is dependent solely on 'functional disorder.' The frequent transitory character of the symptoms would denote, also, that the number of cases which originate from any organic change of structure must be very small."

Dr. Reid enters fully into the therapeutics of the disorder, and has an able chapter *on the diet of infants predisposed to convulsive affections*. An appendix of twenty-six illustrative cases terminates the volume, a volume which we cordially recommend to the notice of the profession.

An Essay on the Cerebral Affections occurring most commonly in Infancy and Childhood, including Notices of their History, Causes, Diagnosis, Prognosis, and Treatment. By Valentine Duke, M.D., &c., &c. Dublin. 1849. 8vo. Pp. 90.

The Council of the Provincial Medical and Surgical Association awarded last August their prize to Dr. Duke's Essay. We are not aware of the number of competitors there existed for the honour of such award, and are, therefore, ignorant of the range and nature of the comparison the Council had it in their power to make. But we must confess, however painful it be to us, that we are disappointed in finding such an Essay as Dr. Duke's to have been the best. We will admit, that, so far as it goes, it is well enough, but we think it ought to have gone a great deal further, and, moreover, have borne some evidences of original research. Almost every-

Right aspect has a happy look; features expanded. Both sides of external head alike.

Right hemisphere of the brain a complete membranous bag, containing six ounces of a muddy coloured seropurulent fluid.

Left hemisphere natural.

Among my notes I read on the duality of the face, I find one aspect of a female face agreeable; the other aspect disagreeable.

The left side of that man's physiognomy is ugly; the right is pleasing.

That gentleman has a stern look on one side, and a mild look on the other.

If there is a duality in the index of the mind, there must be a duality in the mind; and, if in the mind, why not in the brain?

thing in the book is mere quotation, or a reiteration of the statements of others; and surely the "cerebral affections occurring most commonly in infancy and childhood," are not almost alone comprised in *tubercular meningitis*, however important that malady may be. With the consideration of this disorder, fifty-six pages are consumed—pages, though, we may remark *en passant*, not containing much type—whilst *convulsions* are discussed in three pages, and *congestion of the brain* in a page and a quarter. *Irritation, or erethism of the brain*, has allotted to it barely two pages. *Hydrencephaloid disease* scarcely has three, *acute meningitis* about thirteen, and *chronic hydrocephalus* not five, and there ends the matter. There are nearly five pages of preface, but no index. Upon these subjects what *is* said all very well; but something more, and upon topics left untouched, the Prize Essay of the Provincial Association, we think, should have contained. Coming, too, as this Essay does, from our Dublin friends, we are the more disappointed, as they comprise a school of practical medicine we most highly respect.

Tracts for the Improvement of our Popular Literature. No. 3. Containing Physiology; its Moral, Political, and Hygienic Teachings; an Essay in Blank Verse; with Minor Pieces. By ROBERT DICK, M.D. London: John Churchill. 1848. Pp. 80.

This is a curious little book, treating of subjects in blank verse which grave and learned doctors usually handle in prose. Our Author, however, has exhibited both tact and talent in this poetical essay on physiology, &c.

The Serpentine "as it is," and "as it ought to be." By EDWARD JOHN TILT, M.D. Pp. 67. London. 1848.

Dr. Tilt, in this Pamphlet, severely handles the Non-Medical Board of Health, and draws a fearful picture of the condition of the Serpentine. If what our Author states is true, (and we have no reason to doubt his veracity,) great disgrace will rest upon the "Patron of the Serpentine Bathing Club," if he does not forthwith use his authority to have the fifty acres of stagnant water cleansed, so far as possible, of its impurities.

LUNATIC ASYLUMS IN IRELAND.

"Legitimate inquiry is the parent of progress."—*Bacon.*

[To the Editor of the "Medical Times."]

SIR,—Having opened your valuable columns to the discussion of one of the most important subjects that has ever engaged the attention of a scientific periodical, allow me to make a few remarks upon the letter of Dr. Mollan, the Visiting Physician of the Richmond Lunatic Asylum, Dublin, which appeared in your columns of the 27th inst., and had been intended by that gentleman to shake the validity of the observations which occupied a leading part of your paper on the 13th inst.

In order that the members of the Profession on both sides of the water may clearly see the position laid down in your columns of the 13th inst., it is necessary, as the schoolmen say, to recapitulate these positions.

First.—It was submitted, that while the Chancellor of England and the Home Secretary in 1843 were studiously engaged in securing *by law* for the poor inmates of existing and future county or district asylums in Great Britain, the comforts and blessings of *resident* medical care, the *Irish* Chancellor and his supporters, were, in 1843, as *studiously* employed in excluding from existing and future district asylums in Ireland, as far as in them lay, similar blessings and comforts towards their afflicted inmates.

This first position is and has been unassailed and unassailable.

Second.—It was submitted in your paper of the 13th, according to a Parliamentary return (No. 597, July 1, 1847,) that as a result of these extraordinary regulations of the Irish Chancellor, in 1843, (dates are essential) no two asylums, although said to be under uniform management, discipline, and medical control, presented almost any one similarity; for instance—

The medical attendance (and, be it remembered, the visiting medical officer, by these regulations, had to direct the institutions so far as the patients are concerned, "*in every particular*") on one great asylum, containing 320 patients, has averaged sixteen hours per month. The medical duties in another, containing 280, according to the inspector's Report to Parliament within the same period, had to be confided in details to a medical pupil!! and, in a *third* asylum, the local authorities openly set all Government rules and all inspectors' authority at defiance, by empowering the resident manager (who happened to be a medical man) to act as resident physician; in fact, the district asylums, so far as these regulations of 1843 are concerned, very much resembled, (*by Parliamentary Reports, be it remembered,*) in their essentials, a Dutch concert; while, by a process only known in Ireland, the Institution that sets all Government laws and regulations at defiance presented, by the valuable tables published by the Society for the diffusion of useful knowledge, on an average of ten years, the *largest* amount of cures, and which returns (as you, Mr. Editor, may learn from the enclosed document) have been compiled by a gentleman who stands out as the highest living authority on all matters relating to the statistics of insanity.

Dr. Mollan says, (and, as the brother-in-law of the Irish Chancellor, he is good authority,) that he *believes* Government will place none but medical men in future as resident managers in the Irish district asylums; and instances as a proof Lord Clarendon's recent nomination of Dr. E. White, to Carlow.

But what security has the profession that "*alio die* and *alio (pro) consule*," some great man's great man shall not assume Dr. White's place in Carlow, should death or removal cause a vacancy therein? *Here it is*, that Ireland and the Profession in Ireland, want a similar protection to that which *the law* gives to England in this respect.

One point more, and I have done. Surely Dr. Mollan knows well that the appointment of medical men as managers of the District Asylums in Ireland—for instance, of Dr. White, in Carlow, (I take that gentleman as an instance, his name having been introduced), unless they be empowered to act as *medical men* within their institutions, is of little use. At present, as the rules of Government stand, the resident manager of Carlow Lunatic Asylum dare not—I repeat the term, *dare not*—administer a dose of castor oil to a patient, without the directions to do so of the visiting physician, who lives in the neighbouring town, and who *may be ten miles off at a private call the moment his services are essentially necessary at the District Asylum.* Nay, he dare not, *at midnight*, under the same rules, although living *in* the Asylum, and witnessing the most dreadful agony of a patient, use any one medical appliance until, in the language of the Roman satirist, slightly changed—

"Donec longinquo libeat vigilare chirurgo."

With reference to the superior medical control of the Richmond Lunatic Asylum, I have nothing to say beyond this, that a Parliamentary Blue Book states, that a medical pupil acts as resident medical officer over 280 lunatics; and that it possesses, by a reference to Thom's Almanacks for 1847, 1848, and 1849, a power of drafting incurables, to the number of 115, to the House of Industry, thus having advantages of admitting *curable* cases to that amount, and, thereby, of raising its per cent. of cures in a similar degree,—a privilege enjoyed by no other asylum in Ireland; yet it may be seen, by a reference to the same books, (unparalleled for official accuracy,) that, within the three years so named, the average cures on the total number of inmates under treatment are only 10½ per cent.

I have the honour to be, Sir,
Your obedient Servant,
VINDEX.

PROTEST OF THE MEDICAL OFFICERS OF PRESCOT AND WEST DERBY UNIONS.

[To the Editor of the Medical Times.]

Sir,—After your frequent exhortations to Poor-law Medical Officers to exert themselves, I am somewhat surprised at not, ere this, seeing some movement. I am, however, proud to say, that the dormant spirit does not rest with my brother officers in this extensive district. Two meetings have been held, at which I presided as chairman, and the following protests were passed, and all have duly signed them; and, not only that, but each officer has come forward with 10s. towards aiding the strenuous and praiseworthy labours of our London Committee. I have great pleasure in sending you copies, which I hope you will insert in your valuable *Times*, as an example for others to hasten to do likewise, before the meeting of the Convention.

I am, Sir, respectfully, yours obliged,
J. ARMITAGE PEARSON.

Woolton, near Liverpool, January 31.

THE PRESCOT PROTEST.

We, the undereigned, the Medical Officers of the different districts comprising the Prescot Union, do each and all of us, beg to protest against the imposition of the extra duties assigned to us by the "Health Act," for the prevention of nuisances and disease, inasmuch as such duties are a violation of our contracts, and an infringement on the just rights of all Union surgeons.

(Duly signed by the five officers,)
J. A. PEARSON, Chairman.

THE WEST DERBY PROTEST.

We, the undersigned, Medical Officers of the West Derby Union, beg most forcibly to protest against the compulsory services exacted from us under the provisions of Lord Morpeth's Bill, services entailed upon us without our consent, and to be exacted without remuneration.

And further, as a body, we beg, most respectfully but firmly, to protest against the provisions of a Bill which thus sacrifices our rights, not only as medical officers, but as private citizens.

(Duly signed by fourteen officers,)
J. A. PEARSON, Chairman.

GOSSIP OF THE WEEK.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of Medicine, and received certificates to practise, on Thursday, 1st February, 1849:—Oglethorpe Wakelin Barratt, Birmingham; Francis Turner Welby King, Melton Mowbray; Felix Weekes Richardson, Banbury; William Thomas Garnett, Woodforde.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College, at the meeting of the Court of Examiners on the 2nd inst.:—Messrs. Samuel Smith Millar, Enfield; John Henry Brown, Gorton, near Manchester; Thomas Tronsdale, West Butterwick, Lincolnshire; Francis Turner Welby King, Melton Mowbray; Horace Benge Dobell, Cheltenham; George Chatfield, London; George Frederick Brutton Willing, Hampstead; William Guyer Hunter, London; and John Hutchinson, East Indies.

NAVAL SURGEONS.—At the last meeting of the Court of Examiners of the Royal College of Surgeons, Messrs. John Wade, Johnston Thomas Musgrove, and John Thomas Caddy, passed their examination for naval surgeons. These gentlemen had previously been admitted members of the College, their diplomas bearing date respectively Oct. 28, 1842; April 26, 1844; and May 27, 1844.

WAR OFFICE.—15th Light Dragoons—Surg. John Marshall, from the 84th Foot, to be Surg., vice Monatt, deceased. 84th Foot—Assist.-Surg. Francis William Innes, M.D., to be Surg., vice Marshall, appointed to the 15th Light Dragoons; Assist.-Surg. Alfred Gosden, from the Staff, to be Assist.-Surg, vice Innes. Ceylon Rifle Regiment—Assist.-Surg. Samuel Smith, from the Staff, to be Assist.-Surg., vice Dakers, deceased.

APPOINTMENTS.—Mr. John Terry Hester has just been elected Surgeon to the Radcliffe Infirmary, Oxford, in the vacancy occasioned by the lamented decease of C. L. Parker, Esq.

HONORARY DISTINCTION.—The President of the French Republic had conferred the Order of the Legion of Honour on M. Bonpland, the celebrated traveller and naturalist, and on Dr. Jackson of Boston.

OBITUARY.—John Stewart, Esq., Staff-Surgeon, on his voyage from the Mauritius.—Jan. 17, at Field-place, near Stroud, in his 26th year, George Edward Freeman, assistant-surgeon in the Royal Navy.—At Maybole, 23rd ult., Mr. William M'Farlane, surgeon.—On the 29th ult., William Peck, Esq., surgeon, Kimbolton, Huntingdonshire.—On the 31st ult., at Grange-terrace, Brompton, Dr. George Fownes, F.R.S., Professor of Practical Chemistry at University College, London, in the

34th year of his age.—On Saturday, the 3rd inst., at Hornchurch, Essex, Robert William Quennell, Esq., surgeon, of that place, after a few days' illness.—On the 25th instant., at Wollaston, Northamptonshire, Charles Staff, Esq., surgeon, late of Brunswick-street, Trinity-square, aged 42.—On the 19th instant, at Dorking, aged 82, Isaac Chaldecott, Esq., 59 years surgeon to the garrison of Portsmouth.—On the 4th ult., at Madeira, Nicholas George Hobson, Esq., late of Great Marylebone-street, surgeon.

Death of Dr. Mouatt.—Dr. Mouatt, surgeon, 15th Hussars, and whose recent court-martial produced excitement in India, on the 21st December, died on Board the Bentinck steamer on a voyage to Suez, of a fit of coughing and expectoration of blood.

The Board of Health.—The physicians have been directed to visit all pauper institutions where children of tender age are brought up, with a view of ascertaining their exact condition, and thereby of coming at their general treatment. If this proceeding is carried out, it will be of incalculable advantage to this portion of the community, as well as most satisfactory to the public generally.

Cholera in Belfast.—The number of cases is a little on the increase, while the mortality is considerably less in proportion than towards the commencement of the visitation.

Edinburgh and Vicinity.—The cholera is on the decline here. The disease has again appeared in Leith, 4 cases having been reported since Tuesday last. There have been 3 cases reported from Restalrig since our last.

Glasgow.—On Wednesday, the new cases were 44; deaths, 22; recoveries, 44. Thursday, cases, 53; deaths, 30; recoveries, 36. Friday, cases, 20; deaths, 19; recoveries, 30. Saturday, cases, 32; deaths, 8; recoveries, 17. Sunday, cases, 36; deaths, 9; recoveries, 28; Monday, cases, 23; deaths, 12; recoveries, 17.

Other Places in Scotland.—In Paisley, from 27th January, there have been 116 new cases, 53 fatal. In Barrhead the total number of cases now amount to 127; deaths, 66; and recoveries, 43. In Greenock there have been 6 new cases, 5 fatal. In Hamilton the total number of cases now amounts to 308; deaths, 133; recoveries, 120. In Johnstone and Elderslie, the number of cases during the week ending 2nd February, is 53; the deaths, 18; the recoveries 24. In Kilbarchan there have been seventeen fatal cases since the commencement, and 8 recoveries. In Falkirk 3 cases have occurred, 2 fatal; in Bainsford 4 fatal; in Stirling 6, 2 fatal; and in Kelso, from Wednesday to Saturday last, there had been 11 cases, 5 deaths, and 4 recoveries, making a total there of 196 cases, 94 deaths, and 79 recoveries. In Holytown and the mining districts the disease has made fearful ravages. In Carnbroe and Newarthill there have been 56 cases and 43 deaths. In the *quoad sacra* parish of Holytown, there have been, at the least, 260 deaths out of a population (in 1841) of 7,419. At Chapelhill there has been 23 cases and 16 deaths. In Napier's Square, 21 cases and 11 deaths. At Jarvieston Colliery a number of deaths have also occurred. In addition to the above there have been reported to the Board of Health up to Monday evening the following cases:—Aberdeen, 1 fatal; Newtown, Dalkeith, 5, 1 fatal; Galston, 3 fatal; Benhill, 6, 2 fatal; Old Kilpatrick (since Jan. 17), 3, 2 fatal; Riccarton, 5; New Monkland, 17 fatal; Kirkaldy, 1 fatal; Tillicoultry, 5, 3 fatal; Selkirk, 2.

Cholera in Turkey.—Letters from Constantinople of the 16th ult. state, that the intense cold which prevailed since the commencement of the year had completely checked the progress of the cholera.

Middlesex Hospital.—The Annual Court of the Governors of this Institution was held last Thursday, to receive the Report for the past year, during which period the income had amounted to 24,328*l.* 2s. 11d.; the ordinary receipts amounted to 5,306*l.* 16s. 4d.; and the ordinary expenditure to 9,006*l.* 14s. 11d., leaving a deficiency of 3,699*l.* 18s. 7d. There were 207 patients at present in the hospital. It was resolved to increase the salary of the apothecary to 200*l.* and the assistant to 70*l.*

Society for Relief of Widows and Orphans of Medical Men in London and its Vicinity.—The Annual Dinner of this Society is appointed to take place on Saturday, the 21st of April. H.R.H. the Duke of Cambridge, the Patron, has graciously consented to take the chair. A legacy of 500*l.* has lately been paid to the Treasurers by the Executors of the late Thomas Spencer, Esq., of Myddelton-square, Pentonville. The Secretary has received, from an anonymous benefactor at Oxford, a packet of books "to be disposed of for the benefit of the Society."

Medical Interpretation of Dreams.—Dreaming, as the precursor and accompaniment of diseases, deserves continued investigation, not because it is to be considered as a spiritual divination, but because the unconscious language often very clearly shows, to those who can comprehend its meaning, the state of the patient. According to Albert, lively dreams are in general a sign of the excitement of nervous actions. Soft dreams are a sign of slight irritation of the brain; often a nervous fever, announcing the approach of a favourable crisis. Frightful dreams are a sign of determination of blood to the head. Dreams about fire, are, in women, signs of an impending hæmorrhage. Dreams about blood and red objects are signs of inflammatory conditions. Dreams about rain and water are often signs of diseased mucous membranes and dropsy. Dreams of distorted forms are frequently a sign of abdominal obstruction and disorder of the liver. Dreams in which the patient sees any part of the body especially suffering, indicate disease of that part. Dreams about death often precede apoplexy, which is connected with determination of blood to the head. The nightmare (*incubus ephialtes*,) with great sensitiveness, is a sign of determination of blood to the chest. We may add, that dreams of dogs, after the bite of a mad dog, often precede the appearance of hydrophobia, but may be only the consequence of excited imagination.—*Dr. Winslow's Journal of Psychological Medicine.*

MORTALITY TABLE.

For the Week ending Saturday, Feb. 3, 1848.

Causes of Death.	Total.	Average of Five Winters.
All Causes	1,137	1,169
Specified Causes	1,111	1,164
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	346	221
Sporadic Diseases:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	38	54
Tubercular Diseases	169	203
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.....	110	141
Diseases of the Heart and Blood-vessels.....	41	40
Diseases of the Lungs, and of the other Organs of Respiration	203	243
Diseases of the Stomach, Liver, and other Organs of Digestion	43	67
Diseases of the Kidneys, &c.	10	13
Childbirth, Diseases of the Uterus, &c.....	9	9
Rheumatism, Diseases of the Bones, Joints, &c.....	8	7
Diseases of the Skin, Cellular Tissue, &c.	1	1
Malformations	5	3
Premature Birth.....	20	23
Atrophy.....	20	15
Age.....	52	73
Sudden	20	14
Violence, Privation, Cold, and Intemperance	21	37
Causes not Specified	26	5

Night Charges.—In a trial, Hodgson v. Watson, at the Hull County Court, last week, the principal dispute was, as to what constituted night-charges, treble fees having been charged for visits paid in the night. A number of medical men having been examined on the subject, a majority of whom stated their practice to be, to consider all visits required to be made between nine o'clock at night and six o'clock in the morning as night cases, the Judge gave an order for payment upon that principle.

The Price of Medicine and Advice in California.—The physician receives six ounces of gold for one ounce of quinine; calomel and jalap in proportion. An ounce of gold for advice given, six ounces a visit, brings the fever and ague to be rather an expensive companion.

TO CORRESPONDENTS.

"B. G."—The Lord Mayor is a Life Governor of the Hospital, but we are unable to state how many cases he has the power of recommending.

"Philos."—The College of Physicians and Surgeons of New York was founded in 1807, by an Act of the Legislature, at the recommendation of the Regents of the University, by whom it is governed.

"An Old Subscriber."—It would be illegal.

"M.D."—Dr. Vidal de Cassis published the cases.

"A Licentiate."—A Licentiate is a legal medical practitioner, and is entitled to the usual fee for professional evidence in the Coroner's Court.

"Mr. Jameson."—The whole of the manuscript must be sent before we can offer an opinion.

"Amicus."—We do not touch general politics.

"Lucius."—We are not aware that any German medical diploma can now be procured without examination. Were it otherwise, the parchment would be of no value in the eyes of the profession.

"Anti-quack."—We have not heard that "a Medical Tract Society" has been established, in order to enlighten the public in reference to the doings of uneducated practitioners.

"Academicus."—The leech is oviparous.

"Querist."—Yes.

"H. H."—A candidate for an Assistant-Surgeoncy in the Army must possess a diploma either from London, Edinburgh, or Dublin.

"An Irish Student."—It would be useless.

"Viator."—The laws which govern the Medical Profession in the colony, are the same as those in England.

"A Young Surgeon."—Chelius's Surgery; edited by Mr. South.

"Celsus."—The Medical Galvanists referred to are quacks.

"Dubitans."—The Apothecaries' Act requires a five-years' apprenticeship, and the Court of Examiners has no power to overrule it.

"A Subscriber."—We cannot engage to send private answers to all our Correspondents who may request us to do so.

"Inquirer."—The salary is not fixed.

"Chirurgus."—The Antiphlogistic plan of treatment is the best.

"M.D., Lond."—We are not aware of the changes alluded to. Perhaps our Correspondent will favour us with the particulars.

"Medicus Juvenis."—The Apothecaries' Certificate is received at the University of St. Andrew's. The candidate has merely to present it a certain time prior to the day appointed for the examination.

"Jacobus."—We consider it proper for the Surgeon to dispense his own medicines.

"Philo."—The old apparatus, on account of its simplicity, is the best.

"F. L. S."—An ordinary silver catheter will answer the purpose.

"Ouvrier."—We do not participate in the fears of our Correspondent, as regards homœopathy.

"A Surgeon-Apothecary."—Yes.

"Scotus."—The "Radclyffe Travelling Fellows" must be M.A.'s of the University of Oxford, entered on the study of physic. Their salaries are continued for ten years, five of which they must pass in parts beyond the sea, for their improvement in medical science.

"Æneas."—The subject would not interest the majority of our readers.

"Rusticus."—The suggestion to employ beer-yeast is not original.

"Argus."—We cannot publish the letter on "Hospital Abuses," unless it be authenticated.

"Dr. Dean."—The communication has not been received.

"Mr. Fothergill, Darlington."—Dr. Simpson mentioned in his communication to the Edinburgh Obstetrical Society, we believe, that Dr. Arnott had referred to the "Use of the Pneumatic Tractor" in midwifery. This statement will, perhaps, be sufficient for our Correspondent.

"Mr. Fred. Manby."—The Coroner has the power, in certain cases, to dispense with medical evidence, and the results have been most serious. Many persons who have been murdered have been buried, after a Coroner's jury has returned a verdict of "Died by the visitation of God."

"A Subscriber"'s wish shall be gratified.

"Dr. J. M. Davis."—The request shall be attended to next week.

"Dr. Deverell" shall be answered next week; it came too late for insertion this week.

ORIGINAL LECTURES.

LECTURES ON THE RACES OF MEN.

By ROBERT KNOX, M.D., F.R.S.E.

Lecturer on Anatomy, and Corresponding Member of the French Academy of Medicine.

(Continued from page 248.)

HISTORY OF THE SAXON RACE.

The generalisations of historians are but too apt to lead the mind away from the facts and events by which the true character of the race may be clearly, and distinctly, and unalterably made out. A few years ago, when the question of race came to be tested in the Low Countries,—race against nationality; nature against human contrivance and political fraud,—Belgium threw off the incubus of a Dutch King and a Dutch Government; and every one seemed surprised at the event. But, had they travelled in these countries, and looked attentively at the characters of the two races, their surprise would not only have ceased, but their astonishment would have been unbounded, that so insane a project as the union of Holland and Belgium had ever been entertained. There is something incongruous, moreover, in the idea of a Dutch King! Nothing can reconcile the ear to the expression. The flag of Holland; the glorious names of De Ruyter and Van Tromp, of De Witt and a host of others, recall great deeds; they fought or died under the banner of freedom—the flag of the old United States of Holland!—a glorious flag, put down by the protocols of Vienna. Let us hope to see it once more raised as a German or Saxon banner. Holland has but to wish it, and it is done. But here exists the insuperable difficulty, which must, I think, for ever prevent the formation of a great Saxon or German Power in Continental Europe,—it is in the *character* of the *race*. No two States will unite.

The race detests unity. One would think that what D'Arpetigny says of the large handed, spatular fingered, utilitarian Dupin, to be true of the whole race. "Every one for himself," is the universal cry. Let Germany be free, shouts the assembled Congress at Frankfort; but do not forget to crush Posen and Bohemia. These countries are peopled with another race, not German; but by *free men*, we Germans only understand German men; for black people, and other sorts of people, we have no sympathy. Look at America.

But the most remarkable of all Saxon characteristics is, the *utilitarian character* of the Saxon mind. They advise you to be religious, were it only for the "*economy*" of the thing—its *utility*—its profit. With them, no doubt, occasionally, "Holiness is a great gain." I pointed out to an English lady in the British Museum the fossil remains of the monstrous tortoise sent from India by Captain Cauntlett, and by my esteemed friend and former student, Mr. Falconer. I called her attention to its almost incredible size, and the wonders of creation unfolded to man by the fossil remains already discovered. For a time she stood lost in thought; and then, with much seriousness, inquired if the shell was in a fit condition for the making of tortoise-shell combs! True to her race, her utilitarian mind made a direct application, in the right direction.

But I have already glanced at these matters in my previous lectures, and described fully the admirable qualities of the Saxon lady, by whatever name she may be called: Dutch woman, English woman, Swede, &c. One character prevails; they are the best of mothers and of wives. I need not dwell further on these points, although, in the general history of nations they have been entirely overlooked: the very elements of human society giving to it its variety, as affected and produced by race, have been totally misapprehended, and often misrepresented.

The strongest element in the Saxon mind is the democratic tendency of his character: nothing, of course, can ever subdue this, it being derived from nature. He brought it with him from the woods and wastes of ancient Germany into England; it accompanies him everywhere; it is a part of himself. He is the true Cosmopolite; lives in a separate house; refuses to be obliged to anybody; seeks no aid; is himself for himself; all-confident. He connot be made to believe that there exists on the earth any set of men stronger, better, wiser, richer, handsomer, than himself; and, although "he cannot make a statue," yet with him is Trafalgar-square beautiful, and the view from the steps of the thing called "the National Gallery," (a disgrace to the country,) was declared by Britain's Prime Minister, "the noblest site in Europe!" (a) Alas! admirers of fatted pigs, unwieldy oxen, and Chinese pagodas—shrewd and sensible men; ac cumulative race! leave the adorning of the world to other races, and carry out your own destinies. All qualities have not been bestowed on all races: Milan, and Genoa, and Venice, were built by one race; and Birmingham, and Manchester, and Liverpool, by another.

Lovers of order and of law, the Saxon does not revolutionize unless pushed to the extreme point of forbearance. Nevertheless, he is quite aware that what is called moral force is a mere sham; but it suits his purpose to laud it. From what I can gather from a somewhat obscure passage in a speech of Mr. Van Buren, that distinguished statesman holds the same opinion. It would seem, that in some States of America, the *franchise* is not *universal*. Mr. Van Buren's remark is, that "the franchise of universal suffrage in this State (I know not to which State he alludes; perhaps to Britain) would never be recovered except by the sword." This is my opinion.

The pure Saxon displays little of what the witty Celt calls *esprit*, or wit. A Dutch joke is exceedingly coarse. I have seen occasionally something of this even in merry England. They despise theoretical and learned men; but chiefly abhor and detest men of original genius, whom they look on as humbugs. Party writers and partisans have shown, that all the pretended English patriots are cheats and traitors; and that patriotism and imposture are nearly synonymous terms; there is as much philanthropic jobbing transacted in a day in London, as in the whole earth besides; but, as every one understands the affair, it deceives nobody.

The music of the race is Scandinavian, consisting in some heavy martial airs, glees, madrigals, and choruses. In Holland, they seemed to have only one song, and that was a borrowed one; it was something about Vaderland, with the word *Konig* occasionally introduced as a show of lip-loyalty which costs nothing. Mammon is the God they worship; a good and a rich man are synonymous terms, all over Saxon countries. Their dislike of system is such, that it was by mere accident that each railway throughout the Kingdom had not a distinct gauge. Continental discoveries are adopted whenever and wherever they will pay; haters of martial restraint and unwarlike, they are irresistible, yet, by their physical strength, determined when roused. The English and Swedish infantry cannot be excelled by any race. But it is on the ocean that the Saxon shows his vast superiority over all other races; this is his native element. Hence the rivalries of Holland and England; hence the dread in England of a German unity—of a free German nation in Continental Europe. The American navy must, at no distant period, dictate peace to the world. How miserably *effete* does the old policy of the late dynasties and imbecile monarchies of Europe look, before the rising grandeur of the free Saxon States of America! Gibbon's prophetic foreboding is about to be realised.

Democrats by nature, Protestants by their blood or race, lovers of order and of equality before the law—originators of trial by jury—assertors of the inviolability of a private dwelling—the future happiness and freedom of mankind rests with the Saxon. The Celt is all but hopeless; the Slavonian is nearly as he was seven centuries ago; of the Sarmatian, or Muscovite race, I need not speak. With the Saxon originated the Magna Charta, the Bill of Rights, freedom of speech. These he wrested from the Norman aristocracy; but he left the land in their hands, and so the work is still to do. From the dire effects of the Norman conquest—the most calamitous event which ever befel mankind—the Saxon race has not yet recovered.

Most of her advantages in the great struggles of nations, England owes to her insular position. Some have thought that the discovery of steam power may one day diminish or even destroy her influence; but this seems improbable, or at least extremely remote: nor would our Saxon brethren in America stand by and see England trampled down by Cossacks or Celts. With her, then, still rests the hopes of some, at least, of the Continental Saxon nations. Without her aid the Scandinavian nations would long since have been extinguished. They languish, it is true, and seem to be without any political influence; but another field of Jutterbach might come to be fought, and perhaps a Gustavus Adolphus found to lead the Saxon nations. In despite of commercial jealousies, the Continental Saxon must still look to England,—to Saxon England. Her Norman government will, it is true, side with the dynasties and "family arrangements" of States; but it is to be remembered, that the English people are mainly Saxon, and that already symptoms of general dislike have commenced, showing themselves as to the trips our fleets make to Lisbon and Naples. A re-action approaches, which the Continental Saxon might hasten by prudent measures.

I have endeavoured to refute M. D'Aubigné's view of the Reformation in Europe in a former lecture, and need not, therefore, return to this matter. Protestantism was rejected by the Slavonian, Sarmatian, and Celtic races; accepted by the Saxon. There cannot be the smallest difficulty, in an unprejudiced mind, in tracing the cause of this simply to race.

To describe the Saxon in the Colonies abroad—whether within the tropics, or located in more temperate countries, would require a distinct lecture. He carries with him the character of his race. In Southern Africa they have not altered during 300 years. As the climate agrees with them, the frame acquires its full development; and those tall men, who die in England and Holland of consumption, escape, in these happy climates, this scourge of humanity; and so the race becomes, as it were, a tall race, abounding in tall men and women. The same seems to have occurred in America, and to have given rise to the idea, quite erroneous, however, that men owe their stature to the climate they live in. This pitiful physiology—for it deserves no better name—still holds its ground in some schoolbooks.

I have already mentioned the extreme dislike the Saxon has to the dark races of men; let us hope, that right religious feelings, if they cannot altogether do away with this dislike, may at least soften the asperities. The inhabitants of the Cape, rather than agree cordially to the extension of the franchise to the coloured races, resolved rather to live under their present military despotism.

To trace the history of the Saxon, we should require to consider the various institutions and laws, of which a part, at least, form the mere manifestation of his physical and moral character. In most of them the machinery becomes so unwieldy that the work at last ceases.

The national dockyards offer a good example of this; but there are many others. He hates unity of purpose, and so learned societies are split, and split, and split, until they cease to be else than a mere advertisement of certain names and office-bearers. In educational institutions the infants are most cared for, and call forth naturally universal sympathy; hence infant-schools. Yet I remain of the same opinion I always held, that infants are best with their mothers, and that all that society requires to care for is the comfort of "the domestic hearth." This alone is nature; all the rest, merely human. Almshouses, small and isolated, were built by our Saxon forefathers; huge hospitals and

(a) Sir R. Peel's speech in the House of Commons.

unions by the Norman Government of the present day, in imitation of the continental races. They are the same men who gave our Guards cuirasses *after* the war had terminated. Better late than never; but why could they not have done this during or before the war?

About a hundred years after Schools of Design had been established all over the Continent *they were tried in England*. They are sure to fail; they are in the hands of a few M.P.s, whose knowledge of art is of course correct, and taste unquestioned. After 700 years of misrule the Norman Government of England founded a School of Design in Dublin, and promised another in Cork, in case the first succeeded! Could the Anglo-Irish aristocracy not find out, that the population of Ireland was Celtic, and therefore of a high and fine taste? They have discovered their Celtic nature at last, but, will they profit by this discovery? I think not: the character of race is unalterable.

The Saxon is the strongest *race* in the world, and it is amongst them that the peculiar form of the Athlete, or prize-fighter, most frequently appears. He naturally uses his arms and fists; the Celt flies to the sword. But, the Celt, when an athlete, is stronger than the Saxon—*ceteris paribus*, he is much more active; much more rapid in his movements. I leave to the strong pens of Mr. Albert Smith and his friends the task of bringing out certain other qualities in the Saxon which by no means sit gracefully on him, and are anything but calculated to secure for him the esteem and respect of other races.

The English mob would combine against the Italian company at Covent Garden if they dared; they attempted to drive Catalani from England. Nonconformists by nature, it is in the wilds of America that the genuine character of the Anglo-Saxon race appears, unfettered by usage, and uncontrolled by the pressure of the Three Estates.

One of the most important events which ever happened in the history of the Anglo-Saxon race was the attempt of Canute to unite these various families into one kingdom or power. He was ostensibly King of Great Britain and Ireland, Denmark, Sweden, and Norway; that is, in point of fact he ruled three-fourths of the whole Saxon race. But wide seas lay between the families—they did not speak the same language—and, lastly, there existed that barrier still more insurmountable than any ocean—the Saxon mind, the dislike of centralization, and repugnance to monarchy under every form. There is no truth whatever in the story, that Alfred or any other king gave to the Saxon race the trial by jury, or any other free institution or law; they all existed previously. With the old Saxons, land could not become the especial property of any individual; it belonged to the people. Property in land was introduced by the Roman and Norman laws, and adopted clumsily by the Saxons; "whatever they adopted they did it clumsily," is the expression of Sir F. Palgrave.

The Folkmoot—courts of the shire, or hundred, for the distribution of the Common Law, the Saxons held from time immemorial—derived from no King nor Parliament, but originating in the nature of their race, like their language, feelings, and moral character. All these may be traced to physical, fixed causes, not accidental nor fleeting. The history of mankind is still to write; some of our institutions express the character of our race, others do not; the cause of that I need not dwell on here. Those uncongenial to his nature he sweeps off with the bayonet, whenever he can, as in America. Saxon Law existed long before Saxon Kings; there was law long before there was prerogative. Strict justice and Common Law, beyond all doubt, will be better administered in the camp of Pretorius than in Cape Town. What the Dutch Boer contends for, and what the military Government of the Cape refuses him, is strict Saxon law and liberty, civil and religious. This the Norman Government, through her military governors, steadily refuses to her colonies; hence the revolts in Canada, the Cape, Ceylon, &c.

To describe the condition of what is called philosophy in England would require a lecture. The utilitarian doctrines of Socrates and Philo Judæus were brought forward by Derham and Paley, and, through them, became triumphant in England. The doctrine of Final Causes prevailed, and assumed a wholly mechanical form, suited to the Saxon mind. They have been attacked and pressed on lately, since the South German transcendentalism of Kant and Goethe became known; but, in my opinion, the Materialism, for such it is in fact, of Paley will prevail in all Saxon countries. Rationalism is a purely Saxon element of thought.

The theory of the ingenious Arpetigny, that emigration exhausted Scandinavia and Spain, does not seem a sound one. England suffers not, nor does Ireland. The Scandinavian races could not extend their territory. That is the secret. The settlement of Canada, he thought, exhausted France for a time. I do not believe it.

I was quite aware, when I commenced these Lectures four years ago, that in all countries, but especially in England, the introduction of this element, as a practical one, into human history and human affairs, would be sure to meet with the most determined resistance. My opinions on all these points had been long known to thousands of my students; my first public lecture, however, to a mixed audience, on the "Races of Men," was delivered before the Philosophic and Literary Institutions of Newcastle nearly four years ago: and it was there that I learned privately, from some distinguished friends, that some of the leading statements in my lectures, especially as regarded the *then* position of the European races, were treated by Germans, French, and English merchants trading to north Germany, as pure paradoxes; theories which the stability of the Governments, the sagacity of the long-headed statesmen, (Guizot, Metternich, Camphausen, Peel, and Palmerston,) wholly refuted. Above all, when, in my first lecture, I called on the English gentlemen present to inform me of the progress they had made in Saxonizing the Celtic population of Ireland, of Caledonia, and of Wales, I felt assured that I was advocating a principle, a new element in history, which the moralists of most nations and the statesmen of nearly all were bound to oppose. The element was of the most dangerous applicability to the United (!) Kingdom of Great Britain and Ireland; to the so-called kingdom of the Netherlands; to Austria above all; nay, still more, if possible, to the heterogeneous, ill-assorted, motley kingdom founded by the drumhead operations of the Corporal of Brandenberg: for them to examine the great question of the present position and future prospects of the Continental German or Saxon race,—their interests, and the interests of the masters they serve, are diametrically opposed to every effort to disenthral their Continental brethren from the dreadful tyrannies under which this race has groaned for at least 1600 years.

The public Journalist Press, as I may venture to call the daily, monthly, and quarterly press of Europe, is conducted, no doubt, by men of the highest ability; literary men, highly and practically educated, *au courant* with events, with national feelings, tastes, and wants. They write for their subscribers, they write for the public; for the leading faction generally, *when it goes with the national feeling;* against it, when the faction in power threatens to come into collision with the mass of the proprietary of the nation. This, I think, is the rule; it is merely the law of self-preservation. That the Press of a Saxon people should pander to the worst, as well as serve the best, principles of the race to whom it is addressed; that a Celtic press should follow precisely the same rule; is no more wonderful than that a tradesman should study the wants and wishes of his customers. When, therefore, I first advocated the peculiar and distinct quality of race, as a great element in human affairs, as the pivot, in fact, on which ultimately most great events must turn, I then, at the period I speak of, asked a German gentleman present to point out their Vaderland to me on the map; to put his finger upon any place where the German nation resided; to inform me who the German was; where was their nationality; where their capital, their flag, their army and navy; their country, their history as a nation: and I distinctly asserted that there was no such nation as a German nation, and no such people as a German people. Some silly, absurd stuff was offered me in reply, about the land of the Free and the Rhine. Yes, the Germans are a *race* of men no doubt, and a race possessing the highest qualities; but union as a people is not one of their qualities; and when they point to their Saxon brethren in England, they forget that the Saxon English might never have united into *one people* but for the Norman conquest. The continental German forgets all this.

Permit me to hope, from the candour of the educated and the gentleman, that it will now be admitted, (I do not well see how it can be denied,) that my views of the German people, and of the approaching struggle of races, published four years ago, were substantially correct. Germans whom I then met individually assured me, that the Germans were a great nation, and that Germanic and Teutonic, as they amusingly called their air-built Vaderland, was a vast and a well-known region. These gentlemen will, I trust, admit, in common candour, that I must have been right in my opinions, else how has it happened, that, for the last twelve months at least, the Continental Saxon race have been in search of this Vaderland, and cannot find it; looking for it sometimes at Berlin, where assuredly it never was; sometimes at Vienna, where it never can exist; then at Frankfort; next, perhaps, at Cologne. But why not view the whole question fairly, why mystify so plain a subject? It is all very right and sensible for the English Press to do so; they write for the sensible Anglo-Saxon—the Saxon settled in England; they write for the commercial, manufacturing, money-making Saxon in England, who, separated by a wide sea from the destructive bayonets of Celt and Slavonian, Sarmatian savages, Italian jesuitry, and feudal beasts of prey, have had time and opportunities to accumulate within their narrow isle half the wealth of the world.

With these remarks I shall conclude my brief sketch of the Saxon race. The prospect of the continental Saxon is at this moment gloomy. Take a lesson from the United States, ye Saxons of Germany! if you can, and remember what Holland once was, and what both you and she may again become.

CLINICAL OBSERVATIONS ON SOME OF THE MORE FREQUENT DISEASES OF CHILDREN.

By W. HUGHES WILLSHIRE, M.D. Edin.: M.R.S., Physician to the Royal Infirmary for Children, &c.

(Continued from Vol. xviii. p. 302.)

GENTLEMEN,—In my last lecture I spoke to you of the treatment which was necessary to be adopted in that formidable affection denominated "*gangrenous stomatitis.*" I shall now detain you with some observations on another form of disease, attacking the *mouths of young children.*

When an infant is brought up by hand, and especially when fed upon vegetable material, often allowed amongst the poor, almost to pass into the acetous fermentation; or again when the milk of the nurse is inferior, or of deteriorated quality, or retains too long its *colostric* characters, the whole gastro-intestinal mucous lining is very liable to evince symptoms of great irritation, and that of the mouth to become affected with the disorder I before alluded to under the title of "*erythematous stomatitis.*" (*Medical Times*, vol. xviii. p. 201.) Sooner or later a number of minute disseminated granules of a very white colour appear on the tongue or back of the palate or gums, or on all together, causing these portions of the mouth to appear as if sprinkled with little pieces of curdy matter, between which the rather dry and slightly inflamed mucous membrane is seen. These curd-like granules may remain discrete or unconnected, or may gradually increase in size and quantity, and coalesce or become confluent, and then form an entire

continuous white layer over the tongue and palate, soft and hard except close to the margin of the gums of the upper jaw. After a variable time, this white curdy matter, whether discrete or confluent, may be thrown off the parts upon which it lies, leaving the more or less reddened, dry, tense, and often glistening membrane beneath, and upon which a new layer may be formed and even reformed anew, in the same progression of events as before. Or, after the first coating is thrown off, the erythema of the mucous membrane may gradually subside, the membrane may lose its tension, dryness, and redness, and the mouth assume its normal condition. Such are the forms under which we see this disease—so far as the mere local signs go—in our own country; but in the continental ones, with their large hospitals, it assumes a far more severe type. With us, accompanying the local disorder of the mouth, there is, however, always seen some constitutional derangement,—the bowels are out of order, the child often is distressed with severe vomiting, and frequently suffers from erythema of the thighs and nates. This constitutional disturbance always ushers in, too, the appearance of the deposit in the mouth, so far as my observations extend. On the Continent, as I remarked, this disease assumes often a very severe form; the deposits in the mouth become confluent, taking on a yellowish brown, and, according to some, even a green colour; and *diphtheritis*, or *entero-colitis*, or *pneumonia*, &c., carries off the little patient. But for information upon this form of the disease, and its complications, I must refer you to the "Bibliotheque du Médecin Praticien," under the Article *Muguet*. Under whatever character, however, this disorder appears, to it are given the names of *true thrush*, *muguet*, *millet*, *blanchet*, or *creamy stomatitis*. When the local disorder is obstinate, this true thrush is often combined with other forms of oral affection, such as *follicular* and *ulcerous stomatitis*; but these are intercurrent disorders, and are different from the former disease.

Now, I must tell you, that there are late writers who have broached some rather peculiar views as to the pathology of this common disorder; and I mean to detain you a short time in reference to them, because they also involve some general pathologic principles, of late years endeavoured to be established in reference to several diseases occurring in the human body, as also in that of the lower animals, &c. Were it not so, I should have hesitated in occupying your time with such minutiæ. We will ask, then, the question, What is the nature of true thrush? It is undoubtedly the fact, if we are to believe the experience of Grüby, Berg, and others, and if my own observations are of any value, that when the white curdy or creamy matter is examined under the microscope, we find abundant evidence of the existence in it of a low form of life, in the shape of a species of fungoid vegetation, or, in plainer words, a minute mould or *mushroomy* plant. According to Grüby, this cryptogamic plant has great analogy with the mycorderms of *tinea favosa*, and alliances with the genus *sporotrichium* of botanists; and Berg regards its sporules, or regenerating particles, as having strong similarity to those of *torula cerevisiæ*, the plant of *yeast*. I have myself found this vegetable parasitic growth in the thrush exudation the more easily when I have acted on the suggestion of Berg, of adding a weak solution of potassa to the curdy matter under examination. The alkali dissolves the albumen, and renders the cells of the epithelium of Berg,—but what I consider exudation cells,—transparent, and the network of vegetable fibres is more distinctly seen. (See Dr. Forbes's Review, Vol. xxiv., p. 425.) Of its presence, then, I think there can be no doubt. But this is the least part of the story, the chief of which is, what pathologic interpretation are we to place upon its existence? I think a very simple one—Grüby, Berg, and others, a vital and important stress. It is asserted by Dr. Berg, that, in the presence of this vegetable organization, we see the true exponent of the pathology of the whole disorder. Thrush, do these writers say, is the springing up and propagating of a parasitic fungus, the fine threads and fibres of which insert themselves in every direction amid the superior layer of epithelial scales, and according to Grüby especially, even passing into the cells themselves. According to Berg, this generation of the fungoid parasite overwhelms, as it were, the mucous membrane, and is due to a reaction between the albumen and an acid in the mouth, the acid generated by the results of bad feeding, or gastric, &c., derangement, influencing the buccal secretions. He maintains, also, that local disorder of the buccal lining membrane itself is not to be recognized as the necessary, or even the frequent, antecedent of the true parasitic thrush disorder.

Now, Gentlemen, I must humbly differ from these opinions, since I consider that the presence of the thrush deposit is preceded by symptoms not only of general and constitutional disorder, but of local disease of the mucous lining of the mouth. I hold, also, the local and general symptoms which accompany the deposit not to be *secondary* consequences of the deposit, but that the existence of the latter is to be regarded as an *effect* of the former. I regard, likewise, the white creamy layer to be originally a plastic deposit analogous, in many points, to that of diphtheritis, and, in some, to that of croup, the result of a peculiar kind of membranous inflammation, and I view the presence of the vegetable parasite as perfectly irrelevant to the true or only essential pathology of the disorder, and consider its development as readily explainable according to well known laws ruling the so-called *decomposition* of organised matter.

You may then ask me what interpretation I would place upon the presence of the fungoid vegetation in the creamy or curdy layer of muguet millet or true thrush. Whenever or wherever organic matter or the cells of vegetable or animal substance, previously endowed with a special form of life, are passing into what we term a state of decomposition, a certain amount of the ultimate cells yield up their endowment of vitality to the overwhelming laws of pure chemistry and physics, their chemical elements separating and then re-combining according to these laws, and forming purely chemical compounds subservient to laws of a like nature. But other cells do not surrender up their vitality to any such influences of chemistry and physics, but preserve their great endowment of the spirit of life, and take on afresh a new kind of organic existence, differing from that expressed in the totality of such organism, of which they previously formed a part, or into the formation of whose existence they had before entered. Let me illustrate this, as I fear you may consider, abstruse point to you. If a piece of melon, or of any cucurbitaceous plant, or a bit of cheese not over dry, be placed in a cupboard, very soon the process of "decomposition" is observed to arise, and is shown by the evolution of carbonic acid, ammoniacal, and other gases, and the formation of a peculiar *fungus* or *mould* about the mass of the "decomposing" matter. Of course, you well know that this matter is composed of organic vegetable or animal cells, as the case may be. In the evolution of these gases, &c., we see the yielding up a certain amount of organic matter to the laws of chemistry and physics; but in the production of the fungus, or mould, or new organism, we observe the preservation of the vitality of certain cells, and their continued exemplification of this vitality in the assumption of a new type of organized existence. So, again, if a piece of fibrine is macerated in water, whilst some of its component cells are yielding to and obeying other than the laws of what physiologists have still a right, I think, to denominate *laws of vitality*, the rest still adhere to them. The organic cells recombining anew, composing, and very soon causing the appearance of the infusorial *vibriones*, whilst the equivalent cells of macerating albumen would pass into infusorial *monades*. These latter facts were first enunciated by Haro, of Metz, but you will—if you feel interested in the matter—find some papers of mine in the *Lancet* of the year 1841, illustrative of this part of the subject. These papers also will explain to you the different interpretation which is put upon them by Turpin. Since the period I have referred to, numberless illustrations of what I consider a great and fundamental law in physiology, have been developed by the labours of Henle, Grüby, Müller, Valentin, and others, although they do not always so apply them; and, although I believe *much* of what they say when they speak of the relation of parasitic organisms to certain well-known diseases, yet I cannot acquiesce in *all* of their doctrines. In my own papers, to which I have made reference, you will find a theory broached, which leans certainly a very great way towards these doctrines, but my further judgment, better informed by *pathological* observation, has shown me, that in doing so I made *physiology* go too far. And here, upon "the threshold of our subject," I may recal to your recollection the admirable remarks of Dr. Latham, who thus addresses his pupils, "it is not *all* physiology which can be made useful towards the knowledge and treatment of diseases, but only those parts of physiology which are undeniably true, and not only true, but easily and at once seen to be so. A great deal of what is termed physiology has turned out to be a mistake, and so far as it has got mixed up with our notions of disease, (and this has happened to a deplorable extent,) it has hindered the progress of practical medicine.—"Lectures on Diseases of the Heart," vol i., p. 19.

You are, perhaps, aware that in so-called tubercles of some punctata, in those of tinea favosa or porrigo lupinosa, in those of small-pox, in the exudations of the bronchial tubes in certain diseases, in those occurring in the intestines in typhoid fever, in diphtheritis, and numerous other instances, the development of vegetable fungoid growths has been distinctly proved to occur. Now, I cannot believe that in *thrush*, any more than in these diseases, that this development of a vegetable organism is the essence of the disease; on the contrary, it is an example of the working of the law I have been maintaining, that, where organic matter is forced to yield to new laws and modes of life, there may constantly be found the production of such low forms of organized existence. Now, nothing is more likely, let me tell you, than that the organic cells of the exudatory products, from diseased action of the vessels of the lining membrane of the mouth, forming the creamy layer, or curdy granules in muguet, or true thrush, loaded as they are, at the same time, with the remains of vegetable and animal material of the nutriment of the child, should pass into this peculiar state of decomposition, not unlike, in some respects, *fermentation*, and give rise, as the latter action does, to the production of the vegetable parasitic organism, and of which we may see analogous forms in the slime and tartar of the teeth, more especially of old persons, who are neglectful of cleanliness. I cannot, then, think with Drs. Berg and Grüby, that the disease I am speaking of is merely, in its essence, a generation of a parasitic organism, or vegetable growth, dependent upon whose propagation, and nothing further, the local disturbance in the mouth depends; but rather, that the affection consists in, first, a general disturbance of the digestive functions; next, in a diseased action of the vessels of the mucous membrane of the oral cavity, which results in *exudation*, or a peculiar deposit, which, becoming mixed with the organic matter of the nutriment of the infant, retained amidst its cells and crevices, passes into a state of *decomposition*, an effect of which is, in part, the formation, by these cells, of a new form of life—the minute vegetable found.

I must yet detain you upon a few points connected with this matter. It may be asked, how far the *continuance* and *progress* of *thrush*—though differing in its *origin* from that assumed by some continental pathologists—may yet be dependent upon or influenced by a progressive re-production of this vegetable growth, merely from its own sporules, the parent plants once having been generated, no matter how; the primary disease giving birth, as it were, to another one, which then acts by laws of its own. It must be known to many of you, that several German experimenters are said to have inoculated tritons, salamanders, frogs, &c., with the germinating sporules of low organized formations, and which in the result soon killed the animals, or caused their limbs to separate from the trunk through their devastating ravages; also, that several

diseases, like the *muscardine* in the silkworm, are rapidly propagated, apparently in like manner, from one creature to the other. Now, Dr. Berg affirms, to the fullest extent, the contagious nature of our present malady, believing that thrush may be conveyed from one patient to another by sporules, or fragments of sporules, even in their dry state, floating in the air; and that, still more frequently, it is propagated by the bottles from which children with the thrush have been fed, or by the nipple, especially where, as in some of the children's hospitals of the Continent, two infants are suckled by one nurse.

Further, Dr. Berg, by the direct experiment of applying aphthous crusts to the mucous membrane of the mouths of perfectly healthy children, produced rapidly, in every instance, analogous disease.

Again, as bearing upon the point, I may read a quotation to you from one of the most able and successful works our medical press has for many years produced—I allude to Dr. Pereira's "Materia Medica," &c. On turning to the subject of "Waters containing Organic Matters," you will meet with the following passage:—"Now, it is by no means improbable that diseases may be induced in a somewhat similar way in the human subject by the use of water containing the shreds or filaments of cryptogamic plants. This suspicion is strengthened by the case related by Dr. Farre (*Microscopic Journal*, vol. ii. page 189) of a woman who passed by the bowels, shreds of false membrane, but consisting entirely of confervoid filaments, probably belonging to the genus oscillatoria. The patient drank the ordinary water which supplies London, and it is not improbable, therefore, she may in this way have imbibed the reproductive sporules." I shall consider the value of these facts in my next lecture.

HUNTERIAN ORATION.

DELIVERED IN THE THEATRE OF THE ROYAL COLLEGE OF SURGEONS, LONDON, ON WEDNESDAY, FEB. 14, 1849.

By CÆSAR HAWKINS, Esq., F.R.S., &c.

Mr. Cæsar Hawkins delivered the annual oration at the College of Surgeons, on Wednesday last, the 14th instant. The theatre was, as usual, completely filled, an extraordinary degree of interest being felt in consequence of its having been made known that His Royal Highness Prince Albert had graciously signified his intention to be present on the occasion. Precisely at three o'clock, His Royal Highness entered the theatre, and was received with most loyal demonstrations of applause. On its subsiding, His Royal Highness having taken his seat, Mr. Hawkins at once commenced his oration. He said: As a lasting mark of respect to the memory of Hunter, this day, the anniversary of his birth, had been set apart for the meeting of his followers. After the memory of one born in 1728, and removed from the scene of his labours fifty-six years, had been commemorated annually to the present period, what could be said in elucidation of his character or his investigations, which was not familiar to every one in that assembly. None refused to recognise in his museum an evidence of unwearied research—knowledge and labour almost incredible, as the work of one man in the short space of thirty-five years. Few had hesitated to believe, on the concurrent testimony of those of his contemporaries most qualified to judge, that in the sciences of anatomy, physiology, and pathology, whether comparative or human, descriptive or general, he first pointed out the manner in which the phenomena in organized beings could be unraveled. No one, who had sufficiently studied his works, would refuse to Hunter a place among those bright luminaries of science whose light, like that of the most distant of the heavenly bodies, may reach us for centuries after they have become extinct. The publication, in 1835, of a new edition of his works, in which his opinions were illustrated by men most qualified for the undertaking; the catalogue of the physiological museum, published within the last ten years, together with the able remarks of some of those whom he that day followed, had demonstrated how vast and varied a fund of knowledge was possessed by him on many important points which were unsuspected by all. By these, too, it was shown, that few men ever lived who had the wonderful power and facility of exhibiting so much truth in so small a field; and now, by the joint labours of their President and Council, the new Catalogue of the Pathological Museum was almost completed, illustrated with extracts from his unpublished as well as from his before well-known pathological researches, calculated to show, in the clearest manner, the preparations he was accustomed to employ in conveying instruction to his pupils by their means. Hitherto, the pathological had not harmonized with the other parts of the collection, although the merits of its great founder had not been unappreciated by a few select students. At present, through the numerous purchases made by the College, at an expense of upwards of 4000*l*., and by the donations, extensive and valuable, of its members, the collection had become double in number and value since the first Catalogue was published in 1830, and might claim comparison with any other collection in that branch of science,—if, indeed, it might not boast of some superiority,—whereby it might be seen how close was Hunter's attention to disease. Then, also, they were in a better position to answer the question,—even, perhaps, granting his great eminence as an anatomist and physiologist,—what are the facts as to the treatment of diseases, why surgeons always express for him such great admiration? Even in that assembly there might be some who had never studied the more finished of his works. It would require much knowledge—much application of mind on the part of his readers, to understand fully the conceptions of a teacher engaged in following out his subject in every possible point of view, and would naturally excite some alarm for the labour in prospect Hunter himself deemed it necessary to apologise for the abstruse character of his reasoning. Neither would a fair inference be drawn as to his influence in surgery, if it were shown that some of his contemporaries were more often quoted than he, and were even safer guides in some points; as when he postponed the amputation of a limb to a remote period after an accident. It would be easy, on the other hand, to show many points which were known to him, but which were overlooked, until re-discovered by other observers after the lapse of time, and secured by them as the result of their discrimination. But it is in examples of individual practice only (for they were all students in the science or art of surgery) that they regard him as their great master. The estimation of posterity is the same, as was Brandreth's, who said: "I feel that I am but a pigmy in knowledge when compared with this man." Notwithstanding their great practical merits, it was in vain to look to the ranks of those at the head of surgery for that constant reference to anatomy, for that depth of thought and varied illustration, which fixed the attention, charmed the ear, and exercised the mind of this writer, in dwelling upon the doubts and suspicions thickly scattered over his writings, many of which are proved to be most sagacious anticipations and most important facts. Hunter's constant aim was to explain to his pupils the principles of the art of surgery, and thus by reasoning, comparison, and analogy, to lead them to be prepared to cope with unusual and unforeseen difficulties. It was by enforcing these principles in a spirit of experimental research that he contributed to effect that change in surgery which characterised his time; and to his precepts were they largely indebted for the impulse which had been given to it in the present century. He was prohibited by the Council of that Society from mentioning the names of many among whom the same spirit had extended, because they still moved within their observation. It was his duty to recall to the recollection of his audience the losses which had been sustained by the Council, since the last anniversary, in the death of three of its members. Two of these, Mr. Briggs and Mr. Callaway, afforded a most remarkable contrast to each other, both physically and mentally. The latter was an active, persevering man, laboriously employing his skill for the benefit of a large circle, by whom he was deservedly esteemed and most sincerely mourned. The former was the shy, retiring, and modest student, whose works were known in comparatively a narrow sphere. Both of them held several public appointments, but by neither of them had the literature of the Profession been much enlarged. Mr. Callaway was the author of a work on Surgery, and Mr. Briggs one on Aneurism. Appreciating as he did the zeal evinced by the Council for the cultivation of literature among its members some short time ago, he would venture to add that the library of the Institution had been since considerably increased at a large expense, in which increase Mr. Briggs felt a warm interest, and was a liberal contributor. The library at the present time contained as many as 23,000 volumes, and was the most complete in every department of the sciences connected with medicine of any library in the kingdom. The possession of 2,500 volumes upon subjects of natural history, evinced the desire of the Council to promote also the study of more general literature, while the fact of 5,808 visitors having availed themselves of the benefits which such a library afforded, was a sufficient proof that the Council was right in its conjectures as to the literary character of its members. The third loss which the Council had to deplore was that of Mr. S. Cooper, whose surgical erudition had earned for him a wide-spread reputation. Educated at Dr. Birnie's, he began his professional studies at St. Bartholomew's Hospital, for which Institution he had a warm attachment. His public services in connexion with the army were first called for during the short interval of peace, and then in that great victory which secured the longest peace ever known. He occupied many high stations. For seventeen years he was surgeon to the University College Hospital, where his kindness procured for him the regard and warm attachment of the students. He was also for many years Examiner of this College, and in 1845 he filled that highest of offices in it, which you, Mr. President, now occupy. While he was quite a young man, he wrote a treatise on the diseases of the joints, which gained him the "Jacksonian Prize" of this College. His great work was a Dictionary of Practical Surgery. That book, though perhaps imperfect, was a work of inconceivable labour, and presented a great mass of surgical information, from many valuable sources, and the best authors in Germany, France, and Austria. It had been translated into three languages, and had been also published by their Transatlantic brethren, who, however, affected to find fault with it. Seven large editions had appeared in this country up to the year 1838, and for the thirty years preceding it had formed the text-book of every student. That work, however, had been in a great measure superseded by many other manuals, especially adapted for young students. In the work of Mr. Cooper, the very richness of its illustrations perplexes the young beginner, for want of some guiding point to lead and direct him. The consultation of many authors is not the modern tendency. The changes which the literature of the country had undergone had naturally an effect upon their Profession; yet cyclopædias and reviews had too much usurped the place of old folios, so that it might be said still, "Men get at all their knowledge by reviews." On the other hand, he trusted and believed, that the impulse which the advancing tide of knowledge had received was felt by them, that many had become more studious and more scientific, and that pathology and surgery had, in the course of the last few years, undergone changes as wonderful and important as those effected by Hunter; not, indeed, by the labours of a single individual, but by a number of zealous votaries in a similar spirit of

experimental research, and over a still more extended field. The great results which he anticipated in pathology and practice, both medical and surgical, were again to be derived, in part, from further researches into anatomical and physiological science; by more minute and accurate examination of animal and vegetable bodies; and by having especial regard to the general anatomy of tissues, which was at present carried on, by microscopic observation and inorganic chemistry, to a greater degree of refinement. It was in minute subjects that modern pathology was occupied, to explain the different and numerous functions of life. Digestion, respiration, secretion, excretion, &c., were all presented in new forms, and gave fresh charms to science. The discovery of albuminous substance in all vegetable life had removed much of the mystery of the animal, showing that the conversion of vegetable substances into nitrogen is not required to be effected in the stomach. The process of digestion becomes, therefore, much more simple in theory; it is mere dilution and absorption, and provision is made for the removal of that subtle alkaloid poison from the body so as to preserve life. The Lecturer then referred to the knowledge which was possessed of the power of absorption of gases by the blood, the chemical changes which it underwent, and the removal of nitrogen from the body. He alluded also to the triumphs of modern chemistry, in resolving one organized substance into another, and which Hunter had regarded as impossible. It was a physiological question, how that could be effected by the living body, subject as it was to the action of gaseous particles upon its solid, as well as upon its fluid material. Every action of the body effected some chemical change, and caused the disengagement of electricity,—these were facts which were familiar to every one. Practice, on the other hand, to be more effectual, must sometimes look to the prevention, and at others to the treatment of disease by the use of remedies directed chemically to the multiplied chemical changes known to be in progress. The orator proceeded to combat some of the absurd theories of the present day, observing that the tendency of modern philosophy was to attempt too much to explain many of the phenomena of life upon some simple physical principles. Some of the admirers of Hunter, by unduly elevating the vital property so dwelt upon by him, have led others to turn away from the study of his writings; but it should be remembered that Hunter had to combat the extreme views of the physiologists of his day, and the examination of his whole writings would show that he kept that part of his doctrine in due subordination to the rest. Mr. Hunter's theory of the blood had been doubted, yet the deductions of modern science were daily bringing out the solidity and justice of his views into fuller and brighter relief. Mr. Hunter, indeed, was a man, the originality and fertility of whose views entitled him to say—

"Libera per vacuum posui vestigia princeps:
Non aliena meo pressi pede."

It was, however, encouraging to observe, that modern physiologists and pathologists were not disposed to look to any single cause for the condition of so complicated a substance as the human body; that they do not wish nor attempt to explain everything upon mere chemical, mechanical, or any other single theory; they know that all these forces might be concerned in one affection; and that, though advancing science had discovered much, there yet remained much in the human frame, which regulated that body, to which they could only apply the term "vital affinity," or "vital action;" and which took place in that part of the system where the solids and fluids were most intimately mixed, and were continually changing places. What numerous discoveries must necessarily, therefore, yet await them? If their present knowledge of these things was so limited, how little could they expect to understand of the morbid states? Mr. Hunter, speaking of the "vital action of the fluids," was a pathologist far before his age; he believed that the fluids were as capable of disease as were the solids. It was a curious study to trace his great doctrine, at one time exalted most extravagantly, then sinking into disbelief, and then again brought forward with all the force of enthusiasm; satisfactorily proved in many points, but in danger, perhaps, like many others in modern physiology, of being carried to a greater extent than Hunter contemplated, or than facts would justify. Certainly, the marvellous discoveries during the last quarter of a century, might excuse some degree of overconfidence in human opinions, and some hasty speculations. Those who were inclined to the indiscriminate adoption of every theory, and found an unknown and foreign name more potent than a well-established authority, would do well to remember the forty years of labour spent by Hunter. On the other hand, it is admitted, that Harvey and Hunter were thought, by their contemporaries, to be enthusiasts. It cannot be said now, with truth, that there is a want of readiness to investigate new theories—the portals of science were thrown open. There was nothing contrary to physiological principles, that vegetable substances should be quickly absorbed into the blood, and this knowledge was of incalculable importance to mankind; it was proved by daily experiments upon living bodies, and demonstrated how close were the confines of life and death. The orator alluded to the suggestion of Sir Humphrey Davy, that nitric acid gas would destroy the sense of pain during surgical operations; also to the application of pressure as a safe and easy cure for aneurism of the extremities. It had been anticipated that they were arriving at a culminating point in their knowledge and comprehension of nature. He was well aware of the gradual and slow progress made by science when it depended upon the accumulation of facts, and how difficult it was to establish even a single point. Much still remained, and must ever remain unknown regarding the animal frame, so that their knowledge could not be elevated to the rank of the exact sciences. The wisdom of experience should be acknowledged especially in their Profession, and there would ever be a variety of theories and opinions. Lime juice had for years been considered as essential in the navy to arrest that disorder which, till lately, had almost disappeared — the scurvy. Potash had lately been recommended in its place. After alluding to the ravages of the present epidemic, the orator went on to observe—There was encouragement in the signs of the present day. Physiology and pathology were more generally studied by the Profession, with a sober, candid earnest search for truth, than at any former period, and this was acting, moreover, under much more favourable circumstances. It was said with reference to geographical discoveries, that mankind made more progress in the fifteenth century than in all the other ages previously—all former knowledge faded away and disappeared in the comparison—new objects now presented themselves, and the human mind engaged in the pursuit with fresh ardour, and exerted its powers in new directions. Similar to that was the rapidity with which general science advanced with the present time. Every day some new discovery was made, and bonds of connexion between their own and collateral sciences were perpetually becoming evident. It could not be that the general flood of light, which was shed over all, should not illuminate medical science also. He could not agree with those who, remembering the errors of supposed discoveries in the early part of the present century by means of the compound microscope, believed that the same applied to the acromatic microscope of the present day. The microscope appeared to be effecting changes in their knowledge of nature no less wonderful than that effected by the telescope. He knew not which extreme was most calculated to excite reverence for their common Creator. The Council had not been unmindful of the benefits which anatomy, physiology, and surgery might obtain by the microscope; they had purchased a large number of specimens at no trifling cost, the catalogue of which formed a splendid collection of microscopic objects. The first volume, now on the eve of completion, would serve as a complete treatise upon anatomical physiology. He then referred to the use of the stethoscope, and to electricity, which latter had been so successfully employed to bring life and healthy action into the diseased limb, and to destroy the vitality of a morbid growth. How fruitful a field of inquiry had been opened in the study of its influence upon the whole animal and vegetable economy, whether it were traced in its diurnal motion, or in the thunder cloud and storm, unnoticed, except by the student, but affecting large portions of the globe. Might he not venture to ask, if they could not derive great lessons from the way in which these sciences were often cultivated? In reading the works of adventurous voyagers, such as Sir James Ross, they could not but be struck by the manner in which their knowledge was brought to bear upon science—the structure of the earth—the temperature of the waters—the different vegetable and animal productions of land and water—the tidal movements—the appearances of the heavenly bodies—and numerous other objects of interest. These observations were made amidst the dangers of the Antarctic regions; while in other latitudes similar results were considered and deliberately agreed upon by persons eminent in their several pursuits, by whom subsequently the whole were compared and analyzed, and their value duly weighed. Would not some such consultations advance medical science more steadily in the right direction, step by step? Would these not give a higher value to original discoveries; and would not, especially, such a system work well in their public medical institutions? In each different hospital of the metropolis there was much local traditional knowledge confined to its own pupils; in which there were peculiar modes of treatment; nay, their doctrines were so opposite, that a form of tumor, regarded at some schools as constitutional and cancerous, is regarded in others as fibrous and purely local. Hospitals were the only safe standards of statistical information. It could not be but that the united results preserved upon one concerted plan, for a few years, would afford a mass of valuable information now in a great measure lost or wasted, which would enable those who possessed the necessary test to solve a great number of most important questions in medical and surgical practice, in which, therefore, comparative certainty would take the place of so changing an aspect of personal experience. It was very gratifying to witness the increased co-operation and appreciation of scientific merit, which was being manifested in other countries; and they must acknowledge their obligations to other nations, especially to Germany, for much of that spirit. It was pleasant to see the medals of their Society awarded to foreigners for their efficient services to medical science, and to witness the elevation of their own countrymen to posts of rank and honour in other lands, especially in the call of Sir David Brewster to the chair of the French Institute, lately occupied by one of the greatest of modern chemists, Berzelius of Stockholm. In conclusion, it was always gratifying to witness an increasing sense of the benefits and pleasures which might be derived from scientific knowledge by persons in every rank of life,—a sense which had been constantly evinced by that Illustrious person whose love for science had that day induced him to honour them with his presence. No doubt their President would express to him the sense which was entertained of His Royal Highness's condescension in visiting that assembly; he would, therefore, only presume to add, that as it was a pleasure to every Englishman to witness the Prince Chancellor of one of their ancient Universities assisting in giving that honour to science which a sense of its importance had prompted him to give, so was it always the prayer of every Englishman that the force of parental example might have its full influence upon a long line of princes, whose personal character would give a stability to the throne itself, even should there be again such an overthrow of dynasties as it had been their lot, under Divine Providence, to sympathise in, but not to share.

The Oration was received with frequent indications of gratification; and, at its conclusion, the Prince Consort was rapturously cheered, which he most graciously acknowledged.

MEDICAL SCHOOLS AND UNIVERSITY TOWNS OF GERMANY.

By DR. BUSHNAN.

(Continued from vol. XIX, page 156.)

PRAGUE.

Prague, the present capital of Bohemia, is one of the oldest and most beautiful towns in Germany, and, moreover, contains the longest bridge, and most ancient University, of which the "Fatherland" can boast. There is something in the very name of this old city familiar to our ears. Prague seems to possess a sort of natural association in the mind of every Englishman—that is, of every one about my own respectable age—arising, doubtless, from the heart-stirring reminiscences of its celebrated "battle." By this, however, I would not be understood to refer to any conflict, either of historical or political importance, but *the* one which, in frilled boyhood, thinking it a most wonderful composition, we have teased many a fair girl to attempt as a specimen of her skill, "The battle of Prague!" Who can forget its "sound of cannon," "roll of musketry," "trumpet," "charge," "galloping of horses," "clashing of swords," "groans of the wounded," "Grand March," "God save the King," and the little bit of "Turkish music" at the end to set us all right again, and send us away with smiling face for the rewarding glass of lemonade or wine and water! Who can forget all this? Of course, nobody. It is one of those early and indelible impressions which dwell upon the heart for ever.

And then the city itself. In general aspect and character it entirely corresponds with the notions you would form of it. The more modern streets are wide and handsome, but the market place, the curious and massive bridge, the fine old Gothic cathedral on the hill, the numerous churches and convents, the vast and now decaying palaces of the ancient Bohemian nobles, the large public edifices, and the old style of architecture in the private mansions, give to ancient Prague a character of the most impressive grandeur. The view from the bridge, as well as from one or two other points, is striking in the extreme. Spires, domes, minarets, towers and pinnacles, backed by rocks and wooded hills, are all mingled together in princely confusion; and present a *tout ensemble* of splendour, somewhat Asiatic, but, to my mind, more imposing than that of any other city in Germany.

Such is its position and aspect; and thus, in a basin-shaped valley, intersected by the rapid Moldau, surrounded on all sides by rocky eminences, stands Prague, and its famous University, which was founded in 1348. It was at all times renowned for its professors, and especially for those of the medical faculty, in which it seems to have maintained, until now, its ancient glory.

The fame of the newly-founded University quickly spread, for the Rector had prudently gathered around him men of the most eminent talent in every branch of literature and science; and, in consequence of certain privileges afforded at that time to students, young men were attracted thither from all parts of Europe. At first all went on well, but this unanimity did not long prevail. In the original statutes of the university, it was provided that the students of each nation should possess an equal share in the administration of its affairs. This was a step rather in advance of the times; and, as the students at that period numbered amongst them many Hungarians, Austrians, English, Franconians, Suabians, Bavarians, Poles, Danes, Swedes, and Russians, the voices of the native Bohemians were comparatively unheard or powerless, and much ill-feeling, jealousy, and actual inconvenience, were found to arise from this somewhat indiscreet arrangement.

To remedy this untoward state of things, a measure, drawn up, as it is said, by John Huss, was proposed in 1409, at once abridging, and, indeed, in operation actually abolishing the privileges hitherto accorded to the foreigners, and throwing a preponderating power into the hands of the Bohemians. This was combated in every way to the utmost by the aggrieved party, but in vain; neither alteration nor even modification could be obtained—the Imperial influence prevailed, and the measure was finally confirmed. At this time the number of students is stated to have been 37,630! and of these, in less than ten days from the promulgation of the obnoxious law, many professors, together with 24,310 students, seceded in disgust, and, becoming dispersed throughout Europe, founded Heidelberg, Leipsic, and other famous universities. At the period of which we are speaking, the University of Prague was composed of several distinct colleges, one of which was called the Carolinum, in honour of the founder, the Emperor Charles IV. This afterwards became the cradle of those religious opinions so boldly put forth, and so ably supported by John Huss, the then rector, and Jerome, which gradually detached, and, in the end, separated the Bohemians from the Romish communion. A modern writer has observed, that "the doctrines taught here were derived from the English Reformer, Wickliffe;" and it is well known that a direct and close intercourse was kept up at the time between the two nations. Richard II. was married to a Bohemian princess, "the good Queen Anne," sister of Wenzel IV. Englishmen, as we have already said, studied here; and the writings of Wickliffe, his Sayings, and Translation of the Bible, tended most powerfully to bring about the Reformation. How solemn is a residence in this world!—when we can thus trace, through five centuries, and among countless millions, the effects of what one conscientious priest thought, uttered, and wrote during the short period of a human life.

The charitable institutions of Prague are numerous. Those connected with the Medical Profession are the Public Hospital (*Allgemeine Krankenhaus*), the Maternité, the Lunatic Hospital, the Military Hospital, and the Children's Hospital of St. Lazarus.

The Public Hospital was founded in the year 1790 by Joseph II. It is a fine building, making up at least 550 beds, and divided into sections, comprising the medical and surgical klinics, and others for syphilitic and cutaneous diseases. The average number of patients who are administered to in each section is about 400. Besides other legitimate and ample means of supply, everybody, without distinction, who dies within the Hospital, is placed on the dissecting table, and undergoes such an examination as the nature of the disorder appears to justify—pathological anatomy being a branch of medical science to which the attention of the Austrian professors is peculiarly directed.

The present demonstrator of anatomy is Dr. Dietrich. The surgical klinics are under the direction of Professor Pitha—a name of considerable renown—and offer to the student a great number of cases. The principal operations are all performed by Dr. Pitha; those of a less important character by his assistants, or elder pupils, under his direction,—a practice almost universal in Germany, and which, I think, might, with great advantage, be introduced in British hospitals.

The syphilitic and cutaneous diseases are committed to the care of Dr. Krauss.

Besides the medical and surgical klinics, and the syphilitic treatment, above referred to, there are, also, sections of the hospital appropriated to ophthalmic and pulmonary complaints, and, likewise, for the diseases of women. These are, severally, under the superintendence of Drs. Arlt, Jaksch, and Lang.

Every medical man is admitted to each section of the public hospital, after having paid a visit to the Protomedicus of Bohemia, Dr. Ignatz Nadherny.

Besides the klinics, the students attend private lectures, the arrangements for which are admirable, and the means of instruction ample. The courses combine every branch of medical and surgical treatment and practice, and the lectures are delivered by professors of the most eminent talent. The expenses necessary in attending these are very trifling. A printed paper, now before us, for the autumnal course, 1848, comprises lectures on Pathological Anatomy, Surgical and Ophthalmic Operations, Pulmonary diseases, Auscultation and Percussion; and the terms vary, from 15 fl. to 20 fl. (or from 1*l.* to 1*l.* 13*s.* 4*d.*) for each course.

The Maternité is an ancient monastery, occupying a noble site, and affording a beautiful view of Prague and its environs. About forty rooms are thus appropriated—one portion for pregnant women, the other, for those who are lying in. A separate and strictly closed entrance leads to several private apartments, where women of the richer class can be delivered. Every room is beautifully clean, well ventilated, and comfortably furnished, and the arrangements throughout, both in this building and the hospitals generally, are such as reflect the highest credit upon the city.

With regard to the reception of pregnant women, the rule is as follows:—On an applicant being received, no one learns her name except the Director himself, to whom she must deliver a sealed note, containing her name, age, and station in life, which is retained by the Director until she quits the establishment. The Maternité is, at present, under the superintendence of Professor Jung.

One of the best institutions in the medical department of Prague is the Lunatic Asylum. This building was finished in 1845, and contains upwards of 200 beds, with the usual living-rooms, dining-rooms, saloons for conversation, billiard-room, &c., every possible attention being paid to the comfort and amusement of the unhappy patients. The women occupy the right wing, and the men the left. The treatment of the inmates is upon the most enlightened system, and everything like harshness or severity is totally prohibited. Everything is done to attract the patients to the exercise of useful occupation; and as many of them are from amongst the working-classes, and comprise men of all trades, most of the articles of furniture, utensils, &c., required for the hospital, are made by those within its walls. The establishment is, at present, under the care of Dr. Riedel.

The children's hospital of St. Lazarus, was originally a private institution, founded by Dr. Kratzman; but its efficiency was so great, that it was soon taken under the protection of the Government. Dr. Kratzman having fallen ill, Dr. Loeschner undertook the direction of it, and still retains the appointment. The average number of children received here is about twenty per month; besides which, about 300 children are elsewhere attended, and visited twice every day, at eight o'clock in the morning and at four in the afternoon. Students have free access to all.

The Military Hospital is a magnificent and extensive building, formerly a College of the Jesuits, but converted to its present use on the suppression of the Order. Here they can make up about 600 beds—though so large a number is seldom required—and throughout, it may be briefly said of this city, that the opportunities for improvement which it affords to students in the Medical Profession are, taking all things into consideration, unequalled in Germany.

Prague contains several other useful institutions, which it may be well to mention in a description of this nature. There is an excellent Reading Society, established in 1840, where most of the German and many of the foreign scientific journals are to be found. It is open every day, from 8 A.M. till 9 P.M.

The chief natural collections are in the Clementinum, another ancient college of the Jesuits, erected by the Emperor Ferdinand I., in 1653. It is, like all the rest of these buildings, very extensive, and now contains within its boundaries, the observatory, the library, the natural and physical museums, the printing-office, the gymnasium, and two large churches.

The Zoological Museum comprises, in about fifty divisions, a most interesting, well-arranged, and instructive collection. The mineralogical specimens are still more extensive, comprising upwards of 10,000 of various sorts, besides fossils, &c. These are under the care of Professor Prest and his talented assistant, Dr. Nickerl, who, himself, possesses also a beautiful entomological collection.

Amongst other wide fields of interest and cultivation here offered to the student, may be particu-

larly mentioned the Botanical Gardens. These have existed about eighty years, and are in the most beautiful order, both as to arrangement and classification; about 15,000 specimens are reared here, and additions are constantly being received. The buildings, besides conservatories, &c., comprise a gardener's lodge and offices, an herbarium, and a lecture-room for the convenience of the students, who are mostly attended by their Professor when visiting the gardens. The whole is under the able superintendence of Professor Kosteletzsky. Besides the University gardens there are many others equally accessible, amongst which we may mention those of Count Salons, Prince Kinsky, Prince Lobkowitz, and Count Waldsteins,—the latter near the interesting palace of the renowned Duke of Friedland.

The medical session commences on the 1st of October and finishes in July. The medical klinics are from 8 till 10, and the surgical from 10 till 12 daily. Other hours, according to circumstances, are appropriated for the visits of the students with their various Professors to the departments appropriated to the syphilitic, cutaneous, and ophthalmic diseases, and likewise to the Maternité. The private as well as public lectures are mostly given at the hospital, and the fees for each course vary from 10 fl. (16s. 8d.) to 20 fl. (1*l.* 13s. 4d.,) which is the highest sum charged by any Professor. The ophthalmic courses are the least expensive. The courses on pathological anatomy are invariably 20 fl.

At present the life of a Prague student does not differ much from that observable in any other University, to which I purpose, at some future period, to devote a few columns of the *Medical Times*. What distinction there was is fast merging into one general system, which is extending itself more and more amidst the operation of the reform clubs formed amongst the students themselves, and which take a deeper root, and are the more effective, from the circumstance of their having been so long interdicted from anything approaching to free discussion. But the darkness has passed away, and the true light now shineth.

Students who dine at the hotels generally take an *abonnement*, or subscription, at the *Table d'hôte*, which can be obtained for 18kr. (6d.) Those at the Archduke John and the Star are the best; the general charge at either of these is 20 kr. (not quite 7d.,) and the dinners excellent. The breakfast, consisting of coffee and a roll, costs from 8kr. to 12kr. (3kr. is one penny English money.) Supper *à la Carte* from 12kr. to 15kr. Most of the medical students reside in the square called the cattle market (*Vieh Markt*) near the hospital. In this neighbourhood a furnished lodging costs about 80 to 90 florins per annum, but elsewhere good rooms can be obtained for from 50 to 60 florins per annum (12 florins = 1*l.* English). Two or more students not unfrequently occupy the same suite of rooms.

Properly introduced, access to respectable and quiet family circles is not difficult, nor is there that marked distaste to English society observable in other towns near or upon the great arterial routes usually pursued by travellers. The walks around Prague are inviting; some of them beautiful, commanding views right across the country to the chain of hills forming the advanced guard of Saxon Switzerland. The inhabitants are kind and sociable, great lovers of music, which is heard in every form, from the barrel organ to the grand orchestra, and meets you as a principal entertainment in every family, in every church, and in every place of public resort. The finest music (it is, however, all good) of this latter kind will be found on the Schutzen and Sophien Inseln, where, during the summer, the whole of the Prague noblesse may be found. Altogether, apart from great advantages of study, a young man may pass a very agreeable life in Prague. *Vice is there*, but it must be *sought*. Unlike London or Paris, it flows here in a more hidden stream; and if a young man fall into extravagant and dissolute habits, it will in all probability be because *he has placed himself* in the way of temptation.

The number of students at present at Prague is about 2,800, of whom nearly 700 are destined for the Medical Profession.

The present university building was erected in 1710.

ORIGINAL CONTRIBUTIONS.

A FEW HINTS ON CHOLERA.

By W. D. REID, Esq., Comrie.

The poison of cholera, whether it be animal, vegetable, or electrical in its nature, appears to me, to exert its influence principally, on the nerve of the circulation, the sympathetic, and through it, on the organs of circulation. The power of the heart is so much depressed, that it strives, but is no longer able to propel the blood into the extremities and capillaries; in consequence there is great congestion of the abdominal and thoracic viscera; the liver, kidneys, &c., cease to act, and the patient is in the state of collapse. The blood not finding vent by its natural channels, seems to set up a circulation of its own, by pressing its more fluid ingredients through the coats of the intestines, thus forming, along with shreds of epithelium, the rice water dejections.

The indications of treatment are:—Stop the premonitory diarrhœa which sometimes occurs. In the more advanced stages, give diluents freely, and let the patient have his choice. Stimulate the sympathetic by galvanism, or the internal use of strychnia.

Attempt to unload the liver by cholagogue medicines; the most powerful and expeditious of these is, I believe, the sulphate of manganese. Given in two or three drachm doses on an empty stomach, dissolved in a tumbler of water, I have rarely found it fail to produce copious evacuations of pure bile, either by vomiting or by stool.

OBSERVATIONS ON CHOLERA.

By L. F. CRUMMEY, Esq., Stokely, York.

[Continued from page 197.]

It is an acknowledged fact, that hitherto dissection has failed to supply pathological data in confirmation of any one theory of the nature and seat of cholera. In the absence of such, I am induced to entertain the following views respecting it:—That it essentially belongs to the class of diseases called pyrexia, or febrile, is subject to similar laws, and that all the symptoms may, and do, depend upon deranged functional exercise.

A peculiar concomitant of cholera is diarrhœa; yet, such is not invariably a premonitory symptom. In many of the cases which occurred during the epidemic of 1831-2, no forerunning diarrhœa existed. Languor, with rigors, or a sensation of chilliness, were quickly succeeded by prostration and collapse, the purging supervening. In two of the fatal cases, at Hutton Rudby, the excessive purging was subsequent to cramps, vomiting, and collapse.

In numerous instances of exanthematous and other fevers, bilious irritation is a marked premonitory symptom. Small pox, typhus, &c., are frequently ushered in by diarrhœa, and that, too, of a peculiar character. Of six cases of Irish fever which occurred in this town, during the latter part of 1847 and beginning of 1848, four of them were preceded by a relaxed state of the bowels for some days. In one fatal case, the stools, which were frequent, had the appearance of thin soap lather, and perfectly inodorous.

There occurs throughout the whole class of febrile diseases, cholera included, a distinct and invariable stage, antecedent to the development of the disease, marked by shivering or chilliness, indicating deranged cutaneous function; and, in all of these diseases, determination to the skin is the first favourable symptom.

From the above facts, I am compelled to contend, that diarrhœa is not exclusively the harbinger of cholera, and that when premonitory, its indiscriminate arrest, even if practicable, is not justifiable.

In cholera, as in every other disease, by whatever name it is known, the balance of functional harmony is upset, and circumstances may determine the organ primarily and principally embarrassed.

Of the pestilences of the middle ages, the Black Death had its peculiar boils and tumors, and the sweating sickness its characteristic perspiration; yet these were but concomitants. In like manner the diarrhœa of cholera is but a part of the diseased action. In the majority of cases of cholera which I witnessed during the epidemic of 1831-2, the purging bade defiance to all direct treatment; nor did its arrest in others insure success; but, in every case, where efficient determination to the skin was effected, all the symptoms were immediately influenced; and, in proportion to the restoration of the cutaneous function was that of every other.

These considerations have induced me to adopt a diaphoretic treatment in all cases of cholera, of whatever type, and with almost invariable success; the internal remedies employed being sesqui-carbonate of ammonia, with spirit of sweet nitre, in large doses; together with brandy.

Whether the skin be the organ primarily involved in the mysterious chain of diseased action constituting cholera, is matter of conjecture; but certain it is, that its functions are the first perceptibly deranged, and their restitution is the unerring presage of recovery.

PROGRESS OF MEDICAL SCIENCE.

IRELAND.

(From our Dublin Correspondent.)

DUBLIN PATHOLOGICAL SOCIETY.

ENCYSTED TUMORS.

Dr. O'Ferrall said, there was a remark of Sir A. Cooper in his Essay on Encysted Tumors, with which his experience did not coincide. Sir A. Cooper stated, that the thickness of the parietes of the cyst was in proportion to its duration. This opinion was probably suggested by his theory of their formation. Dr. O'Ferrall had seen many cases, which, like that now presented to the Society, were remarkable for thickness, although the tumor was small, and the disease of comparatively short standing.

A woman, 48 years old, was admitted into St. Vincent's Hospital on the 28th January, 1849, with a tumor on the occiput. On examination, the tumor was found to consist of two distinct portions or tumors, one superimposed upon the other. The inferior, or that which lay next the cranium, was irregular in figure, and flattened. Its longest diameter was about three quarters of an inch. The other tumor, which lay next the skin, was smaller, and of a globular figure. It could be made to move upon the former. The integument covering the smaller tumor was tense, without hair, and marked by vascular ramifications of an arterial hue. The patient stated that those tumors were the growth of three or four years at most.

On section of the tumors, after removal, their cavities, which contained a little atheromatous substance, were small, compared with the bulk of the tumor. The cyst of the smaller was one third of an inch in thickness; that of the larger was about the same measurement—the cavity being flattened into a slit-like form.

Dr. O'Ferrall remarked, that this thickness of the cyst on small tumors was very common, while large tumors were generally thinned so much as to render their removal difficult without opening the cavity, if it were desirable to preserve the cyst entire.

Supposing Sir A. Cooper's theory of their formation to be correct, we should expect the dilated follicle to be thinner at first, and to acquire solidity from irritation and increased nutrition as it advanced in age. Exceptional cases are met with, in which friction or pressure maintains a relation between the size of the cavity and its walls, causing hypertrophy of the latter—but this is not a common case. Dr. O'Ferrall said he was not aware that, even in their arliest period of growth, the cylindrical or ovoid

shape had been observed. The figure which he had remarked—even the smallest of them—was the globular. He had not been able to verify the distinct existence of the aperture noticed by Sir A. Cooper, and though the latter distinguished surgeon had succeeded in introducing a probe. This difficulty of detecting the aperture had also been experienced by Vogel and Walther.

ON BILOCULAR EMPHYSEMA.

BY DR. LAW.

The case to which I would direct the attention of the Society is one which I would designate bilocular emphysema, or pleuritis, terminating in purulent effusion, and this effusion continued in two chambers separated from each other by a membranous partition perfect superiorly, but which presented a regularly defined circular opening, about the size of a half crown piece, in its most inferior part, by which alone the two cavities seem to have communicated. Of these two chambers, ranged in the direction of the vertical axis of the lung, one, situated anteriorly, was up much higher than the other, reaching to within a short space of the top of the lung, while the other, situated posteriorly, does not ascend so high, but descends much lower than the anterior one. The subject of the case was John Salmon, aged 18, admitted into hospital Jan. 8, complaining of difficulty of breathing, pain in his left side, and cough, with expectoration. He had headache, great prostration of strength, loss of appetite, furred tongue, respiration hurried, pulse 98 in the minute, skin not hot, countenance very anxious. He lay with most ease on the right side. The right side of the chest, both anteriorly and posteriorly, yielded a clear sound on percussion, and the peculiar râles of bronchitis were so loud all through it as almost entirely to hush the respiration in it. The left side anteriorly was clear to percussion, and the respiration puerile; but posteriorly it exhibited a striking diminution of size when compared with the opposite one. It was exceedingly dull to percussion in its inferior three-fifths, with extremely feeble respiration corresponding to all the dull sound. This feeble respiration was not bronchial or tubular; nor, again, did it seem remote, as it appeared to reach the surface of the organ, and from thence to the side. At this time it had no peculiar râle. The vocal vibration or fremitus was much more palpable, of course, to the hand applied to the right side than to the left, although it could be faintly recognised in the left. The question now arose, upon what depended the dull sound and very feeble respiration in the inferior left,—whether upon solidification of the lung, or upon effusion into the cavity of the pleura? I at once endeavoured to see how far change of position of the patient would alter the signs, which it did not; the sound was as dull as before, and the respiration as feeble then. He was placed upon his hands and knees, with his shoulders lower than the body. I, therefore, concluded, that things depended either upon solidified lung, or upon effusion retained in its place by adhesion. There were reasons for both opinions. The pressure of respiration was in favour of the pneumonia or solidified lung; while its not being tubular was against it. As I know no other cause upon which diminution of the dimensions of the side could depend than upon a previous pleuritic effusion and its subsequent absorption, the opinion I formed was, that a former pleurisy had existed; that it had terminated in effusion, which had afterwards been absorbed, and then the side had become contracted, and that now a fresh inflammation had attacked the parts before inflamed, and produced effusion; and that the feeble respiration was conveyed to the side by adhesive bands;—subsequent examinations confirmed me in this view. I treated him with leeches applied to the side, and with calomel and tartar emetic. Under this treatment, his pain went away, and his condition generally improved very much. This amendment did not last long. He complained of severe pain in the left sub-clavicular region. For this leeches were applied twice, which quite removed it. However the dyspnœa increased, and there was a palpable dulness occupying the anterior and internal part of the chest for some way down, beginning about a hand's breadth below the clavicle. Corresponding to this dull sound respiration could be heard, although feeble. After a day or so, the heart was observed to pulsate behind, and to the right of the sternum. At this time the stomach yielded a tympanitic sound, on percussion, under the left mamma, so that it seemed to interrupt or be placed between the anterior and posterior dull sounds. However, the area of the anterior dull sound, extending both inferiorly and internally, the clear sound of the stomach seemed to descend. I regarded this dull sound as the result of a second effusion, although we had still to account for a feeble respiration in every part, corresponding to the dull sound, except in the very inferior external part. As long as he was able to lie down, he could lie equally well on either side. A few days before his death he was obliged to remain constantly sitting up. His dyspnœa at last became very distressing. Our wonder was not that he died, but that he lived so long. The body was very much emaciated. When the integuments were removed from the anterior of the chest, the left side exhibited a striking fulness towards the cartilages of the ribs and the sternum. On dividing the cartilages, a quantity of thick purulent matter gushed out. When the sternum was raised, the heart was found behind the cartilages on the right side. A large quantity of thick pus lay behind the left cartilages, occupying a cavity extending to nearly under the clavicle, and down for a considerable way, and bounded internally by the mediastinum, and externally, by a band of membrane constituting the separation between this cavity and one posteriorly. The posterior cavity did not ascend so high as the anterior one, but descended much lower. Its roof was formed by the base of the lung pushed up, and forming an arch. From the anterior and internal part a portion of the lung seemed to dip down into the substance of the membranous partition between the two cavities, and reached nearly to where this was attached to the diaphragm. In the same way, towards the posterior part, the margin of the base of the lung was attached by prolongations of membrane, so as to fix it to corresponding portions of the pleura costalis in such a way, that, except at the external part, the entire circle of the organ was connected to the side by adhesive bands, and thus explained the phenomenon of feeble respiration almost everywhere, except at the external inferior part, where no such adhesion existed. This cavity, as well as the anterior one, was filled with thick, yellow, purulent matter, with large masses of fibrine. Both the cavities were lined with thick reticulated lymph. The body of the lung was pushed up, while the margin of its base was thrown down into thin laminæ, embedded in the membranous bands. The right lung was in a state of engouement, intermediate between the first and second stage of pneumonia. There was great congestion of all the bronchial membranes of both lungs. The pericardium contained about eight ounces of bloody fluid, while there did not exist a trace of increased vascularity, or any appearance of inflammation. This fluid was serum, deeply coloured with the colouring matter of the blood. It did not coagulate when allowed to stand. I consider the preceding case interesting in many points of view. In reference to the opinion I gave of a pre-existing inflammation, to explain the contraction of the side, so far from changing it from the *post mortem* examination, I was confirmed in it. The case began with symptoms of acute pleuritis; and in almost no case of original acute pleurisy, so far as my observation has extended, have I found the effusion purulent, even under the most unhealthy conditions of the system. In such cases, the effusion is generally milky or turbid serum. Whereas, if, as is sometimes the case, we have to perform the operation, in a very acute case, where the effusion is so great as to fill the cavity of the pleura, and thus at once to interfere with the function of one lung, while the other, from being suddenly called upon to perform also the function of respiration, from the excessive action, becomes diseased,—in such a case, having once operated, we are obliged, from the fluid accumulating again, to repeat the operation, the fluid on the second occasion differs materially from that on the first, it being almost constantly purulent, especially if in the operation any air be admitted into the pleural cavity. The succession of the physical signs pointed out the successive inflammations that occurred; the posterior one first, then the anterior one; and it demonstrating its gradual increase by displacing the heart and stomach. We have seen other cases, in which a second inflammation has come on in the pleura; then another was present, and adhesions, in like manner, divided the cavity into different compartments. In two cases of this kind have we seen a secondary inflammation stop up the fistulous communication that had given rise to pneumo-thorax, and thus alter the physical signs that had indicated the lesion. We canvassed the question of operation in this case, but felt that, with respiration heard almost in the parts of the left side, except in a circumscribed space towards the inferior external part, no one would be bold enough to venture upon it. For, even if the instrument did not inflict any injury, and did come upon the fluid, we were satisfied, from the adhesions, of whose existence we had little doubt, that, if any relief followed, it must be very limited and partial. Besides, the condition of the other lung was such as to render the position, even under more favourable circumstances, of the affected side, very unpromising. The presence of the sanguineous fluid in the cavity of the pericardium, without any appearance of inflammation, was remarkable. The full congested state of the right cavities of the heart proved the difficulty the blood met with in its passage through the lungs. Could the principle of exosmosis yield us an explanation of bloody fluid's presence in the pericardium?

SCOTLAND.

[From our Edinburgh Correspondent.]

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

Wednesday, February 7, 1849.

CHLOROFORM IN SURGICAL OPERATIONS.

JAMES SYME, Esq., President, in the chair.

1. A communication from Dr. William Keith, Surgeon to the Aberdeen Infirmary, was read, "On the safety and suitableness of chloroform as an anæsthetic agent in some of the more complex and serious operations in surgery." In two cases of lithotomy, violent convulsive struggling came on after the patients were secured for operation and chloroform administered. These cases had induced the author to call in question the propriety of using chloroform in like cases; but, during a recent visit to Edinburgh, having witnessed operations performed on patients in a state of anæsthesia, by Professors Simpson, Syme, and Miller, he concluded, "that the mode of administration, and not the chloroform itself, had been in fault in the two cases referred to. Four cases of stone having offered immediately on the author's return to Aberdeen, each was subjected to the operation best suited to the case, and all to the anæsthetic influence of chloroform." The history of these cases was minutely detailed. The first patient was a man aged 56, who had a calculus crushed by the lithotrite. The chloroform agreed well in this case, and facilitated the operation by rendering the sphincter of the bladder quite passive. This man made a good recovery. The second patient, a child aged three, was sounded, and had a small calculus extracted by the lateral operation of lithotomy, without struggle or suffering. Recovery soon followed. The third patient, a man aged 46, had a stone weighing seven drachms extracted by the lateral operation; suffered nothing, and recovered. During the operation, the stomach and bowels discharged their contents with force, and the bladder at the same time contracted spasmodically. The fourth patient, a man aged 67, was subjected to the high operation, and had two calculi, each two ounces in weight, extracted. He suffered nothing during the operation, but died five

days after, from the effects of infiltration of urine about the neck of the bladder.

The high operation was resorted to in the last case, because the calculi were known to be large, and because the author is of opinion, that, when the stone exceeds two ounces in weight, this operation ought to be preferred to the lateral operation of lithotomy. He believes that the size of the stone influences very materially the success of the operation by the lateral method; and in an experience extending over 83 cases of lithotomy, including both hospital and private practice, has arrived at results very similar to those published in the tabular form by Dr. Simpson, in the *Monthly Journal of Medical Science*, in November, 1847. In 14 of the author's cases, the weight of the stone ranged from *two* to *four* ounces; of these, 7 recovered, and 7 died. He adds: "It need not, therefore, excite wonder, that, while he seeks to recommend the adoption of lithotrity for all stones weighing less than *half an ounce*, and the continuance of lateral lithotomy for all stones weighing less than *two* ounces, he should desire the revival of a mode of operating for the removal of such as are larger still, in which the soft parts escape bruising, and bulk in the stone ceases to be the same source of danger, because, in the high operation, the outlet is not confined by a solid arch of bone." The statistics of the author's experience in cases of stone are as follows:—

68	stones, under ½oz.,	removed by	lithotrity.
69	do. do. 2oz.,	do.	lithotomy.
14	do. from 2 to 4oz.,	do.	do.
14	do. do.	do. unfit for any	operation.

Total 165.

"Giving, of cases that offer, with stones weighing above 2 ounces, 1 in 5 25-28; and of such, in which operative interference may be thought of, 1 in 11 10-14. So that in every 12 cases of stone that may occur, 5 may be cured by lithotrity, 5 by lateral lithotomy, 1 by the high operation, and 1 rejected as *unfit*." The communication concluded with an enumeration of the different advantages secured by the use of chloroform in these different procedures, and with an expression of the author's opinion, based upon patient and dispassionate trial, "that chloroform, as an anæsthetic agent, is *suitable*, *safe*, and *effectual* in the severest operations in surgery."

Mr. Syme did not agree with the author in recommending the high operation even for the removal of large calculi. He feared, also, the consequences likely to result from the performance of lithotrity upon *insensible* patients, by operators less expert than Dr. Keith. If pain was given by the operation of crushing the stone, he believed some mischief was being done; and the mere abolition, on the part of the patient, of the power of expressing suffering, could not be held as evidence that the operation was well conducted. He agreed with the author in all that regarded the use of chloroform in lithotomy. He had himself used chloroform in every operation in which it could conveniently be given, and without any bad consequence fairly attributable to its use. He felt bound now to add, to what he had formerly said and written on this subject, that by the use of chloroform the shock of very severe operations was lessened; and particularly instanced a case of amputation at the hip-joint, recently performed by him at the Infirmary, upon an exhausted subject, who, he believed, owed his recovery to the employment of chloroform during the operation.

Dr. Simpson expressed the pleasure with which he had listened to the observations made by the Chairman; he considered them the highest possible evidence in favour of the use of chloroform in surgery. A conversation then ensued, in which Dr. Simpson, Mr. Syme, Professor Miller, Mr. Roberts, and Dr. J. A. Robertson took part, regarding sexual manifestations, cursing, obscene language, and other alleged effects of chloroform. None of the speakers had observed cases of sexual excitement; but the use of improper language had been frequently noticed during operations in the Infirmary and elsewhere. Mr. Miller thought that these unpleasant manifestations were most frequent among patients from the lower classes, addicted to the abuse of ardent spirits; and that they might often be prevented by inducing sleep rapidly, and without unnecessarily agitating the patient by noise, motion, or surgical examination while administering the chloroform.

THE AIR TRACTOR AS A SUBSTITUTE FOR THE MIDWIFERY FORCEPS.

Dr. Simpson exhibited to the Society an instrument termed the air-tractor, a substitute for the midwifery forceps. He illustrated the suction principle, on which he had constructed it, by drawings and by specimens of the *remora*, the *limpet*, (*patella*,) &c., and showed, by experiment, with a loaded Salter's balance, that the instrument enabled the operator to exert a force quite sufficient for all the exigencies of midwifery. He assured the Society that, even in its present imperfect form, the tractor was easy of application, and not calculated to injure either mother or child; and, in proof of its efficiency, appealed to experiments made in the Maternity Hospital, in the presence of several gentlemen.

Mr. Syme had seen, in cases of lacerated perineum, &c., deplorable evidence of the mischief which might be inflicted by rash hands working in the dark with such instruments as the obstetric forceps. He sincerely hoped, that Dr. Simpson's invention would be found so efficacious as to supersede more dangerous means of delivery.

Mr. Harvey and Dr. Margulies had witnessed Dr. Simpson's experiments in the Maternal Hospital, and expressed themselves quite satisfied that the instrument was safe and efficient. Drs. Macaulay and Marr likewise made observations on Dr. Simpson's communication.

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THE MEDICAL TIMES.

SATURDAY, FEBRUARY 17, 1849.

THE PRESENT STATE OF MEDICAL SCIENCE.

Such uncertainty has been attached to the art of healing, even from the time when it first assumed the title of a regular science, to the present day, that its usefulness has been called in question, not only by men in general, but even by the avowed professors of the art. Hence we have such declarations as that of the celebrated Sydenham, "that Nature cures acute diseases, and Time chronic ones;" or the confession of another eminent Physician, who declared that, when he first commenced the study of medicine, he had a hundred remedies for every disease; but that, as he advanced in experience, he had a hundred diseases for which he could not find a single remedy.* Nay some have even gone further, and asserted, that medical treatment is an innovation upon nature; that the only sure way of re-establishing health is to shut out the doctor, and that drugs, as their opprobrious name implies, are only fit for the dunghill. Even the great Lord Bacon declares, that the only cause of death which is natural to men is that from old age, and complains of the imperfection of physic in not being able to guard the principle of life until the whole of the oil that feeds it is consumed. Nor, indeed, are cases wanting to illustrate such opinions, as the story of the patient who, having both his legs diseased, gave up one to the treatment of the doctor, and reserved the other to himself, the result proving that Nature beat the Doctor hollow.

The fact is undeniable, that of all human sciences, that of medicine is the most uncertain, and the least likely ever to arrive at a state of absolute perfection. It has its foundation in the knowledge of the living structure; and yet how little do we know of the principle of life, or the laws which regulate organization! Its practical applications consist in the actions of various substances on the living fibre, and here there is nothing to guide us but vague experiment. Yet, notwithstanding all this, it would be rash to affirm that medicine had not arrived at some definite and certain results, or that it had not contributed to the welfare of mankind. Although it may not have fulfilled the expectations of the ignorant, although specifics and elixirs may have failed to realise the visionary dreams of those who expected from them an instantaneous cure of disease, and a renewal and prolongation of life; yet we doubt not but, on mature examination, it will be found that the healing art has co-operated with the other refinements of civilisation, in ameliorating the general condition of mankind, in greatly mitigating the severity of many diseases, in obviating the causes of some, in shortening others, and thus, on the whole, adding considerably to the average duration of human life. To conclude, therefore, that an art is useless or unnecessary because it is, from the nature of circumstances, so far imperfect; or because it has not yet been sufficiently matured by human ingenuity and experience, is a species of reasoning as untenable as it is contradicted by facts. There can be no doubt that, in many stages of disease, the art of medicine is of no avail, that many maladies still remain the *opprobria medicorum*, and that the science itself often suffers from the ignorance and shallowness of its professors; yet these circumstances are by no means sufficient to undermine its foundations, or to render it less entitled to a place among those arts calculated to promote the general interests of humanity.

We have been led into these remarks by considering that fearful scourge, cholera, which now creeps with insidious and stealthy steps over the whole known world; sparing

* "I have finished my education," said a young aspirant for some medical appointment to Dr. Baillie in the last years of his life, and whose patronage he was soliciting. "Have you," replied the Doctor, "I am only now commencing mine."

neither the young nor the old, the rich nor the poor, the gentle nor the simple; which no quarantine laws shut out, no *cordon sanitaire* impedes; which laughs at all attempts to stop its silent and mysterious pathways, as it has hitherto mocked the most scientific and best directed endeavours to arrive at some certain means of cure: for, alas! although we may lay the flattering unction to our souls, that some of our number have been successful in their practice, we still cannot shut our eyes to the fact, that what has cured in one man's hands has totally failed in those of another; and, at the present moment, he who speaks truthfully and plainly, cannot but assert—and none more than ourselves feel the bitterness of the assertion—that should cholera visit us at quick returning intervals, and in the present state of our knowledge concerning it, we must be content to see our swarming cities converted into mournful solitudes, and lamentation, terror, and despair spread themselves over the land

But patience and perseverance still! Diseases nearly as fatal as cholera reigned in former days, which now are well understood and easily overcome. Who will venture to say, that it is not in consequence of our increased knowledge of the causes of disease, that the plague, once so prevalent in this country, is now unknown? And besides the plague, fevers of every description, and especially agues or intermittent fevers, jail fevers, putrid sore throats, and dysenteries were formerly much more common and fatal than at present. Bishop Burnet says, that in the last year of Queen Mary's reign, "intermittent fevers were so universal that they raged like a plague." Morton also mentions, that remittent fevers were very destructive for several years before the great plague of 1665, as also dysenteries. Major Graunt, whose observations on the Bills of Mortality were published in 1662, says, "the diseases which, besides the plague, make years unhealthy in this city, are spotted fevers, small-pox, dysentery, called by some the plague in the guts, and the unhealthful season is autumn." From Sydenham we learn, that from 1661 to 1664 agues were epidemical in London, and again from 1677 to 1685. From a table drawn up by Dr. Heberden, it would appear, that the annual deaths from bowel complaints, since 1700, have decreased in the following rapid proportion:—From 1700 to 1710 the annual deaths from bowel complaints were about 1,070; while, from 1790 to 1800, the annual deaths were only 20. In former times the scurvy was a very prevalent disease, while it is now seldom heard of. The Bills of Mortality, so far as they can be depended upon, give, between the years 1657 and 1677, an annual average of 60 deaths from this disease; whereas, from the beginning of the Eighteenth Century to its termination, the average of deaths was reduced to 5 or 6. In the present day a fatal termination of scurvy is scarcely known. In the middle of the last century, out of every 21,000 deaths in London, 2,000 died of the small-pox. Rickets appears, also, to be a malady which has decreased in a remarkable degree; and measles, scarlet fever, and malignant sore throat, seem also on the decline. But why multiply examples? Are not these sufficient to give us courage,—to induce us patiently to persevere,—and to make us ask, if maladies so mighty as these have, in so great a degree, been overcome and conquered, why may not cholera? And what the means? The gathering together of every observation, every fact upon the subject,—and there is not one too insignificant for preservation,—till, all united by some master-mind, some peculiar genius, into one mass of evidence, the summing-up of which will ultimately give the great and successful result. Thus, the mighty river, flowing on in the greatness of its course, and fertilizing and enriching the regions through which it passes, owes its origin to but small beginnings; to rippling rills, here and there, sporting through the glades and dancing in the sun-beams, and uniting, by degrees, into some bubbling brook, some wanton water, running to meet a sister stream to swell its volume. And so with medicine. There is not a fact, not an observation, nay, scarce a book so badly furnished, from which some good may not be gathered, if sought for in a right and kindly spirit; just as the sedulous bee works to honey that which the loathsome spider converts to poison. Among the veriest dross, some good may linger; and from these littles, a magnificent whole may be formed, which each additional supply increases imperceptibly, though itself is lost in the process of contribution.

REFORM NEEDED IN OUR MEDICAL SCHOOLS.—THE WANT OF GOOD CLINICAL INSTRUCTION.

The great object of medical instruction is to impart to the student a sound knowledge of diseases, and to direct him to the employment of the best means of accomplishing their cure. It is the duty of those who have the direction of professional education to see that the means are adapted to the end,—in other words, that those who are sent forth into society, with authority to take charge of the sick, are qualified to undertake so important a mission. The dignity of the Profession, the advancement of medical science, and the welfare of the public, depend, to a certain extent, upon the kind of discipline which the mind of the future medical practitioner undergoes when a pupil.

Till within the last few years, education in our medical schools and hospitals was of the most defective kind; the teachers appearing more concerned to pocket fees than to benefit those from whom they were extracted. The farce commenced with an apprenticeship indenture, and terminated with a college diploma. It is not necessary for us now to show, *in extenso*, the folly of five years being spent in the dispensary compounding medicines, and acquiring dexterity in the operations of tooth drawing and bleeding. We have proved, on former occasions, that in a much shorter time the pupil may acquire considerable tact in these important departments. Emancipated, however, from the bondage of apprenticeship, he enjoyed but few opportunities of completing in the best manner his professional education. The system of "walking the hospitals" afforded but few opportunities of making him a dexterous surgeon or an accomplished physician. He was privileged, by paying a certain sum of money, to follow the medical officer in his rounds through the hospital to see operations, and then to depart without scarcely hearing a single observation in reference to any of the patients. We do not pretend to say, that, even under all these disadvantages, many, with strong minds and determined perseverance, have not, in after years, shed a lustre on their Profession; but this has been in spite of their education, and not in consequence of it. And the interests of medicine and humanity require that a system more adapted to send forth experienced practitioners should be brought into operation.

In our country, various circumstances have contributed to retard the progress of medical education. Our great hospitals have no connexion with the Government, being founded and maintained by the efforts of private individuals; our licensing corporations have become so numerous, that a competition has existed in the sale of diplomas, which has made it an easy matter for candidates to obtain them; while the aristocratic spirit, for which our nation is said to be proverbial, has kept the professor and the pupil at an immense distance from each other.

The great feature of modern medical education is clinical instruction; it is a system which probably took its origin in Germany, and, from its great practical utility, has been at length introduced into the British schools of medicine. We believe, that to Edinburgh must be awarded the palm of having been the first in this empire to follow the example of our neighbours on the Continent; and the modern Athens, in consequence, obtained a celebrity which attracted students from every part of Europe. The Dublin schools were not long before they patronized the "clinic," and, last of all, those of our modern Babylon.

In no country has clinical instruction been more appreciated than in Germany, and we know of no other in which it has been carried to so high a degree of excellence. In each school there are three medical clinics,—one for acute, another for chronic diseases, and a third for "out-of-door" patients. The pupils enjoy important advantages. They are divided into two sections—seniors and juniors—the former taking charge of the patients, the latter being mere lookers-on.

When a sick person is admitted into hospital, he is consigned to the more immediate care of a senior student, who examines and prescribes under the inspection of the physician. When this officer goes through the ward, each student, who has the care of a patient, is obliged to read aloud, at the bedside, the notes he has taken on the case, and a strict investigation is made in order to ascertain their correctness. When all the patients have been visited, the medical officer and his class adjourn to the lecture-room, where the pupils are examined concerning the nature of the diseases under their care, their probable termination, and the mode of treatment adopted. Should there be anything erroneous either in diagnosis or treatment, the physician corrects it. The prescriptions are read aloud to the class, and are subjected to the ordeal of ex-

amination, and after this they are sent to the dispensary to be made up.

It will be seen, that this method precludes the necessity of regular clinical lectures, as the pupils become acquainted in a much better way with the physician's opinion and treatment.

In the French hospitals a different system prevails, which, while not so well calculated to benefit the student, is yet highly useful to him. The symptoms and progress of each case are explained at the bed-side, and the physician will sometimes occupy two or three hours in conveying instruction to his pupils.

The great defect of this system is, that it does not make the students *practical* men, which it is desirable they should be even before they practice on their own account. This, also, is the grand fault in our British schools,—the care of the patients being confided to the medical officers—the clinical *clerks*, as their name imports, being generally little more than the amanuenses of the physicians or surgeons. Thus, in Edinburgh, the "clerks" record in a book the history of the cures, the symptoms which may have occurred in the absence of the medical officer, and also the medicines prescribed. The ordinary pupils, it is true, are made acquainted with these facts, either at the bed-side of the patient, or in a formal lecture; but it is evident that *all* cannot be benefited to that extent which is desirable. Here the youth's judgment is not exercised, and he has no opportunity of trying his skill, as in the German hospitals. In London, the same defects are palpable; and we regret that the attempts of some of the illustrious men in our Profession, to abolish many of the absurdities connected with the old-fashioned method of walking the hospitals, have been hitherto unsuccessful. A reformation of the system of medical education which prevails amongst us is imperatively demanded. The Colleges may require teachers in the schools to force, at a high pressure, into the brains of young men, anatomy, physiology, chemistry, &c.; but these are comparatively of little value, so long as the means are neglected of imparting a practical knowledge of the healing art. Good clinical instruction is necessary, in order to accomplish this. The senior students should be entrusted with the care of patients; their tact and talent should be brought into exercise, so that, when they go forth into life, armed with authority to practise medicine, they shall not be harassed with that doubt and uncertainty which are always connected with a want of experience. In this matter we earnestly call upon the Profession to move; and especially would we entreat the teachers in our schools at once to show their zeal in the cause of science and humanity, by affording to their pupils the most ample opportunities of becoming practical men.

SALARY OF THE MEDICAL OFFICER OF THE CITY OF LONDON.

We think it may be useful to record the report of the meeting of the Corporation, to fix the salary of Mr. Simon, the newly-elected medical officer of the City, interweaving therewith a few remarks of our own, as a kind of running commentary called forth by the occasion.

The Lord Mayor opened the proceedings in a speech endeavouring to combine liberality with prudence; on the whole creditable to His Lordship.

Mr. Deputy Peacock followed, by remarking, that from 400*l.* to 800*l.* per annum seemed to be the range, in the opinion of those members of the Court with whom he had conversed; adding, that Mr. Simon had stated, whatever might be the amount awarded, he was prepared to act up to the full extent of his duty.

Mr. Dixon, of *Cripple*-gate Ward, said, that because an article had appeared in a newspaper which he had seen on Monday, (the meeting being on a Wednesday,) dictating relative to the salary of the City Officer of Health, he should be induced to vote for a smaller sum than he had originally intended. Surely this gentleman would be a fit representative, not only for Cripple-gate Ward, but for a Ward of ———. (We leave our readers to fill up the blank.)

Mr. Peacock moved, and Mr. Deputy Stevens seconded, a motion, that the salary be 600*l.*

Mr. Perkins cautioned the Court against too liberal an allowance, 'believing that the duties in a little time would die away.' We have heard of 'England expecting every man to do his duty,' but we never heard of duties dying. Perhaps Mr. Perkins is a poet.

Mr. Corney said, he had a "presentiment" that the salary would be 500*l.* Whether, therefore, his predecessor were a poet or not, the event proved Mr. Corney to be a prophet. He thought the 'fever in the public mind' would soon be removed, without the aid of any medicine, save time; he would vote, therefore, for 560*l.* a year. Mr. Corney is quite correct. Time, without medicine, will occasionally not only remove fever, but the patient too.

Mr. Alderman Lawrence thought there was no occasion at all for a medical officer, and heroically contended, that 'the City was already provided with a medical staff sufficient to combat with all kinds of maladies. The office was one which many a medical man would accept from the mere increase of practice that would spring from it.' Thus incidentally recommending the Corporation of the wealthiest city in the world to take advantage of the crowded condition of the Profession to obtain its medical aid for nothing—just as we remember seeing lately an advertisement for a gentleman who wrote a good hand, was proficient in accounts, and with a good address; who, for the present, could receive no salary, but 'would be introduced to the comforts of a counting-house!' —The comforts, in a commercial community, of an extensive medical attendance without a fee! The worthy Alderman also seemed to believe that the duty would be confined to attending and advising the Corporate body on sanitary measures—a sort of Medical Remembrancer. Adding his notion, that the City sewers were the admiration of the world—*Vide* our friend, the "Templar of the *Times*," and our late article on City Nuisances.

Mr. Deputy Peacock stated, that the medical officer would be at the call of the whole of his public brethren of the City, and would be ready to give his attendance. We therefore think that our friend Mr. Simon will have acquired no sinecure, for we feel assured he will act up to his professions.

Mr. Elliott said, if Mr. Simon were allowed to practise privately, the salary named was too much; if not, it was by no means enough.

Mr. Blake expressed his confidence in Mr. Simon, alluding to his advantageous position at Guy's, and would vote for the larger sum.

Mr. L. Taylor could not refrain from nibbling at the proposed 500*l.*, and would reduce it to 480*l.*

On the vote, 500*l.* was the sum fixed by a majority of 24 out of 39.

We shall only observe on this decision, that if the duties of Mr. Simon are intended to be confined to the advising on Sanitary measures, taking a seat *ex officio* at the City feasts, and occasionally making a morning call at the Mansion-house, the salary may be just about the thing. But, if the officer is to be really useful and vigilant,—inspecting, suggesting—nay, following up, and urging the adoption and carrying out of sanitary measures for the public health and well-being,—advising and assisting his medical brethren,—in fact, the authorised, active, and responsible head of the City Medical Staff,—then we say that even in ordinary times the salary is about one-half of that which it ought to be. But let the malignant enemy approach in all his force, and the amount of the duties of this officer, faithfully performed, could hardly be estimated, much more be rewarded by the sum of 500*l.* This is too often the way we act in England: we acknowledge the necessity of an office, we appoint an officer, we give him half a salary, and we tell him to make it up as best he may! Thus frequently the duty is neglected; or, as Mr. Perkins puts it, "dies away." Not that we anticipate any neglect on the part of Mr. Simon,—we have already stated the contrary; but we like not to see men put into such a position, and abominate the system.

We are acquainted with circumstances bearing upon this subject, relative to the treatment of the Medical Officer of one of the most celebrated of our cities; where, after having run the gauntlet of all the local authorities,—urging them, one after another, to remove certain specified nuisances confessedly the hotbeds of fever, at length overcoming the *vis inertiæ* of office, and accomplishing his purpose, the authorities most complacently assume to themselves the credit of the removal, and leave to the officer the labour for his reward.

INJUSTICE TO MEDICAL WITNESSES.—IMPORTANT DETERMINATION OF THE LANCASHIRE MEDICAL MEN.

It is an injustice to Medical Men, of which they have frequently to complain, that of being called to give evidence in important matters at Police Courts and before magistrates, without receiving any remuneration. The time of surgeons is most valuable, and they ought not to be expected, even in cases where public justice is concerned, to sacrifice that time.

The Medical Witnesses Act has recognized the principle of remunerating professional men when called upon to give evidence as to cause of death, and this principle ought to be carried out in all cases where their testimony is required.

In another part of our columns we have published a spirited protest of the Bury Medical Society; and we cannot but admire the determined stand which its members have made against a palpable injustice. Our brethren are frequently required to give evidence in Police Courts; that evidence must, from its very nature, be professional; yet, such is the defective state of our law in this respect, that no fee is allowed to the medical witness unless the case be carried to a higher tribunal. Remonstrance has been useless; hence it has become necessary for Medical Men to use other means in order that they may escape the annoyance of being summoned into Police Court

without some remuneration for their loss of time.

The Lancashire men have set a good example; they have combined, and have come to the determination that no member of the Medical Society will attend to give evidence in any criminal case at Petty Sessions unless legally subpœnaed thereto. We most cordially wish them success in their efforts, and hope that the good example which they have set will be universally followed by their brethren throughout the kingdom. The remedy is in their own hands, and all that they have to do is to be resolved and united.

REVIEWS.

Clinical Lectures on the Practice of Medicine. By ROBERT J. GRAVES, M.D., M.R.I.A., &c. Second Edition. Edited by J. MOORE NELIGAN, M.D., M.R.I.A., &c. In two vols. Dublin: Fannin and Co.; London: Longman and Co.; Edinburgh: M'Lachlan and Co. 1848.

A work, coming from the pen of so illustrious a physician as Dr. Robert Graves, is calculated to excite no small interest in the minds of the profession, and, when edited by so able an author as Dr. Neligan, the interest is powerfully increased. In examining the contents of these volumes, we are at once struck with the great medical knowledge displayed; and there is scarcely a page which does not afford information of the most important kind to the professional reader. Our Irish medical brethren have always done good service in the advancement of medical science, and the work before us will well sustain their high character.

The first volume consists of thirty-eight lectures, and, did our space permit, we could extract from each matter which would be highly instructive to every practitioner. The fourth lecture, which is on the pulse, was originally published five-and-twenty years ago, and contains an account of the first accurate experiments which were made, as to the effect of posture on the frequency of the pulse. We give the results of a great number of observations, made both in hospital and private practice, by Dr. Graves, upon this effect of change of posture in certain diseased conditions of the system. "1. The greatest difference (in the pulse) occurs in patients labouring under fever, or in a debilitated state in consequence of fever or any other cause. It may amount to thirty, forty, or even fifty, between the horizontal and erect postures. 2. This difference decreases after the first quarter of an hour in most cases, but always remains considerable as long as the same posture is observed. 3. In persons not much debilitated, the difference is much less than that above stated, and often does not amount to more than 10. 4. When the patient lies down, the pulse rapidly falls to its former standard. 5. In some the increase in frequency is greater between the horizontal and sitting posture, than between the latter and the erect; while in others the contrary takes place, so that generally the frequency in the sitting posture may be taken as a mean. 6. In persons convalescent from fever or acute diseases, I find it is extremely useful to the physician to ascertain the comparative frequency of the pulse in the horizontal or in the erect position. The greater the difference, the greater is the debility of the patient, and, consequently, the more guarded must his medical attendant be, in allowing him to sit up for a length of time, particularly if the pulse, on lying down, does not resume its usual degree of frequency." In this lecture the case of a young man is cited, in whom the variation of the pulse in different positions of the body was very remarkable. He was just recovering from fever, and, during his convalescence, the pulse went on declining in frequency till it sank to thirty-six in a minute. When made to sit up in bed, it rose in a minute to sixty-four. When he stood up it was much quicker, *but grew so weak and indistinct that it could not be felt at the wrist.* The stethoscope, applied to the region of the heart, showed the pulsations to amount to 120 in a minute. The number of respirations in this patient, when lying down, were fourteen, but when he stood up, thirty.

The following observations on the "dicrotous" pulse are of great value:—"In fever, a dicrotous pulse, which is at the same time hard, is a *very bad* symptom, if it last more than twenty-four hours: when succeeded by epistaxis, and when it disappears after moderate epistaxis it is not bad; it may, in the same fever, thus appear and disappear several times, but each time it becomes more serious. When, in fever, a hard dicrotous pulse lasts for many days without any tendency to hæmorrhage, the case, in nine out of ten, ends fatally. In hæmoptysis, epistaxis, and internal inflammation, a very hard dicrotous pulse sometimes occurs, which resists all treatment, and portends a fatal issue; no matter how much the other symptoms may improve, so long as the pulse continues of this character the patient is in imminent danger."

In the present edition the 27th and 28th lectures are devoted to the especial consideration of cholera, and from them we learn that our Author is in favour of the doctrine of the contagiousness of this disease. Dr. Graves is a strong advocate for giving the acetate of lead, and was the first to employ it in Ireland. The following is his mode of administering this drug:—A scruple of the acetate is combined with a grain of opium, and divided into twelve pills, and of these one is to be given every half-hour, until the rice-water discharges from the stomach and rectum begin to diminish. In all cases where medicine promised any chance of relief this remedy was attended with the very best effects. It gradually checked the discharges from the bowels, and stopped the vomiting. The acetate of lead, our Author asserts, will succeed when all other astringents fail. Dr. Thom, Surgeon of the 86th Regiment, whose excellent reports on the cholera, appeared in the pages of this Journal,* speaks highly of the acetate, combined with morphia, in the treatment of cholera.

The second volume contains 32 lectures, on diseases of the respiratory organs, the heart, digestive organs, kidney, on diseases peculiar to females, on disease of the skin, on venereal diseases, periostitis, amaurosis, sleeplessness, and on the administration and effects of various medicines.

We have perused these volumes with high satisfaction, and they reflect the highest credit on the distinguished Author and Editor. The Profession has marked its approbation of this work, so that a second edition has been called for. This has received those additions which the talented pen of Dr. Neligan is so well calculated to give, and we cordially recommend the volumes to the notice of the Medical Profession.

Clinical Lectures, delivered in the Theatre of Mercers' Hospital, during the Session of 1847-8. By JAMES F. DUNCAN, M.D., T.C.D., &c. Dublin: James M'Glashan; London: William S. Orr and Co.; Edinburgh: Fraser and Co. 1849. Pp. 122.

These Lectures were originally reported in the *Dublin Medical Press*, and are, therefore, familiar to the Irish Profession. By forming them into a distinct volume, medical readers are enabled, without that trouble which is necessarily connected with the turning over from number to number of a weekly periodical, to follow out the Author in his views and treatment of the different diseases of which he treats. The Lectures, ten in number, treat of some most important maladies,—diarrhœa, emphysema, bronchitis, valvular disease of the heart, chlorotic anasarca, spinal arachnitis, Bright's disease, apparent phthisis, real pneumonia, true pneumonic abscess, double pneumonia latent, principal varieties of pneumonia, pluritis with effusion, &c.

In the lecture on diarrhœa, the Author makes some important observations on the use of opium and strychnine. In reference to the former medicine, Dr. Duncan remarks, "No remedy, perhaps, is more common in the treatment of diarrhœa than opium, and none, perhaps, is more abused. In some cases it acts like a charm, relieving pain, arresting the distress, and restoring the health of the patient. In others it entirely fails, and so far from benefiting actually increases the suffering. Whenever bile is freely passing off by the bowels, opium may be given with safety and advantage. It not only relieves the pain, but stops the secretion upon which the disease depends, and, under these circumstances, a full dose of opium, repeated according to the urgency of the symptoms, should form an essential part of the treatment. But the case is different when the opposite condition exists." Speaking of strychnine, the Author says:—"In whatever point of view you regard it, strychnine is the direct antagonist of opium. If opium numbs the sensibility, strychnine exalts it; if opium produces sleep, strychnine excites to wakefulness; if opium impairs muscular contractility, strychnine induces spasm; if opium arrests secretion, strychnine promotes it. It is especially from its effect in promoting secretion that it deserves our attention at present."

Dr. Duncan's "Clinical Lectures" exhibit him in the light of an experienced Physician; and not only will his pupils appreciate the volume before us, but it is calculated to be highly useful to the Profession in general.

* Vide *Medical Times*, 1847, Vol. XVI., page 151.

MEDICAL MEN AND INSURANCE-OFFICES.

[To the Editor of the Medical Times.]

SIR,—Few subjects have created more keen and unsatisfactory discussion than the proper mode of remunerating medical men for furnishing certificates to Insurance-Offices, regarding the health of their private patients. The arguments on both sides of the question, as to whether it is the duty of the offices, or of the candidates for assurance, to pay a fee to the ordinary medical attendant for such information as he may be called upon to furnish to the offices, are now so well understood, and have been so often urged, that it would be a mere waste of words, and of your valuable space, to repeat them. Nor is it necessary for me to say, that too frequently it has been the fate of the private medical attendant, between the two stools to come to the ground—to have been deprived of his fee—the office alleging that it was the duty of the candidate for assurance to have paid for the information furnished by him, whilst the candidate considered his ordinary medical adviser should give such services as a gratuity, in the same manner as the private friends who, *in their way*, certified to the state of his health and habits.

If *all* applicants were assured, there would be little difficulty in the offices securing the fees for the ordinary medical attendants; and, in that case, they would no doubt willingly do so, because they would merely have occasion to add an additional item to the *first* payment, for what the agent had paid to said medical man. But, there are *many* cases which *cannot be accepted*, and which, consequently, involve this difficulty, that the office would have the unpleasant task to perform—first, of intimating to the rejected *candidate* the fact of his rejection, and, in the next breath, that he must pay down a guinea for the unwelcome news, that his life is considered not to be worth a groat—not worth accepting.

It is quite certain that, under these circumstances, but few of the Assurance-Offices will be induced to comply with the request of the Profession, and become their voluntary and gratuitous collectors of such fees. And it is equally vain to expect, that the Profession, *generally*, will come into a solemn paction, to refuse giving certificates in such cases, *without a fee being enclosed from the office at the time of making application for such information*; or, that the offices, through fear of such coalition, will be dragooned into compliance with such demands by the Profession. For, first, many leading practitioners are medical referees to Assurance-Offices, and will be unwilling to subscribe to such alliance, from desire not to give offence to the offices with which their interests are far greater than securing a mere *occasional* fee for a *private patient when assuring*; and, I fear, there are but few who would go so far merely for the purpose of benefiting their professional brethren. And, secondly, the offices becoming an-

noyed by what some of them deem mere contumacy on the part of medical men, who refuse to accept fees for such duties, even *when offered to them by their patients*, but will insist on receiving them *through the offices, only* may, in most cases, come to prefer dispensing entirely with the certificates of the ordinary medical attendants of candidates on such terms, unless on *special occasions*, and, in this way, medical men would, in most cases, come to lose their *fees* from *either* source, as well as their certifying duties. I know, as a fact, that such has already been exemplified in this city.

Now, it appears to me, that the following method might be adopted, with the reasonable hope of doing the utmost amount of good to the Profession for such services, without offence to their private patients, whilst it would be certain to meet with the cordial approbation and support of the Assurance-Offices, as well as of their private medical referees. It would be the mutual interest of all to support the plan I have in view, which is this—a proposal, moreover, which no honourable minded member of the Profession could for one moment hesitate to subscribe to. Let it be agreed upon amongst ourselves, that it shall be considered a *point of honour*, that in *every case* of a physician, surgeon, or apothecary, being called upon to furnish a certificate for his private patient, to any Assurance-Office, he shall make a demand from *his patient* for such service, of not less than half a guinea, if the assurance is for 500*l.*, and of not less than a guinea, if it exceeds that amount, which fee, moreover, must be paid to him *there* and *then*, intimating to the patient, in case of demur, that *it is a point of honour* by which he (the practitioner) *is bound to the Profession, and from which he is not at liberty to deviate from any private feeling or consideration whatsoever*. Under these circumstances, the fee being claimed *on public grounds*, no patient could either seek to refuse paying the fee, or feel offended by the demand, especially when he did not know at the time the tendency of the report to be submitted, further than this, that without such report he could not complete his assurance—an object, the attainment of which he must feel to be as much to his own interest as it is to that of the office, otherwise he would not have made the proposal.

Let the above rule, moreover, include the medical referees of offices in respect to their own private patients assuring at their offices—and they could have no objection to a practice by which they were securing for themselves *double* fees in such cases; and, assuredly, the offices would not then, in any case, fail to avail themselves of such important information as they could procure from medical men most intimately acquainted with their proposed clients, when such information could be had free from all charge against them, or cavil about who ought to remunerate the said medical men for such services.

I trust that this proposal may meet with general approbation and be speedily adopted, as it appears to me well calculated to do justice to all parties, especially to medical men, who would thus secure, in a quiet way, a fair reward for their professional services in such cases, whilst it would, at the same time, put an end to the warfare which has been so long and keenly waged between them and the Assurance Offices on this subject.

I remain, Sir,

Your most obedient Servant,

Manchester, Jan. 20, 1849. **J. B.**

BELLADONNA IN DYSENTERY.

[To the Editor of the Medical Times.]

SIR,—I had latterly several cases of dysentery, and been frequently disappointed in the treatment of that disease by the remedies generally recommended. I determined on trying extract of belladonna, and have found it to be a most valuable remedial agent. I have used it in sixty cases. Forty were convalescent on the eighth day, ten on the thirteenth day, five on the twentieth, and the other five are at present under treatment. The mode of administering it was as follows:—

℞ Ext. belladonæ, gr. xii.; divid. in pil. xii.; sumat; omni tertia quâque horâ.

The diet consisted of rice, arrow-root, and toast; the drink, equal parts of milk and lime water. On the third day, the tenesmus bearing down pains ceased, and fæcal matter appeared in the discharges, which up to that period consisted of mucus, or that material streaked with blood. On the fifth day the calls to stool were considerably diminished; and on the 8th day the alvine evacuations were natural as to appearance and frequency in the vast majority of the cases, when the pills were discontinued, and a more substantial diet allowed. The power belladonna possesses in curing this irksome disease, and not aware of its being used by practitioners in its treatment, will, I trust, be a sufficient apology for trespassing on the columns of your valuable Journal.

I have the honour to be,

Your obedient servant,

T. L. MONAHAN.

February 7th, 1849.

LETTER FROM MR. DAWSON, LAMBETH.

[To the Editor of the Medical Times.]

I was sent for to Thomas Cundall, Monday, 29th January; saw him with an attack of influenza; told him to keep in bed well covered with clothes, and he would soon be well; to send also for more medicine at nine o'clock next morning. Heard nothing more until Wednesday morning, when a child came for more medicine, and I told her I would call, and did so; but when going in at the door a female said (without my speaking)—"Mr. Cundall has just stepped out." I said it was too bad to be served in that manner, and I heard nothing more of the case until the Friday, when a child came for a certificate of death, which I refused; and I asked who had been attending the case, and was told no one but myself. I promised to call, which I did, and waited some time to see the widow, who said she had sent for me at three o'clock on the Thursday afternoon. I said I did not believe any message had arrived at my house, as I should have heard of it. I spoke of having called on the Wednesday, and being told her husband had gone out, she made no complaint of my neglect in any way.

She (the widow) sent a second time for a certificate of death by a child, which I again refused, finding no message had been sent to my house requesting my attendance.

I received a note from Mr. Sewell, surgeon and churchwarden, also late guardian, to inform me that he had, after being called upon by Coroner to look into the case, reported that an inquest was requisite, and such was fixed to take place, and also that he had requested Mr. Beck, the parochial surgeon for the adjoining district, to see the body, and give his opinion on the case.

I received a message from Mr. Beck last night at ten minutes to twelve o'clock, by his servant maid, to say there was an inquest; and when I told her I was surprised I had not before heard from Mr. Beck, she said she had called twice on Sunday evening, and, on my not being within, was told not to deliver her message to any one else.

I exonerate Mr. Beck from any want of courtesy, on the score of want of experience in such matters.

The offices of parochial surgeon are sufficiently laborious and annoying without having such cases as these, got up without any inquiry on the other side of the question.

W. DAWSON.

York-road, Lambeth,
Tuesday Evening, 7th February.

CHLOROFORM IN NEURALGIA.

[To the Editor of the Medical Times.]

SIR,—Should you consider the following case of sufficient importance to merit any comment in your Journal, it is at your service.

I am, Sir, faithfully yours,

J. HUTCHINSON, F.R.C.S.

Cheetham-hill, Manchester, July 11, 1848.

About twelve months since, Mrs. J——, about thirty-eight years, was attacked with brow ague, which lasted three weeks, in spite of medical treatment, at the end of which time removal to Bowdon (a distance of twelve miles from her house) effected a cure in the course of three or four days, together with the use of quinine, which before had been tried unavailingly.

On Tuesday morning, (June 27th,) I attended this lady in her confinement, after which she did well up to the following morning about ten o'clock, when she was seized with one of her old paroxysms. This was repeated, daily occupying from half-past ten a.m. until two p.m. On Saturday (July 1st) I prescribed an anodyne liniment, which, not affording any benefit, I on Sunday ordered some quinine, (this, I ought to state, was not taken with anything like regularity,) and on my visit on the following morning, finding a paroxysm was coming on, I bathed the part with a few drops of chloroform, and afterwards laid on it a cloth saturated with some. This application had the immediate effect of converting the pain from a throbbing to a benumbed sensation. The paroxysm, which was much more supportable, was shortened, and, on the following day, when it was about to return, the nurse again bathed the part with a few drops of the chloroform, which had the effect of again rendering it benumbed, and procuring sleep, which, lasting some time, left the patient relieved of the attack.

On the following morning the seizure was very trifling, and was readily combated by another small application, since which time the patient has remained quite well.

The pain followed the course of the right frontal nerve, after leaving the supra-orbital foramen, and the immediate effect of the application was to render the part benumbed, and to extend this sensation across the forehead towards the left supra-orbital region.

In giving you the particulars of this case, I have reported its progress according to the description given me by my patient, who feels certain, that to the chloroform alone is due the merit of the cure.

The quantity used did not altogether exceed half a drachm.

POISONING BY ALCOHOL.

[To the Editor of the Medical Times.]

SIR,—I feel much indebted to the courtesy of your Correspondent, Mr. Corfe, for so promptly answering my note, and will take the present opportunity of assuring him that the evidence was such as to leave no doubt upon my mind that the child had drunk at least half a pint of brandy. I will briefly state the manner of its occurrence.

During the day of the 7th of December, 1848, a fine and healthy boy was a little disordered in his bowels, and did not eat his dinner and tea; he went to bed at night much as usual. During the night he was poorly and sick, and complained of pain in his stomach; about 3 or 4 o'clock in the morning his father arose and fetched a bottle of brandy from the closet down stairs, and mixed about two or three teaspoonsful of brandy with a little cold water, and gave it to the boy to drink. He drank it, and afterwards fell asleep. His father left the brandy on the dressing-table, the bottle being nearly full; he then went to bed and fell asleep. Between 6 and 7 he arose, and went about his usual business; about 8 o'clock he returned to breakfast, and found that the child was still asleep in bed. While the family were at breakfast they heard this boy moving about the room, and observed that he must be awake, and have got up. The father went up stairs and saw him standing upon a chair, (which he had removed from the further side of the room to the dressing-table,) with the bottle of brandy in his hand, and about to put it to his mouth. The father immediately stopped him, and asked him what he was about? the child replied, that "he was only drinking some of the brandy, and did not know that there was any harm in it," or words to that effect. The father was surprised to find that the bottle, which was nearly full when he took it up stairs, was now nearly empty: there was no evidence of any having been spilt, or of its having produced any cough. The father carried the child down stairs, and he was served with some tea and toast; he took the toast in his hand, and was in the act of putting it into his mouth, when his head fell back on his father's arm, and he became completely insensible. The family were now much alarmed, and sent for a retired naval surgeon, who resided near. He attempted to administer salt and water, but the power of deglutition was gone; and he considered the child dying. I was with them in about an hour after the accident; the child was quite insensible, and evidently sinking; the action of the heart exceedingly rapid for a minute or two, and then becoming scarcely perceptible; the pupil was fully dilated. Some sulphate of zinc was dissolved in water and poured into the mouth, it returned through the nostrils, loaded with frothy mucus. Warm water poured into the mouth returned in the same manner: the quantity of frothy mucus discharged through the nostrils with the water was very great. Some mustard was mixed with water and poured into the mouth. This produced a little excitement; the lips became flushed, and there seemed a slight effort of deglutition, but I do not think that any of it was swallowed. I passed the tube of the stomach-pump down, and injected some warm water, and then withdrew it,—it came back perfectly clear, and without the slightest smell of brandy. Three medical gentlemen were present, and none of us could perceive the slightest smell of brandy in the water withdrawn from the stomach.

I will candidly state my opinion, Mr. Editor, that the above mode of treatment was not appropriate to the case in question. Emetics and the stomach pump are all powerful means with drunkards and gluttons:

but the above case is of a very different character. I believe that the whole of the brandy drank was very quickly absorbed by the capillaries of the stomach, and conveyed into the general circulation. That effusion of a fluid highly charged with alcohol took place in the brain and medulla spinalis, producing complete insensibility and paralysis of all the nerves; that the same deadly fluid pervaded the heart and lungs, and was equally inimical to their life. The object of the treatment should be the removal of this fluid from the circulating system. Should I ever be called upon again to treat a case exactly similar to the above, I should, in the first instance, immerse the child in a hot bath, of 110°—120° Fah., thereby producing a determination of blood to the surface, and a copious perspiration, and the consequent relief of the internal viscera. If the power of deglutition should return, I would administer the liquor ammoniæ acetatis, which has certainly a powerful influence in a drunken fit; and, instead of sending for the stomach pump, I would send for the galvanic apparatus, and pass the current through the head. I am much obliged to your correspondent Mr. Corfe for suggesting the last-named means, and upon it I should place much reliance.

In regard to the quantity drank, I can place the fullest reliance upon the veracity of the father, who is a respectable man, and to whom, and to the other branches of the family, the melancholy accident was a source of deep grief. I afterwards saw the bottle, and the remaining brandy, and I likewise think that the quantity drank must have been at least half-a-pint, if not more. I do not think that a wine-glass full of brandy would have produced such immediate effects.

In the Statistical Nosology of the Registrar-General, in a note to No. 135, I find the case referred to, "where children or other persons are suddenly destroyed by a large draught of spirits;" but I have not met with the complete medical history and treatment of any case of the kind.

Should you, Mr. Editor, deem the above narrative and remarks worthy a place in your valuable journal, they are freely at your service.

I am, Sir, yours most obediently,

F.

ON THE USE OF THE LONG FORCEPS IN MIDWIFERY.

[To the Editor of the Medical Times.]

SIR,—In your first Number for January, I was pleased to see a review of Dr. Tyler's Treatise, on the Use and Application of the Forceps in Midwifery.

The abstracts, herewith sent, were taken many years ago, from more detailed cases, of attempts made by the long forceps to bring down the head of the fœtus, from above the brim of the pelvis, which I was permitted to see in manuscript.

The histories, themselves, bore the most satisfactory evidence of truthfulness and trust-worthiness; they were circumstantial, practical, and admonitory: and I was tempted to make the abstracts, because I thought that a careful consideration of the many facts and incidents to be investigated would be of service to me in my future professional career.

I remain, Sir,

Your occasional Correspondent,

Jan. 22, 1849. T. D. P.

ABSTRACTS OF CASES IN WHICH ATTEMPTS WERE MADE TO EFFECT DELIVERY BY MEANS OF THE LONG FORCEPS.

The age of the patient was in no instance mentioned; nor, in general, was it stated whether it was a first pregnancy.

1. "Woman had been in strong labour *eight* hours—forceps *slipped twice*—child still-born—pelvis appeared contracted at the brim—woman did very well."

2. "Smart labour for twenty-four hours—child could not be extracted by the forceps—head was opened by the perforator, while the forceps were still applied—a very obvious jutting of the sacrum—incontinence of urine followed, which ceased spontaneously in two or three weeks."

3. "Woman in labour ten hours, after complete dilatation of the os uteri and discharge of the liquor amnii—forceps at first applied without effect; *but, after waiting four hours, till the head was impacted among the bones*, the forceps succeeded, and the child was alive—the sacrum obviously jutted."

4. "Woman in hard labour for *ten* hours—child brought away with very moderate effort; it breathed a few times, and died—the catheter was required next day, after which the urine passed properly—perinœum slightly torn—there was want of room about the brim."

5. "Forceps brought the head among the bones, but could do no more—perforator employed—forceps used with too much resolution—nothing said respecting the size of the pelvis."

6. "Forceps *not well applied, obliged to be altered*—child lived—mother recovered—nothing about size of the pelvis."

7. "The patient's sixth child, all the former had been delivered by instruments—forceps could not succeed, *though very resolute force was used*—perforator employed—woman recovered."

8. "Woman had been in strong labour several hours—no unusual force used—child died—mother recovered."

9. "Forehead presentation, easily exchanged for the vertex—slight narrowing at the brim—instruments *slipped* once—child, a girl, brought away alive."

10. "Smart labour for eight or ten hours—head extracted with considerable effort—child dead. (Some doubt expressed, as in Case 4, as to where about the obstruction in the pelvis was situated.)

11. "In pretty strong labour, at intervals, for two or three days—inflammation of abdomen seemed to be supervening—discharge from the vagina fœtid—child extracted with effort, it made a few attempts to breathe, but died—*one blade of the forceps was bent*—abdominal inflammation came on, and the mother died—nothing said about the size of the pelvis."

12. "Irregularity at the brim of the pelvis—*head brought down with resolute effort*—child torpid, but lived—perinœum slightly lacerated—lever had been unsuccessfully used by another practitioner."

13. "No mention of the duration of the labour, nor of the size of the pelvis—labour had *not* been violent—child was stillborn, which seems to have surprised the practitioner—but it had not been long dead."

14. "Face presentation, converted by the fingers to a vertex; sacrum jutted very much—*great efforts repeatedly made*, but in vain, to bring down the head—head opened and extracted with much difficulty—pulse quick; belly tender; patient twice bled and purged—she recovered."

QUACKS AND MEDICAL TRACT SOCIETIES.

[To the Editor of the Medical Times.]

SIR,—Allusion is made, in your Notice to Correspondents, to a society which I proposed through the medium of your journal some weeks ago. Allow me to state, in answer to your correspondent, I would have set the plan in operation myself had I been in a better place, or had more funds at disposal; but only establishing myself in a small country town, and with little means at command, I am prevented from assisting the Profession as much as I am inclined, either by propositions or money. I thought the suggestion might have been taken up by some of our London friends, and though I might have had nothing to do with carrying out its object, I should have had the honour of having made the proposition. On a former occasion I told you that I should not be surprised if quacks came and put themselves in our places, in the hospitals; they have done so with respect to rich families. You will see how speedily this saying is coming to pass, when I tell you that a quack only this last week applied to my landlord to allow him a house next door to me, for practising his system. Fortunately, the landlord was a gentleman, rich and well educated; and though the offer was tempting, for the house has been empty three years, he has refused the application.

I think it the duty of every medical man, whenever occasion offers in private or public, to speak down quackery. This I have done, and will do again. Some quacks have even challenged surgeons in discussion, and some have been foolish enough to accept the offer. Trusting the Society will be established,

I remain, Sir, yours faithfully,

Feb. 10, 1849. A SUBSCRIBER.

THE NAVAL MEDICAL DEPARTMENT.

[To the Editor of the Medical Times.]

SIR,—It is to be regretted that a rumour has been circulated tending to undermine the high position of one who has ingratiated himself into the warm feelings of those who belong to the Naval Medical Profession. The preference for retirement generally displayed by its members has alone been the reason for their not having publicly expressed those feelings of confidence and sympathy, which our worthy Director-General is, by this time, well assured are generally entertained towards him. No doubt, at this peculiar period of time, it would be improper and indiscreet to call such a meeting; but I earnestly trust that the day is not far off when my professional brethren will quickly, promptly step forward, and offer a balm of consolation to that high spirit which has, for many years, watched over us, ever anxiously espousing our cause against numerous prejudices, and, with unflinching care and energy, endeavouring to raise that once degraded service, the Naval Medical Department.

A ZEALOUS ADVOCATE FOR THE HONOUR OF HIS PROFESSION.

Plymouth, Feb. 6, 1849.

SPIRITED PROTEST OF THE MEDICAL MEN OF LANCASHIRE.

At a Meeting of the Medical Society of Bury, Lancashire, on the 11th day of December, 1848, a discussion arose, respecting the annoyance and injustice to which the medical gentlemen were subjected, in consequence of their attendance being so frequently required at the Police Courts, &c., to give evidence in criminal cases, not as common witnesses to a fact, but as witnesses to give a professional opinion, and for which opinion no fee is allowed, unless the case is referred to a higher tribunal. Should, however, the case demand a trial in any superior Court, the medical witness is bound over in heavy sureties to attend and give evidence at such trial; at the conclusion of which the Clerk of the Crown will not allow expenses for attendance, &c., at Petty Sessions, except upon a subpœna or certificate of such attendance from the committing magistrates. And, whereas, the magistrates of the county for the division of Bury have, by the advice of one of their clerks, refused to grant such certificates, it was unanimously resolved:—

"1st. That no member of this Society attend to give evidence in any criminal case at Petty Sessions, unless legally subpœnaed thereto, and that all the medical gentlemen of the town and neighbourhood be requested to conform to this resolution.

"2ndly. That a copy of the above be sent to the medical periodicals, the London Times, and the Manchester papers.

"MAT. FLETCHER, JOSH. GOODLAD, WM. RAYNER, JOHN PARKS, JAMES PARKS, H. J. HINXMAN, THOMAS BOTT, WM. PLANT WOODCOCK, GEORGE HOLMES, HENRY ASHTON, W. BOUTFLOWER, RICHARD PRESTON, JOHN CHADWICK, J. M. CONWAY, JOHN YORKE WOOD, JAMES LOW, T. H. WORDWORTH, jun. ROBT. HARRIS, T. H. WARDLEWORTH. JAMES LANCASHIRE, EPR. YOUNG, JOSH. FOSTER, JAMES TAYLOR. J. W. PICKFORD. JESSE LEACH."

ANOTHER DEATH FROM CHLOROFORM.

A young man who entered the Hôtel Dieu of Lyons, on Jan. 29th, for the purpose of submitting to a surgical operation, having had chloroform administered, expired in a few minutes. The patient did not inhale more than six or eight grammes of the anæsthetic agent, when he became agitated, the pulse sunk at the wrists, the features put on a death-like hue, the respiration became embarrassed, and, in less than a minute, the patient expired. The body, when examined seventy-two hours after death, presented no traces of decomposition. The heart was of its usual size, and contained neither air nor blood. The lungs were strongly retracted in the cavity of the thorax, and had a dark, slate-coloured appearance. The sinus of the dura mater contained a large quantity of black, uncoagulated blood.

THE CHOLERA AND LIFE INSURANCE.—Many persons of the better classes of society were attacked and died of cholera in Glasgow. It is reported, that, by the deaths of three persons from this disease, one Insurance Office was compelled to pay on life-policies to the amount of 12,000*l*.

STATE OF THE PUBLIC HEALTH IN THE LAST QUARTER OF THE YEAR 1848.

"The Quarterly Returns are obtained from 117 districts, subdivided into 582 sub-districts. 36 districts are in the Metropolis, and the remaining 81 comprise, with some agricultural districts, the principal towns and cities of England. The population was 6,612,958 in 1841."

It is gratifying to find that the mortality of the quarter has been below the average. Only 46,124 deaths have been registered. The deaths in the corresponding quarters of 1846 and 1847 were, 53,055 and 57,925; so that, notwithstanding some increase of population, the decrease of deaths on 1847, is 11,801; on 1846, is 6,931. Taking the increase of population into account, the deaths are 2,571 below the average of the deaths in 9 preceding years.

The general mortality of the country was comparatively low in the five years of 1841-5; in the middle of 1846 epidemics set in, and proved fatal through the rest of 1846, through 1847, and the winter of 1848. A manifest improvement took place in the spring of the year 1848. The summer was of the average degree of health; and although cases of cholera have occurred in London, and several districts during this quarter, the returns in the subjoined Tables prove that the epidemic has hitherto produced no sensible effect on the mortality.

	1839.	1840.	1841.	1842.	1843.	1844.	1845.	1846.	1847.	1848.
Deaths Registered in the December Quarters of Ten Years	41,740	44,186	39,292	39,662	42,608	44,080	39,293	53,055	57,925	46,124
Deaths which would have been registered if the mortality had been uniform, and the Numbers had increased from 1839 at the rate of 1·75 per cent. annually	41,656	42,385	43,126	43,881	44,649	45,430	46,225	47,034	47,857	48,695
Unhealthy Seasons. Difference above the calculated number	84	1,801	...	...	...	...	...	6,021	10,068	...
Healthy Seasons. Difference below the calculated number	...	...	3,834	4,219	2,041	1,350	6,932	...	...	2,571

DEATHS REGISTERED in each of the FOUR QUARTERS of the TEN YEARS 1839—1848, in 117 of the DISTRICTS of ENGLAND and WALES.

Quarters ending	1839.	1840.	1841.	1842.	1843.	1844.	1845.	1846.	1847.	1848.
March	42,410	46,376	46,967	44,903	43,748	46,136	49,996	43,850	56,105	57,710
June	41,244	42,074	39,133	38,569	40,343	38,977	40,847	43,734	51,585	46,552
September	37,317	39,498	36,058	39,409	36,953	38,933	36,139	51,405	49,479	43,445
December	41,740	44,186	39,292	39,662	42,608	44,080	39,293	53,055	57,925	46,124
Total...	162,711	172,134	161,450	162,543	163,652	168,126	166,275	192,044	215,094	193,831

LONDON.—The deaths in London were 14,725; of which 5,137 were caused by diseases of the zymotic class; namely 1,765 by scarlatina, 883 by typhus, 472 by hooping cough, 126 by erysipelas. Scarlatina has been epidemic, and has raged with great violence. It has destroyed more lives than any other disease; and shows no sign of abatement. The deaths by scarlatina in each of the four quarters of 1848, were 615, 816, 1,560, and 1,765; making 4,756 deaths in the aggregate. Small pox was fatal to 413 persons; chiefly children who had never been vaccinated. The deaths from small pox in the autumns of 1841-47, were 75, 108, 114, 571, 106, 42, and 372. Nearly all these deaths arose from the neglect of vaccination; which, under a recent Act of the Legislature, is nevertheless gratuitously performed on all applicants, at stations in every district of London. Typhus was fatal to 883 persons: this disease is decreasing, for the deaths in the autumn of 1847, were 1,279. The deaths from cholera were 468; the deaths in the autumns of the seven previous years were 3, 13, 14, 5, 11, 15, 12. Consumption was less fatal than usual; only 1,450 persons died of that malady. Heart diseases, lung diseases, and liver diseases, were much less fatal, not only than in 1847, when influenza was prevalent, but less fatal than in autumn 1846. A hundred and sixty-three mothers died in childbirth; about 17,774 children were born alive; so that one mother died to every 109 children born alive. Of the deaths, 100 were ascribed to *metria*, or childbirth fever. The mortality from this cause is high, and deserves grave consideration. Thirteen deaths were ascribed directly to intemperance. Thirty-four deaths are referred to *delirium tremens*, generally the result of drinking spirits to excess—a slow but certain suicide. Of the violent deaths, 24 were caused by poison, 31 by wounds, 22 by hanging, 68 by drowning, 63 by burns and scalds, 131 by fractures and contusions.

GOSSIP OF THE WEEK.

ROYAL COLLEGE OF PHYSICIANS.—ELECTION OF SECRETARY.—Mr. Bannister, M.A., was elected Secretary of the College of Physicians on the 20th ult., in the room of Mr. Sedgwick, resigned. Mr. Sedgwick held the appointment during the last twenty years; he tendered his resignation to the College in November last.

LECTURES AT THE ROYAL COLLEGE OF PHYSICIANS.—The Gulstonian Lectures will be delivered by Dr. Gull, and commenced on the 16th inst.; the Croonian, by Dr. Conolly, on the 28th; the Lumleian, by Dr. Todd, March 9; and the Lectures on Materia Medica, by Dr. G. Bird, March 21.

HUNTERIAN ORATION.—On Wednesday evening, the President and Council of the Royal College of Surgeons entertained a large and distinguished party at dinner, including the Bishops of Norwich and Oxford, Sir R. Peel, Sir James Graham, Sir R. H. Inglis, the Director-General of the Navy, Sir John Liddell, &c., &c. The dinner was given in the magnificent library of the Institution, and was supplied by Mr. Bacon, of the Freemason's Tavern, who well maintained the character of that renowned establishment.

HUNTERIAN ORATORS.—The following is a list of those gentlemen who have delivered the Oration, since its commencement, with the date of delivery:—1814, Sir Everard Home; 1815, Sir William Blizard; 1816, Henry Cline; 1817, William Norris; 1818, Sir David Dundas; 1819, John Abernethy; 1820, Sir Anthony Carlisle; 1821, Thomas Chevalier; 1822, Sir Everard Home; 1823, Sir William Blizard; 1824, Henry Cline; 1825, William Norris; 1826, Sir Anthony Carlisle; 1827, Honoratus Leigh Thomas; 1828, Sir William Blizard; 1829, John Painter Vincent; 1830, George James Guthrie; 1831, Anthony White; 1832, Samuel Cooper; 1833, John Howship; 1834, William Lawrence; 1837, Sir Benjamin Collins Brodie; 1838, Benjamin Travers; 1839, Edward Stanley; 1840, Joseph Henry Green; 1841, Thomas Callaway; 1842, George Gisborne Babington; 1843, James Moncrieff Arnott; 1844, John Flint South; 1846, William Lawrence; 1847, Joseph Henry Green; 1848, Richard Dugard Grainger; 1849, Cæsar Henry Hawkins.

OBITUARY.—On the 6th inst., at his residence, in Ashburton, Devon, after a few hours' illness, John Soper, Esq., M.D., aged 52, respected and greatly lamented by all who knew him.—On the 2nd inst., at Montrose, in the 43rd year of his age, David Barnes, Esq., M.D., formerly of London.

HEALTH OF LONDON DURING THE WEEK.—The 1,196 deaths, registered in the week, show an excess on the winter average of 27; and, as compared with the return of the previous week, they give an increase of 59. This result, to some extent unfavourable, is the effect of increased fatality of inflammation of the lungs and bronchitis, especially the latter, which, in proportion to the population at each age, carries off a greater number of the old, while the former is fatal, almost exclusively, to the young. The deaths from inflammation of the lungs were 103, or just the average; in the previous week they were 91; those from bronchitis were 93, or 15 more than the average; in the former week they were 78, which is the average number. The readings of both the barometer and thermometer were unusually high. Small pox, measles, scarlatina, hooping cough, all show a decrease as compared with the former return; but fatal cases of cholera were 55, from which it appears that this epidemic is on the increase in London. It is worthy of observation, that diarrhœa and dysentery number 37, which is considerably more than occurred in any of the first six weeks of five previous years; while the mortality from diarrhœa, dysentery, and cholera together is equal to six times the weekly average. A man of 29 years died in the Millbank Prison, on whom the following verdict was returned: "Pulmonary consumption acceleratsd by removals from prison to prison, when in an unfit state; he was taken to the infirmary on reception, and died in 8 days."

THE OPERATION OF THE CITY SEWERS ACT.—In consequence of a representation Wednesday, in mon, the City of London Medical made by Mr. Si effect that the land used by the Officer, to the of St. Bride's, as burial-ground for Churchwardens the poor, was a nuisance prejudicial to the neighbourhood, an order was issued by Mr. Daw, the chief clerk of the Commissioners, directing the Churchwardens to abate such nuisance, and to discontinue interments in such burying-ground from this time forth. The order was made out under the New City Sewers Act, upon the certificate of Mr. Simon, who described the nuisance as one of a most revolting nature. It appeared that, notwithstanding the complaints of the neighbourhood that the ground was over-stocked, burials, varying from one to twelve per week, still took place within its confined limits, and that the grave-digger turned up the skulls and bones from a great depth, so that the stench had become quite intolerable and was likely to produce and aggravate disease.

DISEASE IN EDINBURGH.—By the Annual Report of the Medical Officers of the Edinburgh Royal Medical Dispensary it appears that the past year was more healthy than the preceding, and that epidemic diseases have greatly declined in virulence. There were 7,040 applicants for relief during 1848, showing a decrease, as compared with 1847, of 435 patients, but an increase of 35 patients over those of 1846. Fever—the scourge of "*Auld Reekie*"—was less prevalent than during former years; the number of cases at the Dispensary, during 1848, being 179 only, to 721 in 1847. In all the other forms of epidemic disease there has also been a great diminution, except scarlatina; the cases treated during the last three years being respectively 23, 16, and 93. Small pox had become prevalent during the last few weeks, and had committed ravages amongst the lower orders, who have

of late years shown a great indifference to vaccination.

THE MORTALITY AT BARBADOES.—Within a period of two months, from the 8th of November last, the 72nd Highlanders lost at Barbadoes two captains, one assistant-surgeon, one quartermaster, and upwards of sixty men. Among the latter were twelve non-commissioned officers, and this regiment is said to have suffered less than the 66th.

LONDON FREE HOSPITAL.—On Friday week, the Annual General Meeting of the Governors of this Charity was held at the Freemasons' Tavern, Great Queen-street, Mr. Deputy Corney in the chair. The Minutes of all the meetings in the year 1848 having been read, were, after some discussion, confirmed. Dr. Tweddie then proceeded to read the Annual Report of the proceedings and condition of the Institution. From the 31st of December, 1847, to the 31st of December, 1848, the number of patients amounted to 1,419; and of these, 1,128 were dismissed cured, 221 died, and 61 remained under treatment. The total number of patients admitted since the foundation of the Hospital was 19,881. The annual income of the Institution, from all sources, was 2,761*l.* 10s. 10d., and the expenditure 2,037*l.* 1s. 11d.; leaving a balance in the hands of the trustees of 454*l.* 10s. 11d.

LOCK HOSPITAL.—The Anniversary Dinner of this Charity took place on Wednesday, at the London Tavern, Bishopsgate-street; His Royal Highness, the Duke of Cambridge, filled the chair, supported by the Marquis of Breadalbane, the Dean of Winchester, the Hon. A. Kinnaird, Major Lyon, &c. His Royal Highness, in proposing the usual loyal and patriotic toasts, stated that Prince Albert had subscribed 50*l.* to the Charity. The following donations were also announced:—The Duke of Cambridge, 20*l.*; Mr. John Peppys, 150*l.*; Hon. A. Kinnaird, 100*l.*; Rev. E. Holland, 100*l.*; the Dean of Winchester, 50*l.*; Mr. B. B. Cabbell, M.P., 50*l.* The whole amount of subscriptions announced during the evening exceeded 1,000*l.* From the Report, it appears that the number of patients relieved by the hospital has been greatly extended, and a variety of facts are cited to show the success and the great benefit to society which has attended its operations. Regulations have been adopted which render it impossible that the objects for which the Charity was established should be debased to unworthy ends; and the facts stated show that it has had a reformatory and highly beneficial influence on the morals of those who have been inmates of the Hospital. Out of 179 women admitted during the past year, 100 have either been restored to their friends or have entered asylums; while only 23 are known to have returned to the paths of sin. No less than 850 patients have been relieved by this Institution in the course of the year.

LIVERPOOL LOCK HOSPITAL.—On Wednesday week, the Annual General Meeting of the Trustees of this Institution was held in the Committee-room, 281, Knott-mill. The Chairman, Mr. Wm. Birmingham, stated, that the number of applicants during the past twelve months was 723, while in 1847 there were 825, being a diminution of 102; the amount of subscriptions for 1848 was 189*l.* 3s. 6d., while in 1847 they amounted to 228*l.* 15s., being a decrease of 38*l.* 11s. 6d. The total receipts of 1847 were 367*l.* 15s. 9d., and in 1848 they were only 267*l.* 6s., which was stated to be owing, principally, to the discontinuance of the subscription from the Board of Guardians, as, during the year 1847, they contributed the sum of 107*l.* The whole expenditure of last year had not exceeded 200*l.*

INJURIOUS EFFECTS OF EMANATIONS FROM PAINT WITH ARSENITE OF COPPER.—Dr. Mersbourg has called the attention of hygienists to the impropriety of employing Scheele's green, both in painting apartments and in using paper coloured with this ingredient. He maintains that, under the influence of a moist atmosphere, a certain quantity of arsenuretted hydrogen is developed, which greatly affects the purity of the air. The consequences are, that persons who inhale the deteriorated atmosphere experience pains resembling rheumatism, neuralgia, cough, lassitude, emaciation, disordered vision, and eruptions of the skin. All these symptoms are produced by reason of the hygrometric condition of the air. Whatever is painted with the material has a very disagreeable smell, which is perceptible even when the air is dry. The Government of the Dutchy of Baden, adopting the opinion of M. Rasedon, has prohibited the employment of arsenate of copper, under a penalty of from 20 fr. to 200 fr. Duflos, who contraverts this opinion, reports, in his Treatise on Hygiene, that, at Raichenstein, in Silesia, there is generally employed in the composition of mortar a sand containing arsenic, which, combining with the lime and moisture, emits a large quantity of arsenuretted hydrogen. The persons who use this sand, as well as those who dwell in the houses constructed with it, enjoy perfect health.

ROYAL EDINBURGH ASYLUM FOR THE INSANE, MORNINGSIDE.—The Annual General Meeting of the managers and contributors to this Institution was held on the 29th ult. In the Annual Report, which was read by the Treasurer, it was stated, that the average number of patients had amounted to 491 in the year just ended, being an increase of 47 over the average numbers for 1847; showing, in fact, a decided increase in the number of insane to the extent of rather more than 10 per cent. The funds of the Institution were flourishing, the disbursements being much less than the receipts.

BENEFICENCE.—The funds of the Gloucester Infirmary have just been augmented by the princely donation of *Two Thousand Pounds* from W. P. Wood, Esq., M.P. The late Mrs. Henstridge Cobbold has bequeathed to the Ipswich and East Suffolk Hospital 500*l.*, and to the Lying-in Charity of Ipswich 100*l.* This benevolent lady has bequeathed upwards of 2,000*l.* to various charities. The Norwich Hospital gains upwards of 1,200*l.*, the proceeds of Jenny Lind's concert in aid of the funds of that Institution. There should be a "Lind Ward" established in each of the various hospitals she has so generously assisted, that her name and kindness may be held in memory after her voice is forgotten.

MORTALITY TABLE.

For the Week ending Saturday, Feb. 10, 1848.

CAUSES OF DEATH.	Total.	Average of Five Winters.
ALL CAUSES	1,196	1,169
SPECIFIED CAUSES	1,195	1,164
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	345	221
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THE THREE GREATEST PHYSICIANS.—The celebrated physician, Doumoulin, being surrounded, at his last moments, by several of the most distinguished doctors of Paris, who vied with each other in expressions of regret at his situation, "Gentlemen," said he, suddenly, "do not much regret me; I leave behind me three great physicians." On their pressing him to name them, each being sure his own name would be among the number, he briefly added, "Water, Exercise, and Diet," to the no small discomfiture of his disappointed brethren.

VALUABLE USES OF HORSE CHESTNUTS.—M. Chevaillier says, that the horse-chestnut may be employed as a nourishing food for animals, and to fatten poultry, in a paste or powder, deprived of the shell and bitter principle. He thinks, moreover, that it will furnish an amilacious fecula capable either of being used as food, or of being converted into glucose or alcohol; a paste fit for cleaning the hands; a glue useful for book-binders, weavers, and upholsterers; a product suited to the fabrication of pasteboard and writing paper; an oil well adapted for burning and a resin which may be usefully employed in varnishes; a saponaceous water proper for bleaching linen, and purifying hemp; it may also be employed as fuel, the ashes of which may be employed to yield potash, useful in certain diseases of domestic animals, &c.

TO CORRESPONDENTS.

The Communication of "A Student" is declined.

"Medicus."—A list of the members has been already published.

"Anæsthesia."—An apparatus may be employed in the way our Correspondent suggests, but a sponge or pocket-handkerchief will answer the purpose very well. Caution is requisite.

"Cyclops."—We have already published a letter on the subject, and will, in a short time, again refer to the matter.

"Homo."—We cannot recommend any situation as suitable for commencing practice in or near London.

"M.D."—"On the Narcotic Properties of Indian Hemp," received.

"G. F., Greenwich."—Chloride of lime will answer the purpose very well.

"Assistant-Surgeon, R.N."—We are obliged for the offer, and we shall esteem the communication as strictly confidential.

"Socius."—It is composed principally of albumen.

"A General Practitioner, Birmingham."—The double qualification is necessary.

"Londinensis."—A candidate for the Fellowship in the Edinburgh College of Surgeons must write an Essay on some surgical subject, and then undergo three examinations:—1. On Anatomy and Surgery. 2. On Chemistry and Materia Medica. 3. On the Essay he has written.

"Bristolian."—It is not necessary for the pupil to be articled to a Licentiate of the London Apothecaries' Society.

"Junior."—In many cases of mental derangement, no alteration has been discovered in the brain or its membranes.

"M.D., Edin."—The London College would not prosecute; but none of the Licentiates or Fellows will meet in consultation any physician practising within the prescribed limits without the College diploma.

"Verax."—The communication wants originality.

"Amicus."—We are not acquainted with any statistics to which we can refer.

"Mr. Baynard" should address a note to the Secretary of the Apothecaries' Society.

"Galen Secundus."—The Report is now published.

"Alpha."—The fee for a year's attendance on the Surgical Practice of the Edinburgh Royal Infirmary is £5 7s. 6d.

"Mr. Hutchins."—The payment is one guinea per annum.

"Justitia."—The fee cannot be recovered, our Correspondent not being a Licentiate of the Apothecaries' Society.

"Spectator."—Yes.

"Anti-Critic" is right is in his conjecture.

"Miles," having been in practice prior to 1815, is not in danger of a prosecution.

"Quæsitor."—The two diseases are identical.

"An Articled Pupil."—The expenses of education will depend upon the student's habits, and the schools to which he enters.

"Mr. Couche"'s "Remarks on the Epidemic that visited Penzance in the Summer and Autumn of 1848," shall appear next week.

"Vindex" is thanked for his obliging communication.

"Dr. Turley, Worcester."—The letter shall appear next week.

"A. B."—Next week.

"Dr. Deverell, Dromore, Ireland."—We are sorry that we cannot give the required information.

"Mr. J. Dyer, Northampton."—When used medicinally.

"M. N."—The request shall be attended to.

"T. A., Regent's-park Crescent."—Under the circumstances, marriage would be advisable.

"An Aggrieved Manx."—1. One guinea. 2. No. 3. The giving evidence, a guinea; for the autopsy, with or without analysis, one guinea. 4. No. 5. No additional fee. 6. The county rate.

"Mr. G. B. Childs."—We think our Correspondent has has already sufficiently vindicated his character.

ORIGINAL LECTURES.

LECTURES ON FEVER.

BEING AN ATTEMPT TO DEVELOPE MORE DEFINITE VIEWS OF ITS NATURE AND TREATMENT, BY THE CONSIDERATION OF THE PHENOMENA, AS OBSERVED IN THE PRACTICE OF MEDICINE AND SURGERY; BEING A CONTINUATION OF "MEDICINE AND SURGERY ONE INDUCTIVE SCIENCE."

By GEO. MACILWAIN, F.R.C.S., Author of the above-mentioned Work, "Unity of the Body," "Tumors," &c., &c., &c.

LECTURE V.

Of the Common Characters of Fever.—Cautions required.—Why State of Skin not assumed as Common Character.—Why Morbid Appearances not.—Common Characters proposed.—Varying Influences and varying State of Body imply Varieties in Result.—In all Sciences, this common, when the Law nevertheless the same.—Phenomena of the Body, compounded of certain Influences ab extra and certain Powers within.

We have thus far taken a rapid view of the principal phenomena of fever; and although, in our survey, we have by no means included the whole of them, yet we hope that we have noticed such as are necessary to illustrate the different points of the subject, and to direct us to the path by which we shall most auspiciously proceed, in our endeavours to explore the true nature of fever. We now look round on the facts which we have collected, and try to discover whether, amidst the variety in the form of fever which they exemplify, there be not some features which are always present, some "common characters." Here we must remember our bundle of pens, and, whilst we omit no character which is *universally*, be careful not to set down *as such*, any which, however extensively, is but *partially* distributed. Further, if there be one of whose constant presence we are ever so little in doubt, it will be safer to omit it as a "common character;" because, although such omission increases our difficulty, is not so mischievous, as our adopting as a "general character" anything that is not so. Indeed, it is possible that we may omit something which, in our *opinion*, may be generally distributed, because we may not have time, space, or, if you will, power, to prove it as an incontestable fact. In this case, it is true, we work with diminished light, but, in the other, with illusory vision. The one may obscure the right path, the other will be sure to lead us in the wrong. Lest I should seem over-cautious, I will first remark on one or two points which you might be inclined to adopt as general characters, but which are either doubtful or objectionable, for reasons to which I will endeavour to direct your attention. However different the organs affected in fever may be in different cases, (and a very important fact this is, as, in due time, I shall endeavour to show,) still we observe, that the skin is almost *always* engaged. We hardly ever see fever, still less frequently see it relieved, without very beautifully marked and instructive varieties in the condition of this important organ. In regard to other organs, secretions may occur with benefit or with apparent disadvantage, according to their relations to the case. Secretion from the *skin* is almost always beneficial, and scarcely any patient recovers from any fever without some contemporaneous increase of secretion from this organ; still, I am not prepared to say, that it is absolutely and necessarily universal. Again, we should, to *prove* our position, require a lengthy argument, for which neither our plan nor our limits afford space, in order to demonstrate, that certain occurrences which take place *without* fever, occur under the same law as certain other facts observed in co-existence with fever. For it would, in fact, be no difficult matter to show, that cutaneous diseases, such as are usually without fever, occured in obedience to the same law as those accompanied by fever; that they were equally exponents of the effects of injurious influences; as also why they were not necessarily accompanied by fever, were it consistent with our space or our more immediate object so to do. But as it would, probably, encumber the argument with that which is not, I think, essential to it, we will leave the question of the state of the skin, so far as regards its being a "common character," in abeyance and proceed.

It might, at first, seem, that we ought to set down certain appearances, found after death, in the bodies of those who have died of fever, amongst the common characters of the disease; but, so far from this being safe or practicable, the attempt to do it involves a fallacy which has been productive of incalculable mischief.

The morbid appearances in fever, when viewed collectively, disclose, it is true, relations which greatly assist us in developing the nature of the disease; but these relations, having other important affinities, are greatly obscured, if we place the facts whence we deduce them in a category to which they do not belong. We know not whither one single false conclusion may mislead us—"*primus sapientiæ gradus est falsa intelligere*,"—and therefore it will be useful to take a little pains to clear up the matter. In the first place, I would observe that, as we (generally speaking) examine the human body, after some disturbance or disease, it is not always easy to separate appearances resulting from the disease, fever, from those antecedent thereto, or arising from other causes; still more difficult is it to separate those which exerted a destructive power from those which were indicative of conservative *tendency*. 2ndly. There are a vast number of morbid appearances constantly observed after *fever*, which are also observed when no fever has been present; and, indeed, for my part, I know not one that can *with safety* be asserted to be pathognomic, or distinctive, of what is called fever. It is true that, if a man should assert that, after all cases of *fatal* fever, he had found certain appearances indicative of disordered actions, it is probable that he would be correct, because, however varied they might have been, in all probability some of them would have been unusual. But if he should now say, *therefore*, these are the appearances in the *living* body, labouring under fever, or this is the seat of the disease, or, again, these were the appearances in those who *recovered*, nothing is more certain than that it would be a pure assumption. Men might differ as to the truth of the inference drawn; one might say he is probably right; another, that "it is very doubtful;" and a third might think him certainly wrong; but all *must* agree, that his conclusion was assumed; for, though we should admit (which the general evidence afforded by morbid appearances forbid us to do) that the appearances he described were universal even in those *dying* of fever, still his argument as proven would be no better. Syllogistically, it would be something like this:—All bodies *dying* of fever exhibit such and such morbid appearances, A. B. (who is *living*) laboured under fever; therefore, his body, during the fever, exhibited such and such appearances; which, of course, would be absurd. Again, if we admit that all who die of fever exhibit appearances of *disordered actions*,—a thing not, perhaps, wholly without exception,—we still gain nothing in addition to the fact which we have already learned from the more clear and impressive evidence afforded by the living body. You will say, perhaps, "But, if I examine the body, I can find out the seat of the disease; I can see the lesions to which it has given rise; and then, in another case, I can direct my treatment accordingly." Well, you may have been told all this; you are not satisfied that you would be drawing an illegitimate conclusion. Well, let me beg of you to pause, and to think a little. How many thousand bodies do you suppose have been examined in fever, and in what respect have you improved the treatment of fever since the time of Hippocrates? It is not meant by this question to insinuate that you have not done so in any degree; but it *is* inquired, in *what respect* have you done so, and from *what sources* your improvements have arisen? Have they arisen from facts observed on the living body, from facts external to, but influencing the living, or from the phenomena in the dead? These are questions of some import, if we are to examine the question logically, as well as physiologically, which we must do, if we are to get at the truth and its important bearings on practice. Well, you reply, "All this is very well, and technically the assumption, as you contend, can be received only as such; but this is refining; the probability is *so great*, that, for practical purposes, it is beneficially available. If this, indeed, were the case, we might well pass over the assumption. But is it so? Let us see. You have found, then, in certain cases, vascularity of the mucous surfaces of the trachea and bronchi, or of the membranes of the brain, or of the substance of the organ, of that of the alimentary canal, or of all of them. You have enlargement of the mucous follicles of some parts, say the lower portion of the ilium; nay, you have ulceration, or even sloughing, to boot. Now, if you reflect awhile, I think it will occur to you to consider, whether experience does not teach, that not one of these may exist in another case; any one or more may be present, or absent; they may be infinitely diversified,—they may occur (rarely it may be) without fever, or fever without them. Are you sure that many of them have no more special relation to *fever* than as exponents of exhausted or failing powers? We shall find that there is no necessity here for any special pleading; we shall find it no difficult matter to connect all these appearances with laws and actions of a much more general nature than can be represented by any *fever* merely,—laws which operate in a multitude of forms, of which fever, however important, constitutes only *one* series of illustrations. Having said this much in relation to the assumption, and the insecurity of the guidance it would offer, let us examine the kind of mischief which may arise from it. We must return, then, to the dead body. We will say, then, that you have found vascularity of the brain, or of the membranes, or both, and effusion; regarding the important functions of the brain, and the relation it holds to all other organs, you say, "here is the great mischief,"—here is inflammation. You may, or may not, have made up your mind as to what inflammation is; but we will suppose that you entertain what I suppose to be the prevalent, but, in many points of view, erroneous impressions, that there is too much vascular action,—that there is danger of effusion of some kind or other; both of which are true enough—and that the best, or, as you may have been taught, the only certain mode of preventing it, is to bleed; you may, or may not, have reflected, that it is very possible to have too much blood in the part, and *too little* in the *body*, and many other things which I have noticed in the first volume, in bringing out the "Law of Inflammation;" but you are inclined to refer the cause of the disturbance to the vascularity, and in your next case you bleed. We will suppose, with success; that your patient recovers, and that the facts induced you to date the commencement of his recovery from the time when you bled him. Well, you have another case not quite so flattering; the symptoms were the same, but your patient died; and he sunk so quickly after the bleeding, that you have some misgivings as to whether his death might not have been accelerated by it. Well, the next case you have is well marked as to the *cerebral* disturbance; your last case you regarded as having something exceptional; but still you are prudent and cautious; you will not this time bleed generally, as it is termed, but by leeches, which are liberally applied to some part of the head; but this patient sinks, and rather, as you think, more quickly after the bleeding than the other. You are inclined to think still, perhaps, that, had he been bled earlier things would have turned out differently, but still you have misgivings. Well, these things may be repeated; you may, nevertheless, retain the views which you had adopted: you determine that these have been exceptional cases, and that you are right in the main; or, disgusted with such results, and assuming again (as is too common in human affairs), that right is the reverse of wrong, you determine not again to bleed in fever. Another man goes to work, and reasons in the same manner in regard to the mucous membrane of the bowels as you have done in reference to the brain. You, probably, both give up the thing in despair; you determine that there is something inscrutable in fever; you content yourself by saying that there is some mystery you can not understand, some complication you cannot

fold. That may be too, but the investigation you have made is no proof of it. You have not proceeded with the requisite caution; you have assumed that which you ought to have proved; you have done that which, *in any other branch of science*, would have led you into similar confusion. Assumptions are at all times mischievous things; in matters of life and death they become deadly. Those who know much about the history of fever will estimate the necessity of the caution I am impressing; that I am merely sketching what has really happened, and that intellects of the highest order have had the practical value of much truthful and accurate observation neutralised by the neglect of the very cautious, I am impressing, in fact, inattention to the ordinary rules of right reasoning. I say, therefore, we must positively, not *knowingly*, assume *anything*; and this it is which withholds me from including any appearances found in the bodies of those who have died of fever amongst the common characters of the disorder in the living. As regards the construction put on the vascularity, and the inference that bleeding was the remedy, I have mentioned in the first volume that the heat, redness, &c., usually mentioned as indicating inflammation, are not essential thereto. We all know, too, that great vascularity is not necessarily inflammation; and, lastly, that when vascularity does occur, it may, according *to the state* in which it takes place and the *circumstances accompanying it*, be, so far from indicating power, it may be the most unequivocal proof of the absence of it. Now, I would not lead you to suppose for *a moment that I think lightly of the necessity of observing appearances in the dead.* I am only desirous that you should avoid wresting them to conclusions which they cannot justify. Comprehensively regarded, they are very instructive. Studied as abstractions, and as explaining directly with the symptoms the cause of the disease, they constitute one example of reasoning from the senses, which has done more to create and disseminate error than any one thing in the whole range of what has been called medical philosophy. Before we quit the subject, however, we may remark, that, as regards the visible alterations in fever, we observe, *ceteris paribus*, a very interesting relation between the quality or kind of the morbid actions, the surfaces they occupy, and the existing *powers* of the individual, and exactly of the same kind as we observe in all other diseases; actions on the surface, *cæteris paribus*, as they are restricted there, imply power just in proportion to their nature, that is, as they are circumscribed or diffused, suppurative or sloughy, and, again, as *the extension inwards*; whether this be the creeping of continuous surface, that is to the mucous membranes, or to the deeper structures, as in the sloughing of confluent small pox or plague. No matter whether you take cases in which the phenomena of the skin occur in the form of pimple, pustule, bubo, carbuncle, rash, efflorescence, vibex, petechiæ, or you take cases in which the appearances are chiefly seen on the mucous surface, or again on the internal organs, you will always, I think, perceive that the actions which are *seen* are beautiful exponents of the *power* characterising those which are *not seen*, and that those cases in which fever is well developed, without any special or new actions on the skin are, *cæteris varibus*, intermediate between those which are most *safe* and those *which are most fatal.* You cannot, I think, help being struck with the universal relief that accompanies the eruption of the exanthemata, the increasing gravity of the case as the affection of the skin extends to, still more if it be replaced by that of the mucous membranes, as has been already perhaps sufficiently suggested when we were considering the morbid appearances as a whole.

Now, as to what may be the common character of fever. In the first place, it is very evident that some one or more of the functions of the body are always disturbed; and whether this be expressed by these terms, or by those used by the messenger when he tells the physician that his patient "is very bad," but that he does not know what is the "matter with him," it really conveys about as much as can be really known by either, without further investigation; but certain it is, that the fact which thus lies luminously evident on the surface is really, if not the only, common character in fevers, at least one which, if carefully traced, forms the best clue in guiding us to discover in what fever really consists. As a corollary on this, it should be remarked, that there is no one function the disorder of which can be proved to be, *in all cases, specially* connected with fever, but that the disturbance varies very much in different fevers and in different cases in fevers of the same form. We have no data that I know of justifying us in assuming that fever ever subsides, but sequently, or coincidentally with the occurrence of some secretion, *commonly so called*, or some new or additional action of vessels. Another fact observable in all fevers is, that no fever of any kind can be communicated with *unfailing* certainty from any given individual, or any other given individual, and that this applies to fevers of all kinds, however infectious their nature. That even the small pox is not an absolute exception to this general fact, even though the virus may be brought, as is usually done by inoculation, in actual contact with the blood. These, then, are the few general characters, through a more cautious consideration of which we hope to arrive at some clear and definite idea of the nature, and what is still more important, the treatment of fever.

1. That in all fevers one or more functions of the body are in a disturbed condition.

2. In no form of fever is it necessary that, however prominent the disturbance of this or that organ may be, that the functions should be disturbed in the same manner.

3. That no fever subsides but as a sequence or coincidence with some secretion,* or additional action of vessels.

4. No fever can with certainty be communicated from any one given individual to any other given individual.

DISORDER OF FUNCTION.

In the first place, we must remark, that, although it be true enough that the functions of the body are disordered in fever, yet it does not necessarily nor even commonly happen, that fever is produced by *every* disorder of function. The stomach may digest badly; the liver may be torpid, nay, very possibly secrete no bile; or the bowels may be inactive; nay, the skin or any other organ may be performing its functions more or less imperfectly; and yet there may be no fever.

If, then, disturbances of function may be attended by results so different as in one case to produce fever, and in another to be without any, it follows, of course, that, under different circumstances, the functions are disturbed, but in a very different manner. Disturbance of course implies the presence of some injurious influence: now, we know that these are very multiform in kind; and that the condition of the body varies exceedingly. We might, indeed, be certain, without even this knowledge, that if an effect be produced on any body or thing, by any influence *ab extra*, and that the effect varies, that it must result from some difference in the influence *ab extra*, or in the body to which such is applied, or from both in conjunction. These are self-evident propositions.

A sort of corollary on this, though perhaps not at a moment so self-evident, but one which it is necessary to bear in mind, is, that that which we call an *effect* of an injurious influence on the body is compounded of two forces, as I may call them: the one represented by the influence from without, and the other from the power of the body; what we call the effect being a *tertium quid.*

This is a principle which we must not lose sight of, because it is universal. We say, an acid acts on an alkali; but the alkali may be, just as truly, said to act on it—the result depends on relations belonging to both. In the body, we have most familiar instances of the same thing; such as slight wounds being followed only by healing processes, and nothing like general indisposition; being also, in other instances, followed by a number of serious, dangerous, and apparently complicated phenomena, and even death; and all this difference in cases where there is not the slightest pfetence or possibility for attributing the difference to the instrument or the kind of injury,—which, as you know, may sometimes be the case. In small pox, you have seen how true the same thing is. Well, then, I say, the phenomena characterising the disorders of the functions of the body are represented by two forces: the one, an injurious influence, no matter whether *ab extra* or generated in the body; the other, a force within the body, which enables the body to deal with it after certain fixed laws, subject, indeed, like all other laws of nature, to interference, but always in their essential nature the same.

Now, if injurious influences are multiplied in their form and character,—which, as I have said, we know them to be,—and if the body be composed, as we know it to be, of a number of different organs, which, however they may contribute to one beautiful result, (the life of the being,) are very different as regards the functions assigned them; and if, again, as we all know, any of these organs may be more or less disordered,—we at once see the elements of a great diversity of phenomena, an infinite variety of result, however identical the law in obedience to which they occur.

There is, in fact, no character in nature which so strongly impresses on us the sensation of boundless power, as the simplicity of the means by which such a number of apparently diversified results are made to arrange themselves under the same law; these *diversities* being usually dependent on some variety of condition, some element of interference, which, until it be explained, just, if I may dare say so, discoverably, obscures from us the law we seek.

Nothing can be more beautifully adapted than all this is to the extent and quality of our intellectual powers. If we investigate with humility and diligence, we invariably obtain some progress. Our zeal thus becomes renewed, our hopes animated, and we are sustained by a growing conviction, that a harmony so perfect exists between the laws of nature which relate to us, and the powers on which are conferred the high privilege of investigating them, that there is nothing that is really good for us to know but is within the reach of our measured capacities. Almost every step in science involves the reference of more phenomena to some law previously known. We are, therefore, led to anticipate, that, in the laws governing the human body, we should meet with so many slight variations in the circumstances as to obtain but seldom an *apparent*, however real the identity of result. We never do this in regard to anything, however closely it may be within the control of observation. If I say, for example, water boils at 212°, there are, as you know, conditions which, if altered, may make it boil at many degrees less, or render necessary a much higher temperature. Well, then, it boils at 212°, provided there be no greater interference than a pressure of so many pounds; in fact, the ordinary pressure of the atmosphere. If I took light or sound, I could state similar conditions modifying the results of their respective laws. Even as regards gravitation itself, it is very easy to institute conditions in which its influence is *apparently* overcome. I do not apologize for this digression. It is necessary to recollect these things before we charge on medical science, as a *special* difficulty, that from which no science whatever is free, and which, *as regards its speciality*, exists only in our own misconceptions.

If, then, we would understand why the functions are disordered in so different a manner in different cases, as a step to understand more definitely the disorder, fever, we must examine the action of injurious influences generally; we shall also be obliged generally to revert to the varying state of the body, and from the two try to gather instruction on this confessedly difficult subject.

Though the body, at first sight, seems a complicated organization, it is easy to perceive that its existence depends on taking in and rejecting certain forms of matter of which the elements, though re-

* By secretion here, is meant equally increase of some natural secretion, the occurrence of some other, as, serum, pus, the new depositions required for repairing mechanical injuries, and so on.

arranged, are ultimately the same. That the various organs through which all this is effected have, as the rule, distinct offices assigned to them, with this beautiful condition annexed, that, under certain circumstances, any one organ may execute the office of any other. That, although the usual concurrence of certain functions seldom render any extreme application of this convertibility of function necessary, yet the provision it implies is, during health, constantly present; and we see the necessity for a provision thus ample, when we recollect, that nothing intended to be rejected from the body *can be safely retained.*

We are parting with large quantities of carbonic acid, by the lungs and skin, every hour; yet, if we attempt to breathe it, the windpipe refuses to give it admission. If the urine be brought in contact with any surface not specially organised to receive it, destructive consequences are immediately produced. The suppression of the secretion is immediately and highly dangerous; if unrelieved necessarily fatal; and so of every other form of excretion.

Now, the body is found to exist for many years, although surrounded by variously-formed injurious influences. Some of these are of so refined a nature, that we have no means of ascertaining beforehand that they are present; we are often left to infer it from their effects. In endeavouring, therefore, to get an insight into the mode in which, under various circumstances, the body deals with injurious influences, we must select some with which we are more familiar, and which are constantly open to our observation.

Well, cold and heat are injurious influences; so are alcohol, opium, prussic acid, ipecacuanha, jalap, aloes; so are scratches, cuts, violent blows, compound fractures. Then, again, certain passions, as anger, grief, and anything retained within the body which ought to be ejected. Let us examine, then, the phenomena to which some of them give rise under different intensities, and in different states of body.

A COURSE

OF

LECTURES ON PUBLIC HYGIENE

DELIVERED AT THE FACULTY OF MEDICINE, PARIS.

BY

M. HIPPOLYTE ROYER COLLARD.

LECTURE III.

CLASSIFICATIONS AND METHODS OF HYGIENE.

(Continued.)

GENTLEMEN,—In my last Lecture, I gave you the outlines of the principal systems of classification that have been proposed by the leading hygienists. We will now proceed to examine these different systems, and, finally, select for our guidance that one which shall appear the best adapted to facilitate the study of the science.

These systems are all based, as we have seen, upon one and the same principle,—viz.; that, to know the conditions which maintain or disturb health, the hygienist has to study three points:—

1. The organism, which constitutes the *subject of hygiene.*

2. The modifying agents or influences with which the organism is incessantly in direct or indirect contact and relation (the *object or matter of hygiene*).

3. The effects which result in the living body from the relations of the subject with the object, of man with universal nature.

The principle of the classification is, accordingly, invariably the same: it is simply in the mode of its application that the authors of the several systems differ.

Some hygienists (Galen, Boerhaave, Hallé, Bérard) base their classification upon the diversity of the natural agents which modify the organism. Hence the division in circumfusa, applicata, &c., &c.

Others mentally divide the living organism in as many chapters as they observe different functions in it, and study successively the divers modifications which each of these functions (respiration, digestion, absorption, exhalation, &c., &c.,) suffer by the influence of the external agents.

Now, at first sight, the second process,—that followed by M. Londe, and which is called the *physiological system of hygienic classification,*—may appear the more simple of the two, and the better adapted to facilitate the study of the science.

Several considerations might be adduced in support of this mode of classification. Thus, for instance, it is undeniable, that physicians are accustomed to, and familiar with, this division of the functions. They have seen it applied to the anatomical science by Bichat. It has aided them in the acquisition of the science of physiology, and has also apparently served to facilitate the study of pathology.

No wonder, then, that the physiological system of hygienic classification should have been received by many with great favour, and that the division in circumfusa, applicata, &c., &c., should have been rejected by them as obsolete.

A little reflection, however, will suffice to show, that this method of classification cannot really stand the test of a searching examination. This attempted cutting up of the organism into pieces,—this division of health into small compartments,—are wholly inadmissible. Nay, I will even go so far to maintain, that this division of the functions, which is now so generally taught in our medical schools, and advocated by the leading writers on the science of medicine, is objectionable, even in physiology. The fact is, we have no true physiology in France, and this is owing, in a great measure, to this unfortunate division of the functions which is so well adapted to satisfy the indolent and the shallow. The student, who proceeds upon this plan, may, undoubtedly, acquire some insight into the functions of respiration, of circulation, of digestion, of secretion; but the aggregate of all these functions, life itself, will still remain unknown to him; he may obtain some knowledge of the phenomena of life, but he will learn nothing of their order, connexion, reciprocal relations; and he will, consequently, be unable to comprehend their true signification. Tell the physician of the present day, that respiration is simply a part of digestion; that the kidneys are simply lungs charged to eliminate hydrogen and nitrogen, in form of urine, in the same way as the lungs, properly so called, eliminate hydrogen and carbon in form of water and carbonic acid; tell them that it is by no means a matter of indifference whether the description of the functions be commenced by that of digestion or by that of respiration,—most of them will hardly comprehend what you mean.

Then, again, in pathology, the classification of diseases in the order of the functions, and according to the divers organs which are respectively the seat of these functions, is by no means free from objection. Whilst we endeavour to describe the disease locally, and within the narrow and circumscribed limits of the organ which appears principally affected, we frequently lose sight of the morbid unity,—in other words, of the general character that actually constitutes the disease. Yet, here the method does not positively run counter to the nature of things: a morbidly-affected organ becomes, in a measure, a centre of attraction to which the whole of the vital forces are directed, to the prejudice of the other parts of the organism; if the morbid alteration of the affected organ does not precisely in itself constitute the disease, yet it may be said, at all events, to form the starting point from which the disease sets out to invade the organism. But, in hygiene, this classification by functions is positively absurd,—for health forms invariably an indivisible whole. Suppose, for an instant, you adopt this classification,—under what head are you to treat of the action of the air upon the health? M. Londe treats this question in the article "*Respiration;*" but is the air in contact and relation with the lungs alone? And is it not just as irrational to treat of heat under the heads "*absorption*" and "*cutaneous exhalation,*"—of light, under the head "*vision?*" Verily, I know nothing more antiphysiological than this physiological method.

The organism, then, cannot, with propriety, be divided thus into fractions; whereas, on the other hand, it is natural enough to classify the hygienic agents or influences.

Unquestionably, there exists also an intimate correlation between these agents; the system of the world may also, in a measure, be regarded as an immense organism; and the forces and phenomena of nature are, strictly speaking, as closely and inseparably connected with each other, as are the functions and phenomena in the living body. Nay, who can tell, but that these forces and phenomena, heat, light, electricity, atmospheric pressure, dryness or moisture, &c. &c., may not be actually identical?

Still, the union between the external agents appears less indissoluble than that between the vital functions; at all events, the mind can more readily conceive the practicability of a division of the ormer.

All weighed and considered, then, I think the principle of the ancient method (that of Galen, Boerhaave, &c.) preferable to the one upon which the modern (the physiological) system of hygienic classification is based. I have determined, therefore, to adopt the former method, and to examine successively, one by one, the divers agents that exercise a modifying influence upon the health of man. I have not arrived at this decision without the maturest consideration. I was most anxious to establish some perfectly new system of classification; but I renounced that project at last, finding that I could net well devise a more simple and rational one than that followed by my predecessors.

We will accordingly proceed now to arrange under a few principal heads the divers modifying influences or agents.

I have told you already that M. Hallé has divided these influences into—

Circumfusa.
Applicata.
Ingesta.
Excreta.
Gesta.
Percepta.

Now, is this division a proper one? In my opinion, it is liable to more than one objection.

In the first place, the first four classes may be conveniently reduced to two. The *circumfusa* comprise all the atmospheric influences; the *applicata* embrace clothing, baths, frictions, unctions, &c. &c. But who does not see that clothing, baths, &c., are simply modifications of the atmosphere which surrounds the body? It is in this article on *circumfusa* that we treat of cold and heat. Should we not treat in the same article also of the means of combating the respective influences of cold and heat upon the body, and consequently of clothing? On the other hand, is not the air more closely applied still to the surface of our skin than our vestments are? The physiological action of the water-, hot air-, or steam-bath, in what does it differ, except in degree, from that exercised upon our body by an atmosphere more or less charged with aqueous vapour?

I do not see any necessity, then, for distinguishing the *circumfusa* from the *applicata.*

The same remark applies to the *excreta.* M. Hallé distinguishes *natural* and *artificial excretions.* But some of the natural excretions, the cutaneous exhalation, for instance, perspiration—the aqueous exhalation from the pulmonary surface—the urine even—clearly vary with the atmospheric influences; their hygienic history is accordingly most intimately connected with that of the *circumfusa.* The alvine evacuations, on the other hand, are partly regulated by the alimentation; the chapter on the *ingesta* is accordingly the proper place to treat of them.

Among the artificial excretions, M. Hallé classes all such purgatives and other medicinal agents as are given for the purpose of guarding the organism against the advent of disease. He treats afterwards again of hygienic medication in a separate article, in the chapter on *ingesta.*

And where does Hallé place the facts relative to the exercise of the generative functions, the circumstances which precede copulation, the act of copulation itself, the consequences of this act, pregnancy, childbirth, the nursing and tending of the new-born child, lactation, &c., &c.? These most important questions form, in his classification, simply a subdivision of the *excreta*.

Several other objections might be urged against the system of classification proposed by M. Hallé. On the other hand, however, with all its defects, this system is so simple and clear, that it would be unwise indeed to reject it altogether. We will, therefore, retain it here, with some modification.

Upon attentive examination of the divers agents that act upon the living body, I find that they may be conveniently distributed under the following five heads:—

1. Atmosphere.

This comprises Hallé's circumfusa and applicata.

2. Alimentation.

This comprises all articles of food and drink, and the condiments.

3. Exercise.

This embraces every mode of exercise: active exercises, passive exercises, mixed exercises, gymnastics, the development of all organs and functions by the aid of motion, the hygiene of the vocal and respiratory organs in certain professions, the hygienic history of sleep and waking, &c. &c.

4. Intellectual and Moral Phenomena, and Phenomena of the Senses.

This class embraces the hygiene of the sensations in general, and of every individual sense in particular, the affections and passions, the workings of the mind,—in one word, all the influences which the body and mind of man reciprocally exercise upon each other.

5. Generative Functions.

This class comprises everything relating to the special influence of sex, the physical education of the two sexes, the proper direction to be given to the natural development of the life of reproduction, from the period of puberty to the time at which the exercise of the generative functions ceases. This class includes also the hygiene of pregnancy and delivery, the hygiene of the new-born child, of the mother in childbed, of the nurse, lactation. The final cessation of the menses comes also under this head.

You see, Gentlemen, this division is perfectly simple, and, I may add, perfectly physiological; since, without fractioning life and health into a multitude of distinct operations, it respects, nevertheless, the physiologist's division of the vital functions into three distinct groups, viz.:—

Function of nutrition,
,, relation,
,, reproduction.

Now, as I am firmly convinced that *names*, properly selected and judiciously applied, aid the mind most materially in the comprehension and retention of *ideas*, I think it will be useful to give to every one of these five classes a special name, borrowed from the nomenclature in general use. I will accordingly call the agents comprised—

In the first class: *Circumfusa*
In the second class: *Ingesta*;
In the third class: *Acta* or *gesta*;
In the fourth class: *Percepta*;
In the fifth class: *Genitalia*.

The last of these terms (*Genitalia*) is borrowed from M. Bérard's (of Montpellier) system of classification.

There is not a single question of any importance in the province of hygiene that will not readily find a place in one of these five classes. And here I must repeat what I have already told you in my last lecture, viz., that every individual question, no matter which, that may happen to present itself to the hygienist, is to be treated by him under two different and successive points of view, viz.:—

1. Under the *hygienomic point of view*, the hygienist has to examine—

The nature of the modifying agent.

The manner in which this agent acts upon inorganic bodies, upon plants, upon animals, upon man in his physical and in his moral capacity.

How the action of this agent upon man varies with the age, sex, temperament, &c., &c., of the individual under its influence.

How it varies with the manner in which the agent is applied.

2. Under the *hygiotechnic point of view*, the hygienist has to examine and ascertain—

How the relation of the subject with the modifying agent ought to be regulated, with respect to the manner in which the agent may happen to be applied, and also with regard to the age, sex, temperament, &c., &c., of the subject.

After this, the hygienist has still to examine, whether and in what point or points the question before him may be made to bear upon public hygiene, or upon social hygiene.

Such, gentlemen, is the plan which I propose to follow.

But, this plan embraces only the special part of hygiene. Now, I deem it indispensable that this part should be preceded by an exposition of what is called the generalities of the science.

Thus, in Hallé's lectures, the hygienic history of the circumfusa, applicata, &c., was preceded by an introduction in which he discussed the natural history of man in the different climates; in other terms, the physical and medical geography. After which, the first part of his course was devoted to the study of man, considered as the subject of hygiene. This part he subdivided into two sections, viz.:—

1. The study of man in his collective capacity, or in his affinities.

2. The study of man in his individual capacity, or in his differences (age, sex, temperament, habits, profession, &c. &c.)

M. Bérard (of Montpellier,) also gives in his programme the plan of a first part, which he calls *introduction*, and that of a second part, which he calls *general considerations*. The details of this second part have been given already in my last lecture.

And, finally, to appeal to the authority of a work with which you are probably more familiar, look at Bichat's "General Anatomy." In this Work we find the anatomy of the tissues preceded by a long and admirable chapter, (headed "*General Considerations*,") in which the distinguished author gives us his ideas on life, living beings, the vital properties, solids and fluids, the organisation of animals, functions and diseases; and another chapter which treats of the system, apparatus, nutrition, and the nutritive substances.

A similar introduction is indispensable in hygiene. In this science also, a first chapter ought to be devoted to the exposition of certain general considerations on life, health, and the different conditions in which the latter presents itself to the mind of the hygienist. He who would properly study the influences which modify man in the exercise of his vital functions, must, in the first place, acquire precise notions on man, considered as the subject of hygiene.

I divide these general considerations into two principal sections, viz.:—

Section I.—On Life.

Section II.—On Health.

This section I subdivide again into three chapters:—

1. Definition of health; its essential characters; signs; general laws, degrees, and forms.

2. General considerations on the regimen, or on the most proper direction of the hygienic agents, with a view to preserve the health, and to improve the general condition of the organism.

3. General considerations on public hygiene.

To sum up the whole, we have accordingly:—

Introduction.

On hygiene in general.

Its double end { Preservation of health. / Improvement of the organism.

Its nature, both science and art:
Hygienomy.
Hygiotechnic.

Its divers definitions.

Its relations with the other branches of medicine.

Different branches of Hygiene, viz.:—
Private Hygiene.
Comparative hygiene.
Intellectual and moral hygiene.
Public hygiene.
Social hygiene.

Importance and utility of hygiene in the actual state of society.

Relations which hygiene establishes between the physician and society.

General method to be followed in the study of hygiene.

Classifications proposed by the different authors:
Galen.
Venel.
Boerhaave.
Hallé.
Bérard.
Londe.

Advantages and defects of these classifications.

Classification finally adopted.

Part I.—General Hygiene.

1. On life, considered as resulting from the relations of man with the external world.

2. On health, the most perfect form of life.
Definition of health.
Its essential character.
Signs which denote it:
Absolute or physiological health.
Relative or hygienic health.
Its forms:—
Ages.
Sexes.
Temperaments.
Constitutions.
Hereditary dispositions.
Climate.
Habits and professions, &c.
Its degrees:—
Infirmities.
Cachexies.
Morbid tendency.
Convalescence.

3. On the modifying agents.

4. General considerations on the regimen, or on the hygienic direction of the modifying agents:—
Selection . . . . Measure.
Mode of application . . { Order. / Duration.
Rules varying with { The forms / The degrees } of health.

5. General considerations on Public hygiene.

Part II.—Special Hygiene.

1. Functions of Nutrition.

First Class.—*Atmosphere*, or *circumfusa*, comprising both the *circumfusa* and *applicata* of Hallé.

Second Class.—*Alimentation*, or ingesta, comprising all articles of food and drink, and the condiments.

2. Functions of Relation.

Third Class.—*Exercise*, or *Gesta*, comprising the exercise of the body in general, (active, passive, or mixed,) those of the divers individual organs or systems, sleep and waking, gymnastics, orthopedia, &c., &c.

Forth Class.—*Intellectual and moral phenomena, and phenomena of the senses*, or *percepta*, comprising the sensations in general, and every individual sense in particular, the passions and affections, the workings of the mind and the operations of the intellect, the relations between body and mind.

III.—Functions of Reproduction.

Fifth Class.—*Generative functions, or genitalia*, comprising the hygienic history of the two sexes, considered relatively to the special form of their health; the education respectively adapted for the one or the other sex; puberty, and the incidents which accompany it; copulation; fecundity; production of one sex or of the other; pregnancy; delivery; child-bed; different modes of lactation, natural, artificial, or mixed, and their respective influence upon the health of the mother, the child,

and the nurse; weaning; final cessation of the menses; critical age.

At the termination of every chapter or paragraph, we shall examine the several questions of public hygiene that may be connected with it. Thus, for instance, at the end of the chapter on the several ages in general, and on childhood in particular, we shall discuss successively the following questions:—

Births, and the relative mortality of children in the several periods of the first age of childhood.

Foundlings.

Infant asylums and hospitals.

Registration-offices for wet-nurses.

Education of the children of the two sexes.

Labour of children in factories, &c.

At the end of the chapter on the sense of sight, we shall discuss the question of lighting, the education of the youthful blind, the asylums for the blind, &c., &c.

ORIGINAL CONTRIBUTIONS.

ON ELECTRO-GALVANISM FOR THE CURE OF NEURALGIC AFFECTIONS, ARISING AFTER ACCIDENTS, AND ITS UTILITY IN OTHER CASES.

By E. W. TUSON, F.R.S.

The benefit resulting from a proper and judicious application of electro-galvanism, is not sufficiently known or duly appreciated; the subject is of much importance, not only to the Medical Profession but to the public at large, as it tends to relieve the sufferings of the afflicted, and accomplishes a cure, sometimes even under the most distressing circumstances.

The late Mr. Carpue, in his Lectures, many years since, remarked, that when mercury produced no effect upon the system, and even after all other remedies failed to have any influence on disease, that electricity would produce the most powerful and beneficial result, promoting absorption by its influence and power over the nervous system. This application has been repeatedly employed by me with considerable success, not only when mercury failed to influence the system, but where other medicinal agents produced no effect, more particularly iodine and its preparations.

Electro-galvanism may be made to pervade the very centre of the body, to operate on the most distant and remote organs from the surface of the frame, to influence the nervous system, increasing its power, its energy, its healthy function, removing any obstruction that may have impeded, this nervous influence, and thus at once restoring the parts to health and strength. Can any one doubt that electricity acts on the nervous system? Can we doubt that the functions of the frame depend upon the actions of the nerves and influence of the brain? Can we doubt that diseased action often results from the nerves not having sufficient power to produce or excite the organ to perform its functions, which sometimes is essential to health! Do we not know that it is through the nervous agency that secretion takes place? And do we not know, that certain nerves have particular influence over the parts they are destined to supply? Has not experience taught us, that, if certain nerves are paralysed, death immediately follows? Have not experiments taught us, that, if certain nerves are divided, the loss of power or sensation becomes immediately destroyed? And can we, then, doubt the influence of the nervous system upon the frame, producing by its action, by its degree of energy, a certain effect upon the constitution, and a certain temperament of the system? We have, in electro-galvanism, an agent to act immediately and directly upon the nerves of a part, the nerves of any organ, or upon the whole nervous system, if we please, producing a particular effect, according to its necessity, to its application. The restorative power of the animal economy derives its influence from the nervous system; and, where the nerves or spinal marrow become deranged by accidents or other causes, a healthy action will not take place. To exemplify this: a patient came under my care, having had the sides of a drain fall in upon him while at work, causing a dislocation of the right shoulder, a fracture of the eleventh dorsal vertebra, and a broken leg. He lived about thirty days, and his body was examined after death. The shoulder-joint presented the usual appearance of a healthy restoration of the injured parts, but not so the legs; here there was not the slightest appearance of any restorative power of nature towards a cure; both legs were paralysed, so that they had completely lost their nervous action, and no appearance of union of the fracture was to be seen, no doubt from the loss of nervous power. Upon reflecting on the nature of this case, we perceive, that it requires nervus energy to restore a healthy action; and may not parts or organs sink into a sluggish state, and even assume an unhealthy condition, producing various results. From a want of this nervous power, such cases can only be benefitted, first, by clearly ascertaining the cause, and then using our best exertions to remove it, if arising from want of nervous influence. Nature, in time, or an agent that acts upon that system, can alone restore a due performance of this most important function of the human body. If we examine the course of some of the nerves, we observe that they directly run across or along a main artery. We see an example of this kind in the recurrent branch of the nervus vagus, in the carotid plexus, in the axillary plexus, in the nerves of the arm; we also see the nerves pierce or pass through the divisions of muscles, and we observe the most delicate filaments of nerves pass around a large vessel, for the reason that the pulsation of the artery may, by its continual action, and that the motion of the muscles, may, by their pressure, produce some degree of excitement in the nerves, so as to stimulate them to perform their action and their function in the animal economy. Deductions may frequently be drawn from some observations or circumstances that present themselves in the course of our practice, and lead to some useful and beneficial results. A gentleman residing about eleven miles from town, at Mitcham, had a very severe compound and comminuted fracture of the leg, which united after the lapse of nearly three months. When fully ossified, the leg was useless; he had no feeling in the toes, and when he attempted to place his foot to the ground, it caused him so much pain that he would not even attempt it. He could procure no rest, night or day, from the pain in the ancle, foot, and toes. Some surgeons seeing him, said he had better have the leg amputated, and, so great were his sufferings, that he would have readily consented. He called upon me; and, as I had seen relief afforded in a mitigated case of the same nature, I employed the electro-galvanic spark along the course of the nerves sent off from the popliteal space with the utmost benefit and greatest success. Upon the third application of this agent, he was enabled to walk across the room, and when he returned to the country, the same day, he threw away the crutches, and walked across the garden. The leg had acquired its power, its feeling, and had entirely lost the pain, and he remains quite well, being able to walk, and ride so as to follow the foxhounds. In this case, nature had united a severe fracture, and at the end of this time, might not a want of nervous energy, caused by inaction, and want of muscular motion, have prevented him from using the leg, or might not nature have consumed an increased quantity of nervous power in the restoration of the injured parts, so that a deficiency existed in the system, which was incapable of restoring the part to its former state. Where nature is complete, and the anatomical system abounds with the most beautiful structure; where every part is perfection, it is difficult to suppose that a defect should exist. We may naturally inquire, What caused the pain, the want of sensation, the want of action in the leg? No doubt the want of nervous activity, the want of nervous power: were the nerves implicated or pressed upon by the ossific matter? The result proved that this was not the case. The want of power did not occur from inflammation, but was the result of the want of that harmonious action existing between the nerves of the leg and foot; and the important discovery of Dr. Marshall Hall enables us to account for the pain this patient suffered. Reflexed function produced the sufferings and inconvenience experienced, relieved by the action of electro-galvanism upon the nervous system. Cases of a somewhat similar nature daily occur in the metropolitan hospitals, and patients are months, sometimes even a longer period, before they regain that nervous power in the limb which previously existed. Time restores a degree of nervous energy, and, we have been too free in recommending the patients to have the parts pumped upon, and the employment of friction. But we here find an agent that in most cases will restore parts in the course of a few days, by a complete re-union of the nervous system, producing both power and sensation in the part; and I can further illustrate this by the following case:—A poor man at the Marylebone election, met with a compound fracture of the leg, about fourteen months prior to my seeing him. After the union he suffered violent pain in the leg, which prevented him sleeping, and frequently obliged him to get out of bed at night to tie some wet linen over it, which he found alone gave some relief. He had two ulcers on the leg, where pieces of bone had exfoliated. On the first application of the electro-galvanic shock, it failed to produce any feeling or the slightest sensation, except a sense of heat at the upper parts of the leg, but no sensation in the ancle or foot. The power of the spark was increased, and they were passed through the upper parts of the leg, foot, and toes. After a little time, the communication appeared to be complete, and a spasmodic action of the muscles could be seen, proving that the electro-galvanic current passed through the nervous filaments. When the sparks were passed through the leg, the second day, he could not feel them at first, and it was only by bringing them from above downwards that they could be felt at the toes. The sparks were carried along the course of the nerves, and were found to produce more effect at these situations than at others. The benefit this patient found, was, the loss of pain, a freedom given to the ancle, sensation in the foot and toes, with every power of motion, so that he could walk without the aid of a crutch or stick. The ulcers healed, and he expressed himself to be well, returning to his work as a bricklayer.

Another case will be sufficient to illustrate this part of our subject. A lady broke her leg three years previously to the time I was called in to see her, and she was then suffering from violent pain and great tenderness. Upon pressure at the upper part of the foot, so violent was the pain, that she was unable to sleep at night. After I had employed all other means, I had recourse to the electro-galvanic spark. Upon a few applications she lost all pain, and was cured.

Electro-galvanism has the most decided beneficial effects upon certain cases of paralysis, particularly those occurring from painters' colic. In cases of poison from opium, it is highly serviceable; also in suspended animation; but I am not aware that it has been employed before for neuralgic affections, resulting from accidents, particularly where pain exists, with other distressing symptoms, often rendering the patient's sufferings almost intolerable; and I have, therefore, considered it proper to bring these facts before the public.

[To be Continued.]

OBSERVATIONS IN THE HOSPITALS OF THE CONTINENT, AFTER THE REVOLUTIONS OF 1848.

By Dr. KIDD, of Limerick.

In the matter of *flap* amputations and *circular*, the men of the various hospitals of France and Germany seem very much divided; each mode of operating would appear, from some intrinsic merit, to have its own particular adherents,—at least, modifications, more or less valuable, combining the advantages of each, with less or more of its peculiarities, from time to time put forward, would seem

for the moment, to carry the surgical world along with them.

The events of the past year, if they have done nothing else, have afforded wondrous opportunity for examining the subjects, and putting to the test the many conflicting dogmas of the schools; forcing men, in many instances, to think for themselves, and fashion out operations according to the exigencies of each particular case, and not according to the *ex cathedra* sentiments of any particular writer at all.

It would be idle, perhaps, to deny, that a great deal of the success of operations in the amputating way depends on the character of the wound, the constitution of the patient, the mode of after-treatment, &c.,—much more, however, on the mode and manner in which the surgeon has gone about it: whether by any one of the various modifications of the flap, so common on the Continent; by the circular method, such a favourite at home; or the less orthodox flap itself, as recommended by Mr. Liston, and many of the older surgeons.

Though not an advocate for the knife, I need scarcely say,—as a general rule, the *ultima ratio* of all our medical philosophy,—I yet think, where we are called upon to use it, we should see our way clearly before us; and yet, there are few points of military surgery on which there has been such a diversity of opinions as that under consideration.

Men are fond of their hobbies; and if one practitioner sees everything excellent and amiable in one mode of proceeding that another cannot for the life of him discover, it is just possible that both are right,—that circumstances have altered matters, and that there are seeds of truth in each, which require but to be fostered and cherished to spring up into a goodly growth.

The discoverer of *flap* amputations, I need scarcely say, was Lowdham. In a curious old tract, of the Seventeenth Century, that everybody has heard of,—"*Currus Triumphalis e Terebintha;*" we light on the original idea. In these respectable old times, the art of printing was very imperfect; and the man who got his seething fancies put before the public at all was more than fortunate: to the "triumphal chariot," then, of his friend Younge, are we indebted for this innovation, which a little after fell into disuse, but seems now, I think, under many modifications, coming again to the surface. Weinhold was, perhaps, the first that tried it on the Continent, falling again into oblivion after his time.

In Germany, at present, however, it seems more in favour than the circular method, many of the first men there, in fact, appearing to think it a matter of not so much moment which method is used, as in what way the operation itself has been performed, and the mode of after-treatment conducted. This, no doubt, is a little startling to persons accustomed to the opposite mode of proceeding; and yet several weighty reasons, not without foundation, have been urged on its behalf.

At the upper part of the thigh, and in other positions where it is not easy to sweep round the knife, after the circular fashion, the flap operation is almost invariably performed. The advantage of the flap, in this instance, is sufficiently obvious.

When there are two bones, as in the fore-arm and leg, the flap, for obvious reasons, is recommended also. And, thirdly, where anything is to be gained on one side of the limb, by leaving a flap, it is invariably managed in that way.

In France, Sedillot has lately put forward a mode of amputation with much seeming novelty about it. He has tried it in twelve cases of shattered limbs, with the most marked success. It is, however, the old flap operation of O'Halloran. Baudens, at Val de Grace, the first military surgeon in France, has also tried it with similar effect. It is quite clearly a going back of some fifty years; and yet I don't know but our friends on the Continent would go back to the time of Thebes and Memphis, or the temples of Luxor, if they thought it an improvement. It is quite delightful, in point of fact, on the Continent, to find our surgical literature so studied, the opinions of men in this country finding their proper level; many of the less prominent, as O'Halloran and Professor Callan, that I spoke of before, being better known in the grim old Halls of Heidelberg and Gottengen, than at home in grim old Ireland. O'Halloran's account of this part of our Surgical history, is, indeed, highly interesting.

O'Halloran's narrative of the "rise and fall" of the flap operation, is perhaps the best extant. He mentions Young's pamphlet of 1679, which he fell in with somewhere himself. No traces of the operation however, he says, is met with for seventeen years after. At this time, Verduin of Amsterdam published a Latin dissertation on the subject; O'Halloran seeming to think he got the idea from some English students then in Holland. Verduin appears to have been a more practical man than Lowdham or Younge; and it is curious, and not uninstructive, how near the truth he gets as to union by the "first intention"—a thing not then dreamt of. "He imagined," O'Halloran tells us, "that not only the parts would speedily unite by inosculation without suppuration, but also that the flap of flesh applied to the extremity would save the necessity of taking up the blood-vessels. To answer these ends, he proposed a great variety of straps, soutiens, or supports, to keep the divided flesh exactly united to the new-sawn bone."

Verduin, it seems, put the thing to the test, for the first time, in the hospital at Amsterdam, and the man did well. His son-in-law performed it on a boy of sixteen, with equal success; and another Dutch surgeon, Van Klooten, on a third patient, with similar results. To the Dutch school, then, perhaps, we are indebted for putting the matter fully before the world.

It was brought before the French Academy a little after, and tried at *La Charité;* but the patient dying, it fell at once into disuse. Heister says, it was laid aside on account of hæmorrhage. Le Dran tried it but once; and one or two other continental surgeons, bringing themselves to try it, reported anything but favourably of its success.

Such were the unpromising materials on which O'Halloran set to work, surrounded by difficulties, and in a city where, as a young man, he had little but opposition to contend with. Of the value of his improvement, it will be enough to say, that now, after some eighty years, it turns up again; M. Sedillot, all unconscious of the writings of O'Halloran, lighting on the identical operation again; the events of last year affording him opportunities, in every instance successful, of putting it to the test, and, as it were, re-discovering it.

The peculiarity of O'Halloran's operation, I need scarcely say, consists in a combination of *the two methods* generally in use among surgeons. An *oblique* incision was first made on the front of the limb, or most available surface, thus separating a flap which O'Halloran always measured with the utmost nicety; the operation being completed on the residue of the limb by the *circular* method. The arteries were then tied, and the limb put up,—after a very bad manner, I must confess, but the manner of all the surgeons in the world at the time; O'Halloran's attention, perhaps, not having been drawn sufficiently to a thing which appeared so much a matter of course.

Any one, indeed, that will read his book attentively, will see that he could not long remain out of the true track. It is quite wonderful, indeed, looking through many of the old books of the period, to perceive how near the truth men may come, and yet, for all practical purposes, they might as well be a thousand miles away,—a lesson of deep humility,—rummaging over many of our ablest authors.

O'Halloran lays great stress on the after-treatment. "Let the patient be kept to a proper diet," he says. "In this point, it is impossible to fix any criterion; for regard must ETERNALLY be had to the patient's usual manner of living; what being high diet to one, might sink another into the bowels of the earth." The stern practical truth of this, capitals and all, every one must admire. To come down, however, to our own period of "barricades and sieges," several modifications of the flap operation are in use in Germany at present. We may be hereafter able to particularize, perhaps, with what effect.

Siebold advises a wedge-shaped cut, forming two flaps—one incision carried in an oblique manner on the outside, and one on the inside of the limb, the bone sawed off at the point of the wedge.

Schreiner recommends a mode of operation somewhat the same in principle—the two wedge-shaped flaps being obtained at the most available points. This is very evidently a valuable mode of proceeding in many "gun-shot wounds."

A method by Blasius is spoken a good deal about. I do not know that I well understand it, not having seen it; the principle is the same as that of the flap, the cut of a *sloping* character, something, as described to me, of the shape of the mitral valve; the point of the incision on the anterior face of the limb, and above where the bone is sawed—the base, of course, posterior and inferior. The old methods of Brunninghausen and Graefe have also their advocates; that of the former, I need scarcely say, consisting of two half-moon-shaped flaps, with which the ends of the bone were covered; that of Graefe, a somewhat funnel-shaped piece of flesh, separated by a peculiar shaped knife, the skin being dissected back in the first instance.

This differs very little from the circular method, the peculiarity consisting chiefly in the shape of the knife. It is, however, I believe, little used at present.

Sedillot, and some of the other men on the Continent, seem to think that the stump, after the circular mode of operation, requires too much plasters and bandages to present a sugar-loaf extremity to the limb; that this is obviated by the flap covering over the end of the bone completely; that the edges of the wound are kept more easily in contact, also, by this method; and that the cicatrix being placed behind, is not liable to be injured by an artificial limb.

Amongst ourselves, I need scarcely say, Liston has been the unswerving advocate of the flap. Mr. Syme, also, at one time, thought it the safest mode of proceeding; he has since, however, with much ingenuousness, put forward an opposite opinion more in harmony with the general practice in this country.

Mr. Liston rested his objections to the circular method on the facts, that the operation in that way is more tedious, more painful to the patient, does not afford such a covering for the extremity of the bone, and cannot be so convenient and desirable in the support of an artificial limb. When there are *two* bones in the limb, as those mentioned before, he considers the circular method completely inadmissible.

As to the two first objections, the matter of pain to the patient, and longer time in performing the operation, the use of chloroform is sufficient answer, I think. The other objections have certainly some more weight, and have had not a little to do in bringing about a revival of the old method.

As to the healing of amputation wounds by the "first intention," there is no second opinion, of course, in this country. Some of the Germans, however,—Rust, for instance,—seem to doubt its correctness where there has been previously any drain from the system, such as an old ulcer, or long suppurating surface of any kind. The point is, perhaps, worth recollecting; for myself, I must confess a great faith in the opinions of the Germans, as I know no people that so thoroughly examine a subject, or set about observing phenomena, with the same minuteness. Dupuytren, I need scarcely say, entertained an opinion not very different; and, in a conversation with my friend, Dr. Carswell, at Brussels, on the point, he seemed to think that many patients died from purulent absorption from too much bandaging and closing up of stumps. Indeed, in a long sojourn in Paris, he said he more than once pointed out the thing to Roux, at the Hôtel Dieu, as fraught with danger, and exhibited the purulent matter in the lungs and elsewhere on *post mortem* examinations of the wounded.

Looking into Dupuytren, I find he draws a marked distinction between those that should be healed by the "first intention" and those other wounds not less troublesome that should be allowed to granulate:—"Les plaies résultant d'une ampu-

tation primitive doivent etre réunies immediatement si les tissus sur lesquels celle-ci a eté pratiquée sont parfaitement sains . . . . l'economie n'a pas contracte l'habitude d'une suppuration abondante qu'il pourrait etre dangereux de supprimer tout a coup." He then goes on to describe a plan of bringing the ligatures out of the corner of the wound, and was in the habit, where he thought it necessary, to envelope them in lint to prevent adhesion. Anything in the shape of the old granulating surfaces of O'Halloran, and the men of his epoch, is, of course, out of the question. Yet it strikes me, as a matter still open to inquiry, whether in cases of "secondary amputation," where, in fact, such an obsolete and death-dealing experiment is tried at all,—whether stopping up the old drain on the system may not be fraught with danger.

The nature of the suppurative process is now so well understood,—thanks to the microscope and the untiring energies of our German friends!—that we may each of us form an opinion for himself from his experience and the facts thus unravelled.

The old people, I need scarcely say, entertained all shades and varieties of opinion on the subject: with one it was a secretion; with another, a putrefaction of the serum, of the chyle, of many other things; another physiologist conjured up the fearful vision of the body "falling to pieces;" and yet it is not any of these formidable things, but a simple, natural process as beautiful and wonderful, perhaps, as any in the system.

Our German literature actually teems with microscopic watchings of this process. Some of the men of France have corroborated the views thus put forward; and in England we have also of late begun to agitate the subject. (a)

Gerber's account of the suppurative process, I think, is highly interesting, and, as bearing on the present subject, worth extracting. An oozing of *liquor sanguinis* first takes place on the surface of the granulating stump—the coagulating fibrin forms exudation corpuscles, which are disposed in layers on the wounded surface, to form the exudation membrane; the layers nearest the living surface being converted into cells, after some wondrous arrangement, becoming differently organized according to the character of the tissue to be reproduced; the corpuscles, on the other hand, most distant, together with the residue of the serum, form true pus, covering and defending the granulating surface from external physical agents.

The pus corpuscles lying outside the circle of living influences retain their vitality but for a short period, and, deserted gradually by the organising principle, begin to degenerate; those, on the contrary, in contact with the living surface, proceed in their further organisation, ultimately becoming part and parcel of the tissue itself. "By the death of one," as beautifully remarked by Gerber, "the life of the other tissue being assured."

The character of pus becomes thus a most valuable index of the healthfulness of the system, and its power of making new tissue. And that such a wound as that advised by Dupuytren and Rust, and all the old men, should be substituted for one by the "first intention," does not appear, perhaps, so unreasonable.

Where an old suppurating surface has been long in existence, as in tedious ulcers or old gun-shot injuries, it looks not unlike a very grave error to shut up such a drain; indeed, it is not entirely out of the range of possibility, that the almost certain fatality of "secondary amputations may depend on something not very different.

This new view of the process of suppuration, lets us also into the secret of the wonderful powers of nature in repairing injuries, and that, unassisted, she may often bring about cures, not "dreamt of in our philosophy."

That I am not singular in the view of this subject, however, which I have seen reason to espouse, every one conversant with the writings of the different surgeons of the last half century will at once admit. If M. Velpeau sees reason to say, "the more I live the less I amputate," he has been preceded by many other great men, especially of the German school at Berlin. Graefe tells us, (*"Normen für die ablosung grosserer gliedmassen"*), that he recollects a period when the operation of amputation was more frequently practised than when he wrote. Bilguer and Schmucker, I need scarcely say, have also seen a necessity to renounce the knife in many operations where it was previously thought indispensable; indeed, Schmucker (*"Chirurg Wahrnchmungeri"*) gives several cases as striking as many that have occurred of late on the continent, where fearful shattering of limbs took place, and yet, where a cure followed without amputation,—where, in point of fact, whole limbs had been shot away, and nothing done,—a celebrated maxim of this able surgeon being, that a gun-shot was preferable to the knife, the one acting on a subject in a state of active health, the other on a person suffering already from a similar injury, and in the worst possible condition from fright, weakness, and the confined air of the hospital, to undergo a repetition of the injury. Few, of course, will be ready to go this length; yet any one that will calmly look into the cases brought forward by this able surgeon, as well as those by Gervaise, (*"Anfangs der Wundartznekunst,"* Strasburg), Boucher, (*Memoirs de l'Academie de Chir.*), and Faure, (*Mem. pour le prix d'Acad.*, &c.), with those of the last eventful year, in France and Germany, must pause before they give in their adhesion to the indiscriminate use of the knife after some of our battles.

(a) GERBER. — "Handbuch der Allgemeinen Anatomie des Menschen und der Haussaugethiere." —Leipzig, 1840.

REMARKS ON THE EPIDEMIC THAT VISITED PENZANCE IN THE SUMMER AND AUTUMN OF 1848.

By R. Q. COUCH, M.R.C.S. Eng., &c.

The town of Penzance, situated on an elevated projection on the western bank of a beautiful and capacious bay, and opening to the south and south-west winds, has always been celebrated for the uniformity of its temperature, and the mildness and healthiness of its climate. This general character, though influenced by its peculiar local situation, is chiefly dependent on its insular position. Surrounded almost entirely by a great expanse of water, the colds of winter and the heats of summer are so modified and approximate, that while the average temperature of the year is about 52°.10 Fahr., being only 1°·77 above that of London; yet London is 5½° warmer in summer, and 2° colder in winter. With this equality of temperature, and freshness of the sea air, the town is remarkably healthy; much more so than could have been expected, when the number, closeness, and filthiness of its alleys and courts, and the entire absence of all drainings, and the accumulation of cesspools around and in the town are considered. It is, however, rarely visited by epidemics, and, when it is, they are so mild that they seldom attract any serious attention. Even the ordinary biliary derangements of autumn are much milder than those I have seen in London and the central parts of England during the same periods of the year. But in the summer of 1848, the town, and some patches of the surrounding district, were visited by a very severe and fatal epidemic. Though it was very insidious in its commencement and early progress, yet, if the patients had taken but ordinary precautions, and applied for early medical advice, the disease might have been arrested before it became dangerous. But, being neglected, it rapidly progressed, though it did not attract much general attention till June. At this time it became very severe, and increased in intensity till the last ten days of August, when it was at its climax. From this period it gradually declined, both in number and severity, till November, when it became almost extinct. A few stray cases, however, occurred so late as the 28th of December, but in so mild a form as to attract but little serious attention, even of the patients themselves. These latter cases, however, were either persons in previous ill health, or those who had returned to Penzance after an absence of some months.

The disease itself was generally ushered in with pyrosis and nausea, and occasionally with vomiting, with uneasy sensations about the bowels; but long before this there was always more or less spontaneous lassitude,—a general forerunner of disease. These premonitory symptoms, especially for the first two months of the epidemic, would occasionally last for three weeks; but afterwards, twenty-four hours were sufficient to bring on violent diarrhœa, with severe pains in the right iliac fossa. The pain subsequently extended across the abdomen, along the course of the transverse arch of the colon to the left iliac fossa, and finally into the rectum, where it most commonly assumed the form of painful tenesmus, and rarely allowed the sufferers a quarter of an hour's continuous rest, either by day or night. The pain along the transverse arch of the colon was, in many cases, so great, that the pressure of the bed-clothes could be but with difficulty borne; and the slightest pressure of the hand was intolerable. Many could not even move in bed without a great increase of their sufferings, increase of tormina, with violent sanguineous, and eventually gelatinous, or fibrinous evacuations. The alvine discharges were, at first, copious, watery, and of a pale grey slate-colour, which, in the early cases, would last several days, and finally become mixed with large quantities of fluid blood. Later in the progress of the epidemic, the aqueous discharges, though equally copious, were not of so long a duration; and the blood rapidly changed from a fluid to a more coagulated character, and eventually to pure blood, and then to colourless fibrine. The fibrine was generally very small in quantity, and sometimes had a membranous character; at others, it had the appearance of minced veal; but most commonly looking like half-fluid gelatine, with or without blood. The pulse was, at first, low and compressible; but as soon as the pain of the bowels set in, it rose in number, varying from 79 to 92, full but compressible; and in the last stage, where death followed, it became low, quick, and intermittent. The tongue was, at first, coated and flaccid; afterwards it became morbidly clean and dry, and frequently so dry that it resembled a bit of wood. Thirst became insatiable, and the longings for cold water so great, that it was impossible to resist the importunities of the poor victims; they all said that the water gave great relief, independent of satisfying their thirst. The skin, which, at first, was soft and perspirable, became dry, harsh, and scalding. There was a partial suppression of urine, and a dull heavy pain in the region of the bladder; sometimes there was dyspnœa; and in one case, that of a lady, the retention was complete, and the catheter was obliged to be used. In some of the severe cases, especially among children from seven to sixteen years of age, on the fifteenth day of the attack, the evacuations became dark and black, and subsequently of a bright verdigris green, and all with a very offensive smell. In such cases there was frequent vomiting of matter of the same colour, with a depressed pulse, cold skin, livid and contracted features, with a general shrinking of the whole frame, and finally death. From the first there was always a disposition to sickness, and a firm rejection of every kind of food, and frequently also of medicine. There was, in fact, an inclination to refuse everything except water, and this, at first, was denied them; but, as the disease advanced, it was impossible to refuse them, and I think it was of service to all who took it.

The symptoms here enumerated, in various degrees of severity, were common to the whole of the epidemic; but they did not always individually maintain the same importance and observe the same periods; for, during the progress of the disease, some of the symptoms disappeared, while others increased in severity. In the early progress, where there was great derangement of the stomach, there were severe burning sensations, from the last cervical to the fourth dorsal vertebra. Subsequently, when the sickness was less, this disappeared, or was transferred to the lower dorsal vertebræ, and then disappeared altogether and never returned; so, when the aqueous alvine discharges and sickness were great, there was a great tendency to pains about the

legs and arms, and occasionally spasms of these parts; but latterly these symptoms also disappeared. The aqueous discharges were, at first, of long duration; then the sanguineous period was short; but subsequently the aqueous character gave place to the sanguineous almost entirely, and, at last, the fibrinous period appeared; but it never suppressed the hæmorrhagic type.

At first there was no tenesmus; but this, after making its appearance, increased to such a fearful extent, that many of the victims were in and out of bed every ten minutes, for several days together, till they became quite exhausted, and were obliged to remain in bed. If the patients could be induced to remain quiet, this tendency was less urgent; but a simple turn in the bed was sufficient to bring it on again in all its severity. In a few cases the abdominal pains were slight; but I did not observe, that either the fever or other symptoms were less in consequence of it.

The disease, though always accompanied with premonitory symptoms, yet these were sometimes so slight as to attract such little notice, that the outbreak might be called instantaneous; the following cases will illustrate this form.

Case 1.—Mrs. A., living near the quay, a tall, and, though slight, yet a fine woman, of general good health, had felt an unusual lassitude for some days; but not sufficient to interfere with her usual occupation. She rose one morning in August, as she said, "with her usual health; but, when half dressed, she felt a slight degree of nausea for a few minutes only. At eleven o'clock, that is, three hours after, she was seized again, which, within a few minutes, was followed with violent diarrhœa. For the first and second hours after, she was in and out of bed seventeen times. The discharges were little more than mere slaty-coloured puddle water; urine scanty, skin cold and pale, with slight pains about the calf of each leg; the tongue pale, flaccid, and coated with a white fur. This threatened to be a very severe case, and yet the next day she seemed quite recovered. In this case there was no blood, and the pain about the bowels was so slight as to be acknowledged only under pressure. This case will be again referred to when the mode of treatment comes under review.

Case 2.—A lad, living on the opposite side of the same line, in a dirty confined nook, was suddenly seized with a griping pain in the bowels, which was almost immediately after followed with an aqueously sanguineous discharge from the bowels. At first he felt faint, but in an hour he recovered, and never had a return. This case occurred in September.

The origin of the disease seemed at first involved in great obscurity; and, to settle so important a point, I made minute inquiries into all the cases that occurred subsequently to its becoming so fatal in its character. These I compared with such cases as I had previously noted. This point may not be so satisfactorily settled as some may desire, yet it is all derived from actual investigation, and, so far as it goes, is accurate. It is an opinion entertained by most of the inhabitants of Penzance, that it originated in the arrival into port of the brig Sandwich from Cork, bound to Boston with Irish emigrants. She had been out in boisterous weather for sixteen days, and returned to port to repair her leaks. She had sixty-eight passengers aboard, of well-dressed and finely-grown Irish, beside the crew. When they arrived they were all healthy, and continued so for the week they were lying at the quay. She arrived on the 8th of June, and a week after was hauled into dock for repairs. This place is as low as the bed of the beach, very damp, or, rather, swampy, and surrounded on either side by elevations of rock, high walls, and workshops. Up to this time they were all healthy. On the 16th of June, one of the emigrants, a female, had a severe attack of diarrhœa and fever, which was very obstinate; after lingering for nineteen days, she died. A second and a third case occurred, and they died; then a boy was attacked by phlegmonous erysipelas of the face and head, and he died; and all these cases occurred within a very short time of each other. The rest of the passengers were then removed to a large and well-ventilated warehouse, and were supplied with good fresh diet; after this the plague was stayed amongst them. One or two of the crew had it mildly after they got to sea, but recovered. While its severity among the company first attacked was thus mitigated, by increased comforts of every kind, it very rapidly spread in the courts and lanes of the town, in the immediate vicinity of the dock which the ship had left. While this fatal epidemic was raging at Penzance, the usual autumnal biliary derangements were more than usually common in other parts of the kingdom, and, though abnormal, yet were neither so aberrent nor fatal as at Penzance. Soon after the fatal cases of the Sandwich occurred, it spread itself, in an equally malignant form, through the town, and continued till the last week of December, but latterly in a milder form. The first severe case that occurred to myself was on the 12th of July, in a small dirty house near the quay; this case, after lingering for three weeks, recovered. From this time, the number of cases and their severity increased. All those that I had an opportunity of examining,—and they were a great many,—complained of lassitude for some time previous to the attack. They felt an inactivity and a disinclination, rather than an inability, to perform their usual duties. Walks, which before were agreeable, became wearisome, and were finally discontinued. Occasionally there were transient feelings of nausea, with a very irregular appetite. None of these symptoms, in their earlier state, were severe enough to require medical assistance, and sometimes were just enough to induce the patients to make a mere passing remark to their relatives or friends. But there were some who had these premonitory symptoms, and yet had no subsequent attack. These symptoms were observed in May, and were followed by diarrhœa, which yielded to the usual remedies. The May of 1848 was unusually warm, dry, and clear, and rather unhealthy. The subsequent months of June and July were wet and chilly, and diarrhœa and slight attacks of rheumatism prevailed, but the latter not extensively. In the last week of June, diarrhœa greatly increased from what it had been before, but the cases were slight, and in several instances no medical assistance was required.

A disease in many respects similar to the one now under consideration, occurred in Penzance in the summer and autumn of 1847; but the number seised was not so great, nor the severity so intense, at first, as in the epidemic of 1848. It was characterised, at first, by a confined state of the bowels, with subsequent nausea, purging, and continued fever. The fæces eventually became watery, and exceedingly offensive; and just as the patients were about, apparently, to recover, the hæmorrhage from the bowels supervened. It was immense and instantaneous, which produced faintness, and, within twenty-four hours, death. The pain about the region of the colon, if it existed, was not detected. The disease was at first mild, but the fever gradually increased in severity, and again declined, and then the critical discharge occurred, to be speedily followed by death. The disease of 1848 was equally mild in the early stages of its existence, and continued so till the fatal cases of the Sandwich occurred; from that time it became very severe and fatal throughout the town; and those that recovered had to undergo a very prolonged state of convalescence. Many of the first cases occurred in the neighbourhood of the quay, and in some of the streets in the eastern parts of the town, particularly about Adelaide and Mount-streets. So far as my observations go, however, the disease did not particularly select the narrow alleys and lanes, though in these parts it was far more severe and fatal than elsewhere. The habitations in such localities are low, miserable, and badly ventilated, while the lanes are narrow and filthy, and without drainage. But other cases occurred in wide open streets, such as those—Adelaide and Mount-streets, where the habitations are well lit, the rooms high, whitewashed or papered, and remarkably clean. But they are also small, badly ventilated, and without drains; and when I have entered them, they always conveyed the idea of dampness. These houses are generally occupied by steady and sober artizans. The streets running from the top of the hill to near the water, have the sea breezes at all times freely circulating through their length and breadth; yet in such streets scarcely a house escaped having one or two of its inmates down. The cases were therefore numerous and severe; but death was not so frequent as in the dirty lanes. It should be remarked, however, that these streets open into Rosebean-road, a situation near the Roman Catholic Chapel, where the victims from the Sandwich were sent for air and safety; but nearly all the large, well-aired, and respectable houses escaped. The great variation in the temperature, and the sudden changes from wet to dry, that occurred about the time of the outbreak of the disease, though it did not originate, yet, no doubt, greatly aggravated the character of the epidemic. The summer weather of May, followed by the wet and cold of June and July, produced very sensible effects on most of those who were invalids at the time. But the fishing villages of Mousehole and Newlyn, though visited with diarrhœa, yet had it in so mild a form as to excite but little attention; yet a few cases occurred of the same character with that prevailing at Penzance. At Galval, on the eastern part of the town, and about a mile and a half distant, they had it more severely; and Marazion, on the eastern part of the shore, and distant three miles, had, I understand, not a single case. A few, however, occurred in most of the surrounding villages; but they could generally be traced to some connexion with Penzance. The whole history of the epidemic implied, that the exciting cause was to be found in the town itself. If a person left as soon as the first symptoms of attack appeared, and retired into the country, the severity was but little alleviated; and even if the patient died, after the second, or, perhaps, a third case, the disease became milder, and finally disappeared. If a person had a diarrhœa, or a tendency to it, and entered the town, it immediately changed its character to that of the epidemic. If the atmosphere was vitiated, it was vitiated by the town, as the following case, selected from several others, will show.

Case.—A sailor, twenty-three years of age, of slight frame, but very active, and enjoying a good state of health, left Penzance, in the spring of 1848, for Canada. While in the river St. Lawrence, and his ship on the banks of the shore, he had an attack of diarrhœa, for which he was under medical care for a fortnight, with only partial relief. On the passage home, in September, he had a slight return, but recovered before his arrival in England. He came on shore at Penzance, and lived in one of the infected districts, in a very narrow and dirty court near the Quay. Five days after his arrival he had a return of his old complaint, with nausea and great thirst; these were followed by great pain in the right iliac fossa, and aqueously sanguineous discharges from the bowels. The skin was hot and scalding, tongue dry and furred. The sanguineous discharges became fibrinous, and small in quantity. He was under treatment eleven days, when all the most prominent symptoms disappeared. But the irritability of the bowels continued great for more than a week after; so much so, that a slight walk would immediately produce one or more evacuations. This gradually subsided; but it was followed by an attack of rheumatism,—a termination by no means uncommon where there was slight exposure.

I saw four cases similar to the one now described, in which the ordinary biliary derangements of the stomach and bowels became converted into the epidemic at that time raging. They all recovered. The occurrence of rheumatism as one of the sequelæ of this disease was not unfrequent. The first symptom of such an impending attack was generally conjunctival inflammation of both eyes, and which was the more distressing, from great intolerance of light. This was, in the course of a few days, followed by severe pains in all the large joints, with fullness of pulse, thirst, and general fever. The epidemic would not bear depletion in any form, and yet, in the subsequent attack of rheumatism, those always recovered best who had one or more small bleedings from the arm, with small doses of tartar emetic and colchicum, till the pulse became inter-

mittent. Cases differently treated, in consequence of the character of the previous disease, recovered very slowly; and, consequently, these plans were abandoned after the first few trials. In aged females, who had a very protracted recovery, there was troublesome sanguineous discharges *per vaginam*, from which they recovered by the use of tonics and a generous diet. The disease approached in character to dysentery; and yet, in a few cases, it assumed the mild form of English cholera, and, in two cases, even that of the Asiatic type.

The liability to a relapse was very great, and of frequent occurrence. Soon as convalescence had set in, a walk across a room, or sudden exertion, and, on one occasion, rising in bed to reach a book, was sufficient to bring on three or four relaxed evacuations. If the relapse was decided, the patient rarely recovered; this ought not, however, to excite any surprise; for, as the relapse generally took place within the first week of recovery, the second attack preyed on a constitution already exhausted by disease. The tormina remained for weeks, and even months, after a restoration to health had been effected, and was sometimes exceedingly troublesome, being among other things productive of two or three evacuations during the morning, and sometimes one towards evening. The most severe of this kind of termination were found to be among those whose attacks were slow in their approach, and who were equally slow in recovering; in such there were always delays in applying for remedial applications.

Penzance and its neighbourhood is generally very free from acute diseases, and, in fact, at all points, may be considered a very healthy neighbourhood. The number of its inhabitants is about 10,000, out of which about 82 died from dysentery alone, from June to October. The number attacked I have been unable to ascertain, but I have been informed that 5 per cent. approached very closely to a true statement; but whether this be correct or not, the number was very great. The duration of the disease varied much; in some cases, it ran its course in four days, but generally by killing its victims; in others, it lasted to the eleventh, eighteenth, and twenty-first days, and even to a month, sometimes terminating fatally, and at others not.

Treatment.—Soon after the departure of the Sandwich from Penzance, the disease made its appearance as a fatal epidemic; it was, notwithstanding its premonitory symptoms, so sudden, and its attack so violent and fatal, that the most energetic means were used to arrest its progress, but generally with but little, if any, effect. The success of the treatment was highly perplexing, unsatisfactory, nay, even contradictory; sometimes medicine would arrest it, and at others produce only slight alleviation, while most commonly it entirely failed, and nothing but the most unremitting attention would produce the slightest hope for the patient. The mineral astringents would sometimes act very beneficially, and at others fail; and the vegetables were never of the slightest use, except opium. Most of our remedies recommended in such cases were tried, and were so continually failing in the time of need, that they were for a time entirely discarded. The patients, notwithstanding the precautions constantly urged on them by the fatality of the disease, and the expressed desires of their medical attendants to be called as early as possible, constantly neglected all remedial measures till the epidemic had become fully developed. This delay, which subsequent experience clearly proved, was the cause of all the uncertainty in the treatment. It is quite unnecessary to detail the unsuccessful plans pursued; I shall, therefore, only name those found to be most successful in my own practice. Having selected several well-marked cases, and watched them through every turn of their progress, and from them referred to my notes of other cases, the following plan, after several failures, was adopted in the earliest form of the disease, when there was nausea, vomitings, and the prævenient diarrhœa:—The preparations of chalk, carb. of soda, preparations of potash, combined with opium, answered very well. When there was a general shrinking and coldness, the addition of compound tincture of card. was very beneficial. But if there was blood with the discharges, or if there was not, yet if the diarrhœa had continued for a few days, the recently-made liquor calcis answered much better. As this last preparation was nearly equally efficacious at the commencement, I generally adopted it at first. If there were bilious vomitings with cramps about the legs, powders of carb. sodæ and cuspariæ aa. gr. v., with opium, every two or three hours answered very well. The first dose was generally rejected, after remaining a few minutes on the stomach, but the second or third dose rarely failed to allay the sickness and purging.

In the case of Mrs. A——, mentioned before, there was every appearance of a very severe case. The liquor calcis, with opium, was immediately used. At first, the diarrhœa was so great, that during the first two hours, she visited the night-chair seventeen times. At six in the evening, it was once every hour, and, by daylight in the morning, it had entirely ceased. By resting the whole of the following day, she had no return. If the aqueous discharges had stopped, or had ceased to be fæculent, these remedies were altogether useless. If there was hæmorrhage either of the fluid or fibrinous character, even if the pain about the colon was not great, then the acetate of lead and opium given every half hour answered very well. I saw a case with Dr. Willan, as well as many others both before and after, in which the advantages of this course were immediately obvious.

Case.—I was called, with Dr. Willan, to see a little boy, residing in Adelaide-street, who had been ill for sixteen days. He had received every care that his mother and friends could confer, and had received a good deal of attention from the surgeon of the family without any benefit. He had taken a great deal of medicine of various kinds, but without any good effect. We saw him on the sixteenth day of the attack. He was exceedingly thin and haggard; his eyes were sunk, and his lips thin and livid. He was so weak, that he could speak only with great difficulty and fatigue; pulse 92. His evacuations were not copious, but small and purely sanguineous, and about eight per hour. He was too weak to be lifted out of bed, and he consequently relieved himself on napkins. His skin was scalding, dry, harsh, and his tongue brown, and so dry, that it seemed more like a baked bit of wood. The thirst was insatiable; the pain about the colon very great, and became intense under the slightest pressure. We agreed to try the lead and opium, but with very little hope of success, as the case was so far gone. In three days, the evacuations, though the same in character, were reduced in number to twelve in twenty-four hours; on the fourth day, the blood was less, and the tenesmus less urgent; on the fifth, the evacuations were fibrinous, and the pulse 80; tongue slightly moist, and not at all scorched; skin cooler, but there were daily hectic flushes about three in the afternoon. The little patient gradually improved, and in twelve days, from the use of the opium and lead, was able to sit up and join the family dinner, with an appetite by far too eager. A similar case, of a little girl, occurred in the same street, with the same result.

It has been strongly urged by some physicians, that, where there is pain about the bowels, with accompanying fever, that bloodletting should be used, to reduce the fever and unload the mesenteric vessels; and Dr. O'Brien says, that nothing but the mitigation of pain and extinction of the fever should form the limit of its employment. This plan was tried and abandoned. The patients bore bleeding very badly; and, if Dr. O'Brien's plan had been followed, a much greater fatality would have occurred. The slightest bleeding, even with leeches, produced fainting, &c.; in fact, bleeding did not answer in any case. The pains about the abdomen seemed to be most effectually relieved by counter-irritation, produced by mustard plaisters. Several of the friends of the sick, supposing that counter-irritation was alone required, had a variety of embrocations made of ol. terebinth., and linim. camphoræ c., and rubbed in over the abdomen with a very decided increase of all the symptoms. Quiet was essentially necessary to the safety of the patients; they could not even sit up in bed without feeling worse. The bowels continued in a very irritable state from the time that the abdominal pains were first felt till many months after the patients recovered. The tormina was at all times distressing. Mr. C., a tradesman, had a slight attack, which lasted so long as he would go up and down stairs, and attend to his occupations. He at last consented to remain in bed, and began the use of the lead and opium. His symptoms rapidly yielded, and in two days he attempted to get up; but before he got to his dressing table he had to visit the night chair twice. He returned to bed again, and remained quiet till the next morning. He then got up in his bed to take a book from a small table near him, but this, slight as it was, produced another evacuation.

During the whole of the stage characterised by pain and fever there was insatiable thirst for cold water. Food, either in the solid or liquid form, was rejected and loathed, while cold water was always eagerly sought after, and, I believe, produced a beneficial effect independent of allaying the thirst. The tenesmus was occasionally relieved by mucilaginous injections with opium, or an opiate suppository; but, if the action of the lead and opium was early and fully established, this symptom generally disappeared. If this tormenting symptom continued, with purging on rising in the mornings, the pil. hydrarg. with the acet. morphiæ, in small doses, acted beneficially, but it sometimes failed; then cinchona and the bitter tonics, with opium, were used; and these generally were efficacious; and injections of the nitrate of silver in solution of about 2 grs. to the ounce, were also of service. After these modes of treatment were adopted, and even when the epidemic was at its climax, the disease seemed shorn of its uncertainties, and the recoveries were more numerous and less protracted. The ol. terebinth, and mercurials have been recommended, the former of which I did not use; the second, in mild cases, acted beneficially; but in severe cases it did not act with sufficient quickness, or exercise so great a control as such a rapid and violent disease required. Though the appetite was so bad, and the stomach so irritable, yet, after the plan of treatment here described, the appetite would frequently return with unusual energy, and the choice was generally remarkably curious and coincident. To examine so strange a coincidence of taste, I selected eleven cases attacked on the same day, and living in different parts of the town. On the forenoon of the ninth day they all expressed a desire for fresh whiting; and cases similar to these were of frequent occurrence during the course of the epidemic.

Contagious or Non-contagious.—From the foregoing remarks, the contagious or non-contagious character of the disease must be apparent. The severe form of the disease appeared first on board the brig crowded with emigrants; when they were separated and well housed, it disappeared from among them. Soon after she left, it appeared in the town with equal severity, and in localities either near the ship, or where the emigrants had been lodged. The particular distribution of the disease, it is not so easy to explain. The houses in Mount-street and Adelaide-street are clean, but the rooms are very small, and not well ventilated; the streets are wide and open to the sea air; yet almost every house had an attack. In the neighbourhood of the Quay, the streets and lanes are narrow, dirty, and crooked; the houses are low, dirty, and ill-ventilated; and here it was bad. At Causeway Head, the same character of the streets and houses may be given, and the same results follow. The same localities in which fever predominates were those most severely visited by the epidemic. It rarely visited houses of respectability, where the rooms were large, and supplied with every convenience. Where there was crowding, the disease was more violent. If one of a family had an attack, some of the other members were sure to follow. In one family where the mother had an attack, and suffered a relapse, which terminated in death, the grandmother, who had been in attendance, then exhibited symptoms of disease. She was removed to a larger house at a distance

This attack, at its outset, was as severe as the other's was at its termination. She died, but the disease did not spread. In the house from which she was removed a child was taken ill, and and then I had the whole of the family removed to a higher and more open part of the town; the child recovered, and, though other members of the family were seized, yet they all recovered. A few of the surrounding houses had a case or two, but all recovered, and the disease disappeared. Sailors who returned, after a long voyage, and resided in the infested districts for about a week, generally had an attack. Many persons from rural districts, who came to Penzance to emigrate, had an attack, and several, I understand, died. The cause was evidently in the town itself; and, though all persons brought within the influence were not attacked, yet most who suffered could trace the origin to the same localities described above. This form of the disease, though dependent on a specific and accidental cause, has its origin from a milder form that has visited this district for some years, and, from the tendency now experienced towards the same point, a more or less severe return may evidently be expected during the next summer, unless some sanitary precautions are adopted.

REPORT ON THE CHOLERA AT MONK-WEARMOUTH COLLIERY.

By W. R. CLANNY, M.D., K.J.J., F.R.S.E., &c. W. B. FERGUSON, and CHARLES GALLYE LAMOTTE, Esqrs., Surgeons.

Perhaps a brief Medical Report of the cases of cholera which occurred in the extensive district of Monkwearmouth colliery, and were under our care since the appointment, on November 20, 1848, of two of us to co-operate with the Surgeon of the pit, and the treatment we adopted, may not be unacceptable to the numerous readers of your valuable Journal.

The disease had been hovering about the neighbourhood in the commencement of November, or end of October. Many medical men having, for a long while previously, predicted its coming here again a second time to visit us. The first few dropping cases here, as elsewhere, among the shipping, and also on shore, were chiefly fatal. It seemed to disregard the Sunderland and Bishopwearmouth parishes, and confine its ravages almost entirely to the north bank of the river Wear, upon which Monkwearmouth is situated. In this parish is a large coal mine, and the residences of the pitmen; who, with their families, thus lying in the tract that the disease had selected, suffered mostly from its influence. On the 20th of November several persons were suddenly attacked about the same time with the complaint, and so were others on the following day, thus indicating to all that the storm had arrived. Since then we have attended thirty-two cases of decided cholera, out of which number seven died. Our treatment consisted of large doses of calomel, followed by saline draughts, with frictions and mustard cataplasms externally applied. We gave calomel averaging, according to age and other circumstances, from 10 to 40 grains every half hour, for the first two hours, followed by draughts of solution of carb. of soda in very large doses, to which we added with advantage, in some cases in which the vomiting had not entirely ceased, a few drops of creasote. The calomel seemed to act at first as a sedative to allay the irritability of the stomach, or, as the patients often expressed it, "to lay the heat of the stomach;" then, by its action upon the liver, to eliminate the bile, which, in favourable cases, was soon visible in the evacuations, and which it sometimes tinged yellow, but often jet black in colour. In no case did brandy or other stimuli seem of use, even when used to resuscitate from extreme collapse. One of the patients who died, from whom blood of a florid colour issued per anum, was treated with acetate of lead and opium. No evil consequences have followed the amount of calomel given; in but two cases have the gums been rendered tender by its use, nor did it seem to occasion consecutive fever,—the majority, among the fatal cases, died of collapse, and those that recovered, had no fever whatever. There were many cases under our care with symptoms approaching cholera, which we treated with small doses of calomel, combined with opium, all of which recovered, and, it is probable that some of these, but for timely treatment, would have become true cholera, but in which we seldom gave any opium. In these "resembling" cases, with cramps, *bilious* purging, and vomiting, we gave calomel in from two to six-grain doses, with Dover's powder, followed by salines containing small doses of Tr. opii. The solution of carb. of soda seemed very serviceable, and was so eagerly desired by many patients as a cooling drink, that we considered it an useful adjunct to the calomel.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

ACADEMY OF SCIENCES.

February 13. M. BOUSSINGAULT in the chair.

TREATMENT OF FRACTURES.

M. Malgaigne, in a letter to the Academy, stated, that in very oblique fractures of the leg, the difficulties attendant upon the reduction and perfect maintenance of the reduction were so great as to amount almost to impossibility. Some eight years M. Malgaigne had endeavoured to overcome these obstacles by a method which had not at first been received with much favour, and consisting in the use of a pointed screw, pressing upon the tibia. M. Malgaigne had numerous cases of success on record, and four patients were even now in hospital under treatment. He wished the Academy to name a Commission for the appreciation of this method; and he said that he would submit to that Commission the most singular physiological fact, of a steel screw pressing upon a bone after perforation of the integuments, and sojourning for one, two, three, and four weeks, without occasioning swelling, redness, inflammation, or suppuration.

MM. Roux, Velpeau, and Rayer, were appointed to form the Commission.

IODIDE OF POTASSIUM IN SATURNINE AFFECTIONS.

Professor Dumas read, for M. Melsens, an abstract of a memoir on this subject. The treatment proposed by the author rests upon the principle of rendering soluble metallic substances which might otherwise remain in the system, by associating them with another substance which is readily eliminated by the organs of secretion. M. Melsens remarks, that the insoluble compounds resulting from the combination of mercurial salts and the contents of the digestive organs, dissolve in hydriodate of potass, and that the great facility with which this salt is rejected may induce a hope that the poison will also be eliminated at the same time. M. Melsens asserts, that the same solubility in hydriodate of potass exists for salts of lead. Sulphate of lead, for instance, exhibited alone to a dog, produces death in a very short time; but no accident whatever is observed if the hyd. of potass is taken together with the saturnine sulphate. In cases of mercurial palsy, related by M. Melsens, the symptoms yielded to the iod. pot., and mercury was detected in the urine during the exhibition of this drug. But as it is by facilitating the absorption of an insoluble substance contained in the intestine, that M. Melsens endeavours to produce its elimination, the method is not altogether without peril, and it is only in very small and gradually increasing doses that he recommends the use of the hyd. of potass.

ACADEMY OF MEDICINE.

Meetings of January 30 *and February* 6. M. VELPEAU in the chair.

CHLOROFORM.

The discussion on this subject continued, but no new arguments were produced. M. Malgaigne answered the objections which had been made to the report, and, finally, the following conclusions were adopted:—

1. That the patient who died in Mr. G.'s hands in Boulogne, did not die in consequence of the inhalation of chloroform.

2. That a very large number of cases of sudden death are upon record, either after an operation or not, but without the interference of any anæsthetic agent; and in these cases the most minute and careful investigations have not always led to the detection of the cause of death.

3. That in the Boulogne case the most plausible explanation is, the passage of a considerable quantity of gaseous fluid into the vascular system.

4. That chloroform is a most powerful agent, which may be classed with poisons, and should be employed only by skilful hands.

5. That chloroform may, by its odour or contact, occasion irritation of the air passages, a circumstance which commands reserve in diseases of the heart or lungs.

6. That chloroform possesses a special poisonous action, which medical science has turned to its advantage by arresting it upon the production of insensibility; but if this action is prolonged too much, or if the quantity inhaled be too considerable, death may be the result.

7. That certain modes of inhalation add their dangers to those peculiar to chloroform; that asphyxia is to be feared when the vapours are not sufficiently mixed with atmospheric air, or when the respiration is not performed with freedom.

8. That these dangers may be avoided by observing the following precautions:—1. To verify the condition of the heart and lungs, and let the inhalation take place only if these organs are sound; 2. To take care that during inhalation air is freely admitted into the chest, and that respiration is not interfered with; 3. To suspend inhalation as soon as unconsciousness has been produced.

9. That chloroform should not be exhibited after a meal.

Meeting adjourned at five.

DEATH AFTER THE INHALATION OF CHLOROFORM.

Case.—T. V., aged 17, a lad of a lymphatic constitution, was admitted into the Hotel Dieu, of Lyons, on the 24th of January, 1849, for a disease of the hand. The first phalanx of the middle finger of the right hand was in a state of complete necrosis, and the removal of the finger was resolved upon. Accordingly, on the 31st of January, the patient was brought into the amphitheatre. He had taken no food, and showed no apprehension. A few moments previously a female patient had inhaled chloroform from the same phial which was presented in the second case. She had been thrown readily into a state of insensibility, and no unfavourable circumstances had occurred. A thin handkerchief was held before the face, and the anæsthetic fluid was poured over its surface, whilst two assistants carefully attended to the state of the circulation. After inhaling the chloroform during four or five minutes, the subject was not yet completely insensible. After one more minute, the patient, who had absorbed about two drachms of chloroform, betrayed some slight agitation, but the pulse remained in a perfectly natural condition. Suddenly, he became restless, and when the assistants succeeded in mastering his movements, an operation which did not take up a quarter of a minute, they exclaimed that pulsation had ceased in the arteries. The handkerchief was at once removed. The countenance was deeply altered, and the heart was motionless, at least its sounds were inaudible. Respiration became irregular, and ceased completely in the space of half a minute. Powerful means of restoration were immediately resorted to; hartshorn was applied to the nostrils, and rubbed upon the skin of the thorax and abdomen; alternate pressure was exercised upon the chest and stomach. After two or three minutes, respiration returned; but the patient remained without pulse. The frictions were assiduously continued; but the respiration again ceased. Insufflation of air was performed into the larynx, and the actual cautery was applied to the laryngeal, precordial, and epigastric regions. All these efforts were unavailing,—death had taken place. The *post mortem* examination was performed seventy-two hours after the fatal

occurrence. The weather was cold, and no signs of putrefaction were present. The stomach contained about ℥iss. of a brown fluid, and was distended with gas. The liver and spleen were slightly congested. The heart was collapsed, and contained neither air nor blood; but the ventricular parietes were moistened with a thin and scarlet froth. The cavæ and porta were distended by black blood in a very fluid condition, and upon the Eustachian valve was detected a fibrinous concretion of slight consistency, weighing about 4 or 5 grammes (℥i.) On opening the chest, the lungs collapsed energetically; their surface was of a dark slate colour, their texture being otherwise healthy, as well as the larynx and trachea. The brain presented no morbid change; the sinuses contained a tolerably large quantity of dark fluid blood.

D. M'Carthy, D.M.P.,
Physician to the British Embassy.

SCOTLAND.

[From our Edinburgh Correspondent.]

EDINBURGH OBSTETRICAL SOCIETY.

SESSION VIII.

Second Meeting, January 10, 1849.

Dr. Simpson, President, in the chair.

The following gentlemen were elected office-bearers for the ensuing Session:—Dr. Simpson, President; Dr. Thatcher and Dr. Robert Renton, Vice-Presidents; Dr. W. Cumming, Treasurer; Dr. W. Cumming and Dr. J. Matthews Duncan, Secretaries.

SUDDEN DEATH DURING LABOUR.

[Communicated.]

Dr. Drummond, of Dundee, was called to attend this patient, aged 27, in labour with her first child. She had been married seven years, was not robust, but enjoyed pretty good health. For some time before labour, she had observed that her feet and legs were œdematous. As labour made little progress, Dr. Drummond left her, but was afterwards hastily summoned, and found her in a state of complete coma, which had come on after a convulsion fit of fifteen minutes' duration. The left side of the body was in a state of tonic spasm; the right completely relaxed. Blood was drawn to the extent of about forty ounces. All this time the os uteri was slightly dilated, the membranes ruptured, and slight uterine pains existed. The coma continued profound, in spite of the bleeding and the other means used to cause derivation of blood from the head. She died within two and a-half hours from the first seizure. No autopsy was procured.

Dr. M'Cowan stated the case of a woman whom he had attended in her first labour. On coming to her, he found her suffering from false pains, dyspnœa, pain in the region of the heart, &c. The face and legs were œdematous. A small quantity of blood was drawn, with immediate relief to the symptoms. Subsequently, labour came on, and proceeded naturally till the child (which was dead) was born, when she immediately expired. On the autopsy, there was found advanced disease of the heart and aorta.

Dr. Simpson stated, that, when acting as House-surgeon to the Lying-in Hospital, a midwife sent for him to see a patient that had suddenly died, immediately on the expulsion of the infant. The labour had been natural, and without any complication; but the previous history of the patient indicated the existence of heart-disease. Not long after, a pupil of the Institution sent for him to see a patient, who, on rising from bed, about a week after delivery, immediately fainted and died. There had been no peculiarity in the labour or recovery. Denman, Clarke, Blundell, Meigs, &c., had, in their works, made mention of similar cases of sudden death during or immediately after labour, and without hæmorrhage or convulsions occurring in their practice. Dr. Simpson had always taught, that heart or chest disease formed a complication demanding great care, not only in itself, but as rendering patients unable to endure, for any great length of time, the fatigue and exertion of a difficult second stage of labour. He considered, that, in such cases, instrumental assistance should be earlier given than in cases without such complications.

CHLOROFORM IN PUERPERAL CONVULSIONS.

A case was communicated to the Society by Mr. Norris, Somersetshire, in which severe puerperal convulsions coming on after labour, appeared to be arrested by the inhalation of chloroform. The mother did well.

BALL-VALVE OBSTRUCTION OF THE RECTUM.

Dr. Simpson stated, that he had seen, a few days ago, a well-marked case of this description, in the practice of Dr. Husband. The patient was suffering from intermitting paroxysms of abdominal muscular effort, like labour pains. On examination, a large, hard, oblong, scybalous mass, encrusted with phosphatic deposit, was found filling up the canal of the rectum, which was tender and irritable. An iron instrument was used to break down and remove this mass. Afterwards, several smaller scybala were expelled with great pain, with the assistance of aperients, and the woman was completely relieved. Dr. Simpson had seen several other instances of the same kind, in which the nature of the case was, for a time, mistaken. This was more likely to happen, as a small quantity of fluid fœces was frequently discharged from day to day; fluid matter being able to find its way past the sides of the scybalous mass, and to escape at the anus. Such patients could often procure a slight evacuation of the bowel in the lying, when they could not in the sitting position.

Dr. Peddie stated, that he had seen two cases of this kind, where purgatives and clysters were ineffectual; but where the breaking-up and removal of the scybala relieved the symptoms.

CURE OF OVARIAN DROPSY BY PREGNANCY.

Dr. Peddie stated the circumstances of a cure of an ovarian tumor, of about the size of a child's head, occurring in a woman who had been five years married, but was sterile. In making the requisite examinations, it was necessary to break up a strong hymen which still remained. A month or two afterwards she fell in the family way, and he was very apprehensive of the result of advancing pregnancy in her case. She arrived, however, at the full time, and was safely delivered. After delivery no trace of the tumor could be felt. Since that time she had again been in the family way, and he (Dr. Peddie) had again searched for the tumor, but could find no trace of it.

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THE MEDICAL TIMES.

SATURDAY, FEBRUARY 24, 1849.

THE PROSPECTS OF THE MEDICAL OFFICERS OF UNIONS.

There is hardly any other public officer so unjustly used as the Union Surgeon. He is everybody's servant. From the humblest pauper to the highest functionaries of the State; from the drunken pensioner on parish bounty to the sleek city cheesemonger or village squire,—everywhere he recognizes a master. He must attend to every cry of suffering at all hours and in all weathers, and he must continue at the same time to satisfy the poor, and win the confidence of the Guardians. He is hard worked, fagged, and exhausted both in body and mind,—a walking machine—a living realization of the principle of perpetual motion. He is always weary, because he never rests. In the country he may be seen from dawn to sundown, trotting his old grey mare from house to house, administering medical aid, and dropping a word of benevolent consolation to take the keen edge off agony; at night he turns his deaf ear upwards in vain; before he has rolled himself up in a snug and comfortable posture, and has ejaculated a prayer, that at least for once he may enjoy a quiet night's rest, the bell rings, his heart beats with many an anxious doubt;—alas! there is no excuse for him,—one man's pain has no compassion for another man's necessity,—suffering excludes choice,—the saddle must be put again on the old grey mare, (the grey mare never dies!) and he will finish his nap, if he can, at the dawn of the morning.

This is the kind of service rendered by the Medical Officer of a Union; and when we consider, that it is the labouring portion of the public that receives his assistance; that society is under an obligation to provide it; that his office is a peremptory and indispensable duty, as much prompted by humanity as commended by the public need,—we should expect that the nation would take care to reward suitably those whom it appoints to perform such arduous and necessary duties. Not at all; the nation does only half its work. In attempting to meet the necessities of the poor, it commits an injustice on its officer. It acknowledges the social law, but endeavours to evade it, by a practical compromise with its abstract truth and justice. To yield a right to the poor, it perpetrates a wrong on the ministering surgeon. The consequence is, that it defeats its own efforts; and nothing appears but a series of errors, faults, and hardships.

It was to manifest this proposition to the public that the Medical Officers of Unions held their meeting on Monday last at the Hanover-square Rooms, with Lord Ashley as Chairman; and we were glad to see such a numerous and respectable attendance of gentlemen interested in the matter from all parts of the country. It is a difficult thing to get a few hundred medical men together,—especially Poor-law Medical Officers, whose time is so completely engrossed by their avocations,—upon any subject not of the most exciting character; and the very fact of so large a meeting having assembled is demonstrative of the huge injustice of the system under which they have the misfortune to act. The Report narrated the proceedings of the Committee since the last meeting, and stated two points worthy of being remembered. The first was, the late Mr. Charles Buller's opinion, that it was desirable that medical relief should be distin-

from general relief; and the second was, Sir George Grey's testimony, that the question of expense should be subordinate to the necessity of providing adequate medical assistance for the suffering poor.

The Committee have enunciated the proposition, that the Poor-law Medical Staff should be placed under a special department, presided over by a chief Director, and administered by a sufficient number of Medical Inspectors. This recommendation clearly contains the foreshadowing of a vast alteration, if not of an entire re-modeling of the existing system,—an issue which we confidently expect.

We leave the Committee to develope more minutely and at a fit time the details of the plan they recommend; we have no doubt that they have well weighed its practical operation. We would, however, counsel them at present to endeavour to impress their views upon the Poor-law Commission, through whom only, under existing arrangements, can any real amelioration of these grievances be effected. It is true that there may be great difficulties in the way, that instructions may be issued to which Boards of Guardians may prove refractory, and that amendments may not travel with that speed which keeps pace with the eager expectation of injured men. We understand these, feelings; but, we would recommend them not to cut themselves adrift, and surge off from the only shore where, until extensive alterations are accomplished, they can expect protection. The new Chief Commissioner deserves a fair trial, and we think will render them all the assistance in his power.

That the payment for Medical service is so low in some cases as 3d. per case; and throughout the country not more than 2s. 1d. per case, is discreditable both to our humanity and com mon sense as a people. It is wrong and unwise to expect officers to perform heavy duties at a meed of payment that is rather an insult than a remuneration,—that makes private conscience, not public justice, the measure of duty; and, although we cordially agree with the sentiment of that portion of the Petition that was read to the meeting, to the effect, that the Union Surgeons had generally performed their duties with unimpeachable integrity and zeal, yet we are not the less decidedly of opinion that the nation is wrong in putting their high character and instinctive benevolence to so unworthy a trial.

Where does the fault lie? Is it with the Union Surgeons themselves, the Profession generally, or the Boards of Guardians? With all three. The Union Surgeon holds office, because he knows that there is a professional brother ready to take his berth so soon as he shall vacate it, and, together with it, enjoy any incidental advantages which it may possess. The Boards of Guardians avail themselves of this unhappy conjuncture to get the work done at the lowest possible cost,—a rule correct enough for every trading enterprise, but which is inadmissible in respect to Medical service, seeing that one of the contracting parties is incapable of judging of the due performance of the engagement; and, besides, that character, skill, and competency, are not qualities that can be regulated or recompensed according to a mere money standard. If the Boards of Guardians were to lower the salaries of their relieving officers to one fourth of their present amount, they might get very many candidates, but they would be of a very questionable respectability.

It has been advised, as a practical step to obtain redress, that the Medical Officers should throw up their appointments; but this, though a bold measure, would scarcely effect their object, whilst there was an equal number of professional neighbours ready to step into their places upon the terms they rejected. It has been suggested, and the subject opens up a fair field for discussion, that the remedy for this destructive rivalry amongst the members of our Profession, would be a College that, by its by-laws, should discountenance and repress all injurious antagonism, tending to degrade and dishonour the character of the general body. Such a College, representing the individual opinion of the Profession, would, it is thought, also necessarily urge public questions with great weight upon the consideration of the Government.

We must help one another, keeping in view, incessantly, the general good. Union should be our motto: without it we are as the sands of the sea; with it, we might present the resisting force of a solid rock. Union and agitation will carry any good measure in due season, and will eventually redress the grievances of the Union Surgeons.

The meeting resolved upon a Petition to Parliament, which was stated to contain the whole case of the Union Surgeons. We think this step discreet and necessary at the present juncture. So soon as the Petition shall have been presented to Parliament, and forwarded to us, we shall publish it in our columns for the information of our readers. There were several Members of Parliament at the meeting, among whom we especially noticed Sir Harry Verney, Mr. Wyld, Mr. Cocks, Mr. Cowan, Mr. Hardcastle, and others. The presence of these gentlemen is an indication of the great interest taken in the question. We warmly desire its success.

GENERAL PRACTITIONERS NOT AN INFERIOR GRADE IN THE PROFESSION.

The great question of Medical Reform will soon occupy the attention of the Imperial Legislature, and an attempt will be made to reconcile the conflicting interests of the different grades in the Profession. What will be the result, it is difficult to prognosticate; but, from present appearances, we have some fears that obstacles will arise which will render it no easy task for the real friends of the Profession to carry out the measures they advocate.

The Parliamentary Committee on the Medical Legislation Bill has closed its labours, and the evidence which has been given shows how diversified are the feelings, and wishes, and interests of members of different grades in the Profession.

That the laws which relate to medicine in this Empire need revision, few are disposed to deny; but we are absolutely bewildered with the multitude of propositions that have been made to remedy the existing evils. It is evident, from what has occurred in the recent attempts to legislate for Medical men, and from what has been stated before the Parliamentary Committee, that the grand difficulty is connected with the claims of General Practitioners. Possessing diplomas from Medical Corporations, they have been hitherto unincorporated; and, constituting nine-tenths of the English Medical Profession, they are, in the eyes of our rulers, "the great unknown." Their very existence, as a body, seemed a matter of doubt in the memorable year 1845, when Sir James Graham brought forward his Medical Bill, and they seemed to have sprung into existence as suddenly and as perfectly as Minerva did from the divided cranium of the Omnipotent Jupiter. Four thousand unincorporated Doctors thundering at the portals of the Home Office set Downing-street in an uproar; and since that memorable period, the existence of general Practitioners has been considered "a great fact;" although its force has been endeavoured to be weakened by "great fibs." "Who are you?" asked the Home Secretary in 1845; and the answer which the 4,000 gave, satisfied the querist as to the respectability of the respondents; although their testimony, in reference to themselves, has, since that period, been called in question by some gentlemen who appeared to give evidence before the Parliamentary Committee.

The General Practitioners informed Sir James Graham that they were a body of highly educated Medical gentlemen, duly authorised to practise their Profession; that they had expended much time and money in the acquisition of their professional knowledge; and that the great mass of the people were entrusted to their care when suffering from accident or afflicted with disease. It has since been stated, however, by some who are adverse to the claims of General Practitioners, that they are men of the lowest medical grade, and of defective education. They have been called "geese;" and, viewing them in the same light, some have said, that they were "crammed." The College in Pall Mall stated, through its ambassador, "they are persons, generally, of limited means; their means have not allowed them to fill certain public situations, such as Surgeons under the Poor-law, or Assistant-Surgeons in the Navy; that they may practise as they may; and that they are compelled, by the necessity of the case, to seek to get a livelihood as early as possible." Still more recently it has been said, by one who appeared in behalf of the Bachelors of Medicine of the University of London, "that, inasmuch as the curriculum and examination of this University for the degree of Bachelor of Medicine are as high as the curriculum and examination for the degree of Doctor of Medicine in any other of the British Universities, that they would consider themselves unfairly dealt with if anything like a disposition were manifested to put them in a subordinate position, and that they would infinitely prefer holding an inferior academical status in the University to being classed among general practitioners in a distinct incorporation." This same witness afterwards said, that he could not help viewing the ge-

neral practitioners as an inferior class. We perfectly agree with him in viewing the graduates of the University of London as gentlemen of high professional education, who have submitted also to a most stringent examination; but we must beg to differ from him in the opinion which he entertains that the surgeons in general practice are of an inferior grade. We cannot allow these reflections to be cast upon so large and respectable a body of Medical men without standing forth to vindicate them; and this we consider our bounden duty at the present moment, especially since we are not aware that any of our contemporaries have come forward to rebut the charge.

We maintain, then, that the education of General Practitioners is as lengthened, as expensive, and as efficient as that of any other class of medical men, and for the following reasons:

1. As to the period of time over which it extends, it is not inferior to that demanded by any of the British Universities granting a Doctor's degree, or that of the College of Physicians. The College of Surgeons requires that candidates for its diploma shall have been engaged not less than four years in the acquisition of professional knowledge; the Apothecaries' Company demands five years' apprenticeship, and the attendance on lectures and medical practice afterwards occupies two years and a half,—thus requiring a General Practitioner to be engaged *no less than seven years and a half* before he can go up for an examination. The College of Physicians requires a candidate for its diploma to be engaged only *five years* in the study of medicine. Oxford demands *four years* for the baccalaureate in physic, Cambridge *six*, London *four*. The General Practitioner, therefore, expends more time in the acquirement of professional knowledge than the Physician.

2. The education of the General Practitioner is as expensive as that of any other grade in the Profession. He is engaged in study three years and a half longer than the alumnus at Oxford or at the London University; two years and a half longer than the candidate for the Physician's diploma; and one year and a half longer than the Cambridge graduate. Time is generally considered as valuable as money; however, in this respect, he expends more in his education than the man who intends practising the higher branches of the Profession. His student life at the hospitals and medical schools involves the same outlay of cash, as a reference to the *curricula* of the various licensing Medical Corporations will at once prove.

3. The education of the General Practitioner is as efficient as that of any other grade in the Profession. Yes, and more so than that of the Oxford or Cambridge student. Medical education, in those ancient universities, is little better than a farce. They have scarcely any means of imparting practical professional knowledge; and the M.D.'s cap and gown of those illustrious seats of learning are considered, in the eyes of the Profession, about as valuable as the armour of the renowned Hudibras.

In the really celebrated medical schools, the General Practitioner attends the same lectures as those which the young physician attends, and we cannot for the life of us imagine, how the former can be less efficiently instructed than the latter.

And therefore, and for these reasons, we earnestly exhort the Surgeons in General Practice to look well to their own interests as a body at the present moment. They have been despised because unincorporated. Let them be earnest and united in their efforts to secure privileges by which they will have a voice in College government, and in the direction of Medical Education, then shall we hear no more of their being an inferior grade.

INTERMENTS IN CITIES AND TOWNS.

We are pleased to perceive that Mr. Simon, the new Sanitary Officer for the City, has begun his duties well. He has taken the Act of Parliament, held it up before the faces of the authorities of St. Bride, Fleet-street—in the very heart of the city—and said, Your churchyard is full: here is the law, and here the penalty. I am the officer appointed to enforce it. I warn you, therefore, to refrain from further burying here your dead. We regard this one act worth the first year's salary, as it will prove to all classes that they can no longer commit sanitary offences with impunity. At the same time it must be observed, that the several Poor-law Surgeons of the City, under the new Act, are compelled to perform equally onerous duties without the slightest amount of remuneration.

We could not help noticing, as we passed St. Bride's churchyard the other day, that the ground thereof is a dead level, from four to six feet higher than the surrounding parts, and is supported by a perpendicular wall of great strength; so that you approach the church through what, in railway language, would be termed a "cutting." This, we think, strongly characterises the condition of the place. To Mr. Walker, of Drury-lane, the public are deeply indebted for his attention to this subject, and for the courage and energy he has displayed in contending for its reform. Mr. Walker stated, at an assemblage of gentlemen held at the house of Mr. Mackinnon, M.P., on Wednesday last, that a public meeting would shortly be called to petition Parliament to close all grave-yards in cities and towns, and to prohibit the practice of burying the dead in lead in vaults under churches and chapels.

We hope Mr. Simon will persevere—keeping his armour bright—and we are sure he will find a sufficient shield, should any resistance arise, in the powerful protection of the Public and the Press.

We call his attention to our article on City Nuisances, wherein he will observe matter for his serious consideration; and, keeping a watchful eye, we shall occasionally recur to the subject.

HUNTER'S PREDICTION OF HIS DEATH.

The death of this distinguished physiologist, in whose memory the Oration (given last week) is annually delivered at the College, took place under very melancholy circumstances, as narrated by Drewry Ottley, Esq. In the early part of 1793, a meeting of the Board was called to alter the then existing regulations, and to draw up a code of rules for regulating the admission and instruction of pupils; and a set of proposals was submitted to Mr. Hunter's colleagues, and agreed to by them, without his having been even consulted on the occasion, and many of which were especially directed against Mr. Hunter. Amongst the latter, was one which determined that, for the future, no person should be admitted as a student of the hospital without bringing certificates that he had been educated to the Profession,—a regulation which was probably designed to exclude Mr. Hunter's countrymen, who sometimes came up to town recommended to him, and entered as his pupils at the Hospital without having had any previous medical instruction. Nor was this clause long in taking effect; for, in the autumn, two young men, who had come up to town ignorant of this new regulation, applied to Hunter to be admitted under him at the Hospital. He informed them of the law which had been passed, but undertook to press for their admission at the next Board-day, directing them to furnish him with a statement of their case in writing. On the 16th of October, 1793, the Board met, and Hunter prepared to fulfil his promise, though he was so well aware of the risk he incurred, in undertaking a task which he felt would agitate him, that in mentioning the circumstance to a friend who called on him in the morning, he expressed his apprehension lest some unpleasant dispute might occur, and his conviction that if it did it would certainly prove fatal to him. At his accustomed hour he left his house to commence his morning round, and by accident forgot to take with him his list of appointments; he had left the house but a few moments when it was discovered, and Mr. Clift, the present conservator of the College, who was then residing in his house, hastened with it to York-street, St. James's, the first place on the list, where he found the carriage of his illustrious master waiting. Hunter soon made his appearance, took the list, and in an animated tone called to the coachman to drive to St. George's. Arrived at the Hospital, he found the Board already assembled, and, entering the room, presented the memorial of the young men, and proceeded to urge the propriety, under the circumstances stated therein, of their being admitted. In the course of his remarks, he made some observation, which one of his colleagues thought it necessary instantly and flatly to contradict. Hunter immediately ceased speaking, retired from the table, and, struggling to suppress the tumult of his passion, hurried into the adjoining room, which he had scarcely reached when, with a deep groan, he fell lifeless into the arms of Dr. Robertson, one of the physicians of the Hospital, who chanced to be present. Dr. Baillie had immediately followed him from the Board-room, and Mr., afterward Sir Everard Home, who was in the house, was also summoned to his assistance. Various attempts were made, for upwards of an hour, to restore animation, under the hope that the attack might prove to be a fainting fit, such as he had before experienced, but in vain; life had fled, and all their efforts proving useless, his body was placed in a sedan-chair and conveyed to Leicester-square, followed by his now v[illegible] carriage.

Thus, in his sixty-fifth year, expired John Hunter, celebrated alike as a surgeon and as a naturalist; in neither of which capacities has he had many equals—in his combined character, none.

In an early Number we propose giving a biographical sketch of Hunter.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—Feb. 13, 1849.

J. M. Arnott, Esq., F.R.S., President.

A paper was read, entitled—

Case of Exfoliation of the Anterior Arch of the Atlas. By Robert Wade, Surgeon to the Westminster General Dispensary.

The subject of this affection (aged 35) first came under the Author's notice at the Westminster Dispensary in October, 1845. He then had a large sloughy ulcer occupying the back of the pharynx, at the centre of which dead bone could be felt with a probe. He had previously suffered from extensive exfoliation of the upper jaw, and lost one of the spongy bones. Twelve years had elapsed since he had primary venereal disease, for which he was salivated, and was again subjected to the influence of mercury, by fumigations for ulcerated throat. A course of iodide of potassium in sarsaparilla re-established his health for a time, but his throat again became sore two years afterwards. The same treatment was resorted to repeatedly, with varying success. Latterly he had suffered from pain in the neck, and from attacks of muscular rigidity in the same part. In one of these spasmodic attacks, he had been alarmed by feeling something give way in the back of his neck "with a loud crack like the report of a pistol." On looking into the mouth, some coagulated blood was seen adhering to the ulcer. After this the spasmodic attacks became less frequent and severe; and, at the expiration of five months, the Author observed a small portion of bone projecting into the pharynx, and, with very little difficulty, removed the greater part of the anterior arch of the atlas, with the entire articulating surface for the odontoid process of the axis. Caution was enjoined for a time, and the patient was enabled to resume his usual occupation in three months. The throat, however, has continued, from time to time, to be subject to attacks of ulceration. The power of rotating the head is now nearly perfect; but he has a catching pain at the back of the neck when he attempts to bend his head forwards.

After the reading of the paper, the President called upon Mr. Hewitt to explain certain specimens which he had placed upon the table, bearing upon the subject brought before the Society by Mr. Wade.

Mr. Hewitt said, that, having seen, upon the list of papers received, the title of Mr. Wade's remarks, he thought it would be interesting if he brought forward the two specimens referred to. He had had them for some years past. The one was a case of extensive exfoliation of the anterior arch of the atlas, in which the same symptoms were apparent as in the case mentioned in the paper just read. They both took place after attacks of the venereal disease, in which the patients had been subjected to a course of mercurial treatment. The exfoliations were made within a month or six weeks of each other, and the patients were enabled to leave the hospital quite well. During the time of the exfoliation, in the latter case, the patient suffered excruciating pain, and, whenever there was an attempt to examine the throat, the man always held his head between his hands, and, indeed, had great difficulty in moving it at any time. The head was kept in a recumbent position for some time after the removal of the bone, and the patient ultimately left the hospital quite well. Nearly two-thirds of the articulating surface which receives the odontoid process was exfoliated, leaving about one-third for the support of the head. Both exfoliations took place in 1810, and were recorded in the *Medical Gazette* for 1835.

Mr. Wade said, with regard to his patient, the power of moving the head in the direction of the chest was very limited; perhaps, to the extent only of half an inch. He had intended to ask Mr. Hewitt whether all of the articulating process had exfoliated, but Mr. Hewitt had said that a portion remained. It was doubtful whether, if the whole had been removed, there would have been sufficient support to the head. He inquired whether Mr. Hewitt knew how long the man lived afterwards.

Mr. Hewitt said, he believed that he lived for several years.

A second paper was read, entitled—

Pathological Researches into the Diseases of the Ear. By Joseph Toynbee, F.R.S., Fellow of the Royal College of Surgeons in England, and Surgeon to the St. George's and St. James's Dispensary, London.

This paper contains the results of 915 dissections, which are classified as follows:—

Ears of persons known to be deaf.....	184
Ears of persons supposed to be deaf...	70
Ears in the stage of incipient deafness	358
Ears in a healthy state	303
	915

After some introductory observations, the Author enters upon an examination of the state of each of the structures composing the organ of hearing. The most frequent pathological condition of the *membrana tympani* consists in a thickening of its internal and middle layers, the deposit in its substance of calcareous matter, its adhesion with or without the presence of membranous bands to the inner wall of the tympanic cavity, and the destruction of more or less of its substance by ulceration. In the *tympanic cavity* the diseases most frequently present are a thickened state of the mucous membrane,—membranous bands which connect together the ossicular deposits of mucous, purulent, scrofulous, and calcareous matter. Anchylosis of the stapes to the fenestra ovalis occurred in twenty-six instances. One of the interesting results of these dissections is the rarity of disease in the eustachian tube; in the 612 dissections of diseased ears, only 21 disclosed traces of disease in that portion of the organ of hearing. The author pointed out the agreement that exists between the diseased conditions described, and the history and symptoms of deaf patients during life; and expressed his conviction, that when rational plans of treatment, founded upon pathological research, are carried out by intelligent medical men, this branch of surgery will be rescued from the odium which at present justly attaches to it.

The author concluded his paper by pointing out the intimate connexion which exists between different parts of the organ of hearing, and the brain, its membranes, and other important organs.

Mr. Toynbee, at the request of the President, then rose to speak of the course of treatment which he had pursued in the several cases. He said, his experience was, that they should be treated in the same way as complicated inflammation of any other membrane. The most successful plan was in the use of alteratives and doses of mercury, (not sufficient to produce any effect upon the system,) and these continued for from two to five or six months, with the addition of local applications, first by leeches, and secondly by nitrate of silver, to the meatus externus. A very weak solution of the latter might be applied to the surface of the membrana tympani. In some cases, a strong solution, composed of ½ drachm of solid nitrate of silver to 1 ounce of distilled water, and applied so as to cause a copious discharge, was productive of great relief. In some instances, where there was a great noise in the ear, an application of the solid nitrate of silver, at intervals of two or three days, had been beneficial. In others, a weak solution to the membrana tympani, by means of a sponge, had afforded instant relief. These applications, together with the blue pill, or some other preparation of mercury, were by far the most successful modes of treatment. Blisters, he believed, as a general rule, were failures; they were rarely productive of benefit behind the ear, and leeches, except immediately below the ear, were of but very little use. An application of an ointment, compounded of ½ drachm cantharides to 1 ounce of lard, so as to keep up a discharge to the meatus externus, was also of advantage. By means of the Eustachian tube, when air is expired it may be distinctly heard to enter the tympanic cavity, if the person is in health, by gentle crackings; but in those cases where the membrana tympani and the mucous membrane were thickened, and the tympanic cavity was smaller than natural, the sound resembled that produced by a small quantity of air passing over paper, by the crackings being very loud and the deafness very much increased. He believed that, by the aid of the speculum, on the one hand, and the catheter on the other, in all ordinary cases of deafness, every medical man could determine the condition of the ear. In many dissections he had found the membrana tympani more concave than natural, and in which there were firm bands connecting the tympanum to the surface of the promontory. These bands were so firm as to keep the membrane in a constrained state, so that when air was forced into it, it did not move it. These were exceptions; and he considered they were incapable of relief. He instanced a case of deafness produced by scarlet fever, in which the membrane on one side was destroyed, and on the other was much less in size, and yet concave. In cases where deafness arose from the thickening of the membrane, relief might be obtained by diminishing the congestion of the mucus membrane by the application of leeches, nitrate of silver, and the mercurial treatment. He had placed on the table many specimens in which the bands were so lax as not to interfere with the hearing. In reply to several inquiries, he stated, that he had paid considerable attention to the state of the foramen rotundum, and in some of the specimens disease would be found, but the cases were rare. In answer to an inquiry from the President, he stated, that he remembered the case of a gentleman in the house of Broadwood's, the eminent pianoforte makers, who had a remarkably good ear for music, but who could only detect sounds by means of a connecting-rod from the piano, which he held between his teeth. He was a tuner in that house for many years, and his opinion of the correctness of musical sounds was regarded as most valuable; but in ordinary conversation he could only hear when the voice was much raised; and in hearing more delicate sounds, he was obliged to make use of a solid conducting medium. Diseases of the vestibule and semi-circular canal were comparatively so rare, independently of disease of other parts, that he had not made such observations as would lead him to form an opinion from the kind of deafness, as to the seat of the disease. He had, that day, seen a gentleman who could hear distant sounds much better than many persons; but, in ordinary conversation in a room, was exceedingly deaf. He (Mr. Toynbee,) had lately been engaged in making a collection of cases of persons who had died above the age of seventy, and where there had been a diseased state of the auditory nerve. He had found in these a thickened condition of the mucus membrane; and in the case of one lady who died at the age of eighty-four, and who had not been deaf till she was eighty-two, there were large bands of adhesion connecting together the various parts. In all cases of thickened condition of the membrane, the course of treatment he had pointed out had been productive of benefit.

Dr. Warne had observed, in cases of deafness occurring in old age, the patient could often hear distinctly when there was considerable noise around, better than when all was quiet. A relative of his could hear more distinctly, if a person spoke to him while walking in the street than in a room; and, it struck him, that the explanation might be, that the concussion of air might produce a greater tension of the muscles, and thereby render the membrana tympani more easily affected.

Dr. Webster asked, What was the explanation, why a deaf person heard much better if spoken to in a low than in a loud tone of voice? He had met with several in whom this phenomenon was observable, and it struck him as singular, and he should like to hear Mr. Toynbee's opinion.

Mr. Toynbee, in answer to Dr. Warne, said, he believed that that was not at all a symptom of deafness in old age merely, but also in other stages of life; he should, however, rather decline giving a further reply, until he had worked out a point upon which he was engaged. In answer to Dr. Webster, his opinion was, that in very loud noises the muscles of the ear were thrown into violent commotion, and the stapes was too firmly pressed

upon the cavity of the vestibule, so that, in reality, the vibratory power was diminished. He had, over and over again, observed, what he was about to state as an exception to the rule, that it was only one kind of deafness in which speaking low was necessary. In replying to an inquiry as to cases of continued noise in the ear, he was induced to account for them in two ways; first, by the pressure exerted upon the stapes itself by the membrane of the tympanic cavity; and, secondly, by the firmness and contraction of those bands of adhesion which connected the stapes with the walls of the tympanum. By those two ways, the stapes might be considerably and continually pressed against the cavity of the vestibule, and thereby, he imagined, those sounds might be produced.

Dr. Webster asked Mr. Toynbee his opinion as to the popular notion expressed by military officers, that artillerymen and naval officers were more exposed to deafness than others in consequence of being so much exposed to the noise of artillery. Was it a popular error, or was there any truth in it?

Mr. Toynbee thought that there were many cases on record in which loud explosions and reports had produced immediate rupture of the drum of the ear. He had himself met with a case in which the nerve had been destroyed by it. He had also met with a gentleman who was in the habit of shooting, and in whom deafness of the right ear had occurred. He was unable, from any actual experience, to state the pathological conditions produced.

Dr. Webster was anxious to hear the opinion of some of the members present as to the mode of treatment they had pursued in cases of scarlatina now so prevalent. He had drawn attention to this subject on the occasion of their last meeting, when it was thought better to attend more particularly to the pathology of the disease. With regard to himself, he had not had so much experience as formerly, from the circumstance of his not being attending physician of any institution. Certainly, what little he had seen, convinced him that the present epidemic required very different treatment to that which was formerly pursued. Hitherto, the treatment had been antiphlogistic, the disease being considered as inflammatory, and it was not so fatal then as now. From what he had lately heard, they now required stimulants to support the system, and, so far from bleeding the patient, for every one now bled, there were from twenty to thirty formerly. The treatment, he understood, was to give tonics, bark, port wine, and even brandy. The disease had been very prevalent and very fatal. So far as his knowledge went, the only parallel period in which the epidemic was so fatal was more than a hundred years ago. In 1747, he believed that one of every two affected with it died. He thought it was the most serious disease they had had lately to deal with. The mortality in the fever hospitals was sometimes only 1 in 40. Now, according to the paper of Dr. Miller, read at the last sitting, it was 1 in 7.

Dr. Gregory was not, unfortunately for himself, present on the last occasion, when Dr. Miller's paper was read. He regretted his absence exceedingly, because he wished particularly to have heard whether Dr. Miller made any allusion to a phenomenon which he had seen only two instances of, and on which he was anxious to gain some further information. He meant scarlatinal convulsions. He had not in any work been able to see that matter treated of at any length, though he had seen in the journals some occasional allusions to cases in which it occurred. He was anxious to know whether it, like scarlatinal dropsy, was an occurrence often met with, and whether any gentleman had formed an opinion as to the nature of the convulsions. The first case which came under his notice, he was assisted in by the late Dr. James Johnson. It occurred at Chelsea, in the son of a Mr. Goodman. The convulsion came on very suddenly, and no infantile convulsions, or those incident to more advanced life, ever equalled them. They lasted from an hour to an hour and a quarter. On being sent for, he felt at once that there was only one thing could be done, which was to bleed largely. The boy was twelve years old, and he bled him most profusely, taking from 18 to 20 oz. from him; with that the convulsions ceased; he gradually recovered, and is now perfectly well. The whole family of nine had the disease, and the second who took the scarlatinal convulsions he treated in the same way with but very small prospect of success, as they assumed a very different appearance. That was the oldest girl of the family, who bore the bleeding badly and died. He opened the body and found sufficient phenomena to account for death. These were the only two cases which he had seen. He had had a series of similar cases sent to him by Mr. Ward. He was anxious to know whether it had been prevalent during the late epidemic, and what mode of treatment had been found most beneficial. In both of the above cases the disease had advanced, the one to the thirty-seventh and the other to the forty-fifth day, and in both patients there was a disposition to dropsy. They were both under his own care, in connexion with Dr. J. Johnson, and he believed that the convulsions, like the dropsy, formed a part and parcel of the disease, but occurring at a late period of it. He had heard of instances occurring as early as the seventh or eighth day, but he had never seen such.

Mr. Rogers had met with two cases lately of scarlatinal convulsions, both occurring after the twenty-first day, when dropsy was still existing. The children suffered from albumenuria. The course adopted was cupping over the loins and dry cupping to the nape of the neck; they recovered, and both now well. The treatment in the beginning was antiphlogistic. In the present epidemic, he found that much caution was required, the patients requiring to be supported in every case by tonics, for some time afterwards.

The sitting was then adjourned.

REVIEWS.

Medical Reporting, or Case-taking, being an Attempt to Prove that it is Necessary for the Medical Attendants of Families to Record the Particulars of their Patients' Illnesses, and the Peculiarities of their Constitutions, in order to Treat their Illnesses with Due Care; with Suggestions for Overcoming the Difficulties which have hitherto prevented Medical Case-taking from becoming general. By SAMUEL CROMPTON, Surgeon to Henshaw's Blind Asylum, Manchester. 8vo. Pp. 32. London: Pitman.

This little work sets forth, in a clear and forcible manner, the advantages to be derived from the adoption of case-taking. The author, in searching out the objections or hindrances to the practice, assigns a primary place to the want of time so general among a large portion of the Profession; and suggests, as a remedy, the substitution of Pitman's Phonography for the present cumbrous mode of writing. The Author contends, that for beauty, brevity, and legibility, Phonography far surpasses every other system of shorthand in existence. In fact, in these respects, there is now little room for improvement; while, as to facility of acquirement, Phonography is quite equal, if not superior, to any other system. A very short time suffices for the acquisition of its first principles; and, after this, every hour's practice increases the speed at which the learner can write.

On one point, however, we think the writer has committed an error, in printing a portion of his pamphlet in Phonotypy, a system of printing according to pronunciation, invented by the author of Phonograghy. It will be at once perceived, that as the author addresses himself to a class confessedly without much leisure time at their disposal, and requires of that class the study of Phonography, in order to the attainment of an ulterior *desideratum*—case taking, it was exceedingly ill-advised, on his part, to exact of them an additional expenditure of time, in order to acquire another alphabet—Phonotypy.

Nothwithstanding we have thus spoken, we think there is much in the book that deserves the serious consideration of the Profession, especially the junior branches of it. Phonography, also, possesses much to recommend itself to them for the purposes of reporting the various lectures to which, in their preparation for practice, they are accustomed to listen. They would thus secure to themselves a vast fund of information—a great portion of which is now lost. We cordially commend the work to the attention of our readers.

A Critical Treatise on the General Paralysis of the Insane. Originally published in the "Journal of Psychological Medicine." By JAMES M. WINN, M.D., &c. London: John Churchill, 1848. Pp. 50.

This pamphlet may be considered as a review of M. Rodrigues' Work, "*Traite de la Paralysie Général Chronique, Considerè specialment chez les Aliénés,*" and contains some excellent remarks on the French Author's modes of treating the disease referred to. The third part of this work is that to which Dr. Winn confines his observations. This section relates to the history of the malady, and comprises an account of the predisposing causes, symptoms, state of mind, duration, complication, prognosis, diagnosis, pathological alterations, &c.

The predisposition to paralysis varies with the age, few cases occurring before twenty-five to thirty, but increasing in frequency up to sixty. The disease generally commences with ambitious monomania, and attacks individuals of every kind of temperament. This complaint is rare in southern latitudes, is likely to occur in individuals of an apoplectic habit, and with hypertrophy of the heart. Dr. Bence Jones has also shown, that preternatural quantities of the earthy and alkaline phosphates are voided in the urine of patients suffering from cerebral diseases.

The exciting causes are strong impressions deranging the impulses and affections, such as losses in business, disappointed ambition, anxiety, grief, &c., also injuries of the head.

The symptoms of the disease are, hesitation of speech and impeded motion of the tongue. Good and bad symptoms may alternate for some time, giving hopes of recovery. There is incipient immobility of the features,—then the arms become paralysed,—afterwards, the legs. The premonitory symptoms will sometimes disappear for several hours or days, to return with fresh intensity. This is the first period of the disease. In the second, the symptoms become greatly aggravated. In the third period, the general paralysis has reached its height; hearing and smell are gone; the patient may utter a few vague sounds, but speech is lost. The mouth is opened instinctively when food is offered, but deglutition is almost gone. The head is drawn forwards, the lower jaw acts slowly, and the tongue rests at the bottom of the mouth. The legs are unable to support the body, and the arms lie motionless by the side. Respiration is short, and performed with difficulty, while sensation is nearly gone. Diarrhœa is common. Emaciation rapidly ensues, and death closes the melancholy scene.

General paralysis may be developed after and during mania or monomania, with dementia. Its duration is not easily determined; and nearly all writers consider it incurable. The seat of the disease is thought to be in those portions of the brain which preside over the voluntary movements, and which may produce the paralysis by being either sympathetically or directly affected.

In the treatment of the disease in its first stage, repeated bleedings are recommended; this is the opinion of M. Rodrigues. Dr. Winn thinks, however, that the brain, in chronic as well as in acute insane cases, is greatly injured by depletory measures. In debilitated constitutions, cold baths, light tonics, and aromatics, are advised. Digitalis, administered in large doses, was found useful in two of M. Rodrigues' cases. Mercury has been used with advantage in this country, but the French have a prejudice against this mineral. In the latter stages of the disease, external counter-irritation is recommended; whilst internal revulsives must be omitted, on account of the diarrhœa. From the data, however, collected from medical men connected with asylums in this country, we learn

the medical treatment of insanity is very unsatisfactory. It should always be continued when patients are convalescent, till the medical attendant is completely convinced that the brain may resume its functions without danger.

CONVENTION OF POOR-LAW MEDICAL OFFICERS.

The General Meeting of Poor-law Medical Officers, convened by public advertisement and circular, was held at the Hanover-square Rooms, on Monday, February 19, when a very numerous body of Delegates, and other gentlemen interested in the important question of Parochial Medical Relief, were present.

Viscount Ashley, M.P., on being called to the chair, expressed his deep sympathy with the object of the meeting, and advocated the claims and services of a body of men who were intrusted with the highest interests of the poorer classes, and who were most inadequately rewarded for what they did. The interests of the sick poor and of the medical officers employed to attend them were identical, and it was under this feeling that in 1844, when he took up the question, he felt that he could not do better, in seeking to ameliorate the condition of the former class, than direct public attention to the position in which the latter then stood. It was impossible for any one to examine the evidence which had been adduced before the Committee which sat upon the subject in that year, and to come to any other conclusion, than that the manner in which the medical officers of the sick poor were treated was most unsatisfactory, both as regarded themselves and their patients. He had always been of opinion ever since he sat upon that Committee, that the medical gentlemen employed to attend on the sick poor could not discharge their duties properly unless they received an income suitable to the laborious offices which they had to perform, and were rendered independent of the Boards of Guardians. They ought to be enabled to occupy the position that belonged to them as educated men intrusted with great responsibilities; and, therefore, not only should they be independent in their circumstances, but they should not be subject to the caprices of persons who were almost always ignorant, and occasionally insolent. They ought to be responsible to those only who were capable of appreciating their services, and of judging of the emoluments which should belong to men fulfilling such important duties. He thought, also, that their situations should be permanent, for the offices which they filled were of the most complicated and burdensome kind, requiring an immense amount of labour and skill. In nine cases out of ten the most difficult surgical operations arose among the poor and working classes, for persons whose situation in life enabled them to secure the most minute attention in illness, were comparatively exempt from those complicated diseases which so often come under the notice of the Poor-law medical officers. When, therefore, they found gentlemen intrusted with the charge of 5,000, 10,000, and sometimes 20,000 fellow-creatures, receiving on that account the most miserable incomes, it amounted to nothing more nor less than an insult upon the poor and the Medical Profession. He designated their remuneration as a pauper allowance, and felt anxious that, as they had now rendered their organisation so perfect, they would not fail to press their claims upon the Legislature, not as a matter of bounty, but as a right; and he doubted not that they would ultimately secure that amount of relief which was due to the poor, and the recompense which should be just to themselves. He had only further to state his readiness to assist them in every way in his power. He could not undertake to originate any legislative proposition, but he would support any such movement, because he felt he would be discharging a duty, beneficial alike to the ill-used members of the Medical Profession, and to that large class of his fellow-subjects, the suffering and sick poor. His Lordship then resumed his seat amidst much applause.

At the close of the noble Lord's address, the Secretary, Mr. Lord, presented the Report. That document detailed the steps which had been taken to secure a legislative remedy for the grievances of which the Poor-law medical officers complained, and the result of interviews which deputations from their body had had with the late President of the Poor-law Commission, with the Board of Health and other departments of the Government. It stated that the late Mr. Charles Buller had expressed himself inclined to think that medical relief ought to be separate from the ordinary Poor-law Administration, and that it ought to be carried on upon a distinct and comprehensive system. In the late Health of Towns Act, a permissive clause had been introduced, whereby Boards of Guardians were allowed, should they think fit to do so, to pay their medical officers for the invidious sanitary duties they were required to perform under that Act. The union medical officers of England and Wales numbered 3,000 out of the 15,000 members of the medical profession, and the whole body was unanimous in condemning the present system of Poor-law relief. To these 3,000 gentlemen, nearly 3,000,000 of the poor in distress and sickness were entrusted for relief, yet though 8,000,000*l.* was annually raised for the nominal support of the pauper population, of that vast sum 170,000*l.* was the largest sum which the 3,000 medical officers of the country had hitherto received for their services. Again, the average cost of drugs in each case at hospitals was 4s. 2d., in dispensaries 2s. 2d., while to medical officers from 1s. 4d. to 1s. 6d. was all that was allowed, the time expended and skill employed by them being quite omitted from the reckoning. The Report complained of the extreme harshness of the Boards of Guardians, who defended themselves under the plea, that they were the servants of the country, and that the nation could not afford the cost of medical attendance. This argument was met by quoting the language used by Sir George Grey, that "the question of expense was subordinate to what was necessary to secure efficient medical relief." Liberality of payment was not looked for, but three thousand medical men engaged in this service may well feel that they have some claim upon the public for some equivalent for their arduous exertions. The Report commented upon the conduct of some members of the profession who had shown such readiness to accept office when vacancies occurred through death or resignation, and urged that no obstacle could be greater than that which such a course presented.

The Treasurer presented the balance-sheet, which showed, that there had been received from 304 subscribers, 195*l.* 7s. 10d.; and that the expenses had exceeded this sum, leaving a balance due to him of upwards of 20*l.*

The Report having been adopted,

Wm. Lobb, Esq., rose to move, as the first resolution:—"That the evidence laid before this Convention, and the correspondence of its Committee, prove an universal and increasing dissatisfaction among the medical officers of Unions; that how much soever the Poor-law Board may feel the necessity of altering the present vicious system of Poor-law medical relief, they are so hampered by the Boards of Guardians, that they are unable to carry into operation the very measures which they have deemed to be right; there is, therefore, great cause for the Medical Profession, and the Poor-law medical staff more especially, to seek directly from Parliament redress from the hardship and injustice under which the sick poor and the Union Surgeons are suffering while the present system continues; it is, therefore, urged, that as the Government at present pay half the medical salaries, it is expedient that it should pay the whole, and remove from Boards of Guardians the power to interfere with wise regulations and salutary improvements."

Peter Martin, Esq., of Reigate, seconded the resolution. He proved, that, while their salaries were the same, their duties were very much augmented, owing, not only to the increase of population, but the increased facilities for giving orders. He considered, that the greatest difficulty they had to contend with was the ignorance of the public upon the subject. Happily, by means of the Press, this was very much decreased of late years, but, as yet, their claims were not appreciated. It would be the most desirable course, in his opinion, to place the whole of the charges on the Consolidated Fund, so that they should not be left at the mercy, or, rather, to the tyranny, of the Boards of Guardians. The present moment afforded hope, that, by proper representations, their first and great object would be accomplished; and there was no doubt the other alterations they sought would follow.

The resolution, as in the case of all subsequent ones, having been carried unanimously,

John Liddell, Esq., proposed, as the second resolution, "That the plan for an improved system of medical relief, suggested by the Committee of the Convention, and laid before the Government, with their memorial to the Right Hon. Sir George Grey, contains the three important principles which are best calculated to render any system acceptable to the medical profession, and in the highest degree useful to the poor, viz.—payment proportioned to duties—permanence of appointment,—and responsibility to professional authority." With respect to the payments, he had in evidence, that the practice was now most irregular, cases varying from 14s. 4d. to 4d. in some unions. He had the experience of sixteen years, and felt convinced that they had no hope of altering this state of things by any appeals to the Guardians, for they, for the most part, considered the honour of the appointment as a sufficient recompense. Individually, he disapproved of the medical officers finding the drugs. He then referred to the necessity of making the appointments permanent; showing, that now that they were expected by the Board of Health to point out nuisances and inform against parties, they were never safe, if, in the performance of duty, it was necessary to come across the interests of a guardian or his friend; and for such acts he knew some had suffered already. He then referred to the evidence of Mr. Bonney, of Brentford, who, it appeared, had been dismissed for his great attention to his patients; for the Board said they were dissatisfied with him because he had given orders for relief when not required, and had offered letters in confinement to parties who would not otherwise have applied. He complained, that under the present system the books kept were of the most worthless kind, not understood by any one, and of no value to the guardians or rate payers. Founding his remarks upon the evidence of Dr. Southwood Smith, he urged the great need of inspection among parish surgeons, many of whom were young and inexperienced. The public ought to have this security, for the guardians were confessedly totally ignorant and incompetent for such a work.

Mr. James Lord seconded the resolution. Though not a medical man, he had seen so much of the evils resulting from the present system, that he fully concurred in the object of the meeting. In a very able speech, he showed the disparity between the good effected and the remuneration given, and urged the Committee to avoid details in the discussion, and cling to principles.

Dr. Sibson, formerly of Nottingham Hospital, moved the third resolution, to the effect—"That the Board of Health, having imposed upon the Poor-law Medical Staff, through powers given in the 'Nuisances Removal and Diseases Prevention Act,' new duties of a distinct kind relating to sanitary purposes, without providing payment for the same, this meeting claims protection against such exaction." In commenting upon the conduct of the Board of Health, he urged that the medical men were not fairly treated, for the fact was, that that very body owed its existence to them, for they were the parties who furnished Mr. Chadwick with the facts upon which he based the report, which was the foundation of the Health of Towns Bill; and now, not only had they to perform the most disagreeable and offensive duties, but all this heavy additional toil is imposed upon them without any increased remuneration. The measure, however good, could not be carried out without them. They were frequently obliged to report guardians themselves as having nuisances in their own possession, and they ought to be protected in such circumstances from suffering punishment, for the simple performance of unplea-

ing duty. It was well known that bodies of men would do things which they would be ashamed of in their private capacity, and he must say the conduct of the guardians, as a class, was cruel in the extreme.

Mr. Bainbridge (of Tooting) seconded the resolution, in a brief speech, only heard by the Chairman; and another gentleman produced a file of 4,000 orders, for which he stated he had received an amount averaging 6d. per case, some of them running over a space of six months.

At this stage of the proceedings,

Mr. Wyld, M.P. for Bodmin, presented himself in the body of the meeting, and expressed his deep interest in the cause of Medical Reform. He deeply regretted the want of union amongst themselves, and urged the consolidation and organization of the whole body, so that their expressed opinions might have some weight and attention. He considered the laws relative to medical practitioners in this country as very imperfect; and moved a resolution, proposing a total reform in the constitution of the Profession at large. The noble Chairman, without adverting to the merits of the discussion, declined to receive the resolution, as not having been previously submitted to the Committee; and it was ultimately withdrawn by the honourable Member, who stated his belief, that the feeling in the House of Commons was by no means favourable to the Medical Profession, and urged more public and vigorous measures to secure the amendment of the law.

Mr. Daniell, of Newport Pagnel, moved the fourth resolution:—"That a Petition be presented to Parliament, praying the Legislature to pass an Act imbodying the principles alluded to in the previous resolutions, and that the members of the Medical Profession, the Poor-law Medical Staff more especially, and all others interested in behalf of the sick poor, in improving the present system of Poor-law medical relief, be requested to use their utmost personal influence with Members of Parliament for the attainment of this object."—He was not now a Poor-law officer, for since the last meeting he had resigned his post, after having filled it for twenty-three years. His resignation had been at once received and filled up; and, though he brought no charge against his medical brethren, he questioned the policy or prudence of their having so readily offered to accept an office he had thrown up in disgust. The medical officer at Stoney Stratford resigned at the same time; and, had the opportunity been turned to account, the guardians might have been defeated. His average receipts were twopence and a fraction upon each case; and medicines, for which a druggist would charge him 62*l.* 17*s.*, if he made them up, were paid for by the allowance of 30*l.* He admitted that the system was a vexatious one to the enlightened members of many Boards; but, unhappily, these were few. As a medical officer, after serving faithfully for so long a period, he was allowed to go without regret; when, had he been a common soldier, he would have received a pension for life. Was theirs a less dangerous or arduous work? He asked, whether men should be thus treated, who dwelt, for the public safety, amid scenes of pestilence and death, and performed their nightly vigils in obedience to the imperious mandate of cruel taskmasters. The present system was not economical; but a fairly paid Medical Staff would materially lessen the burdens of the country. Gentlemen of high talent would seek the appointments, patients would be better served, and the public would reap the benefit.

Mr. Livett, of Wells, in seconding the resolution, urged the necessity of rendering the movement more public.

Lord Ashley was obliged to retire from the meeting, and the chair was taken by Dr. Burt. The Secretary then read the Petition, which was based upon the foregoing resolutions, and stated, among other facts, that the fees at present averaged for the country 2*s.* 7*d.* per case, and 1*s.* 7¼*d.* for London, and prayed for a fixed scale of 6*s.* per case. The next resolution was moved by Mr. Cantrell, of Wirksworth, of Derbyshire, to the effect:—"That a Committee shall still be maintained, for which purpose the following gentlemen be re-appointed, with power to add to their number:—Thos. Hodgkin, M.D., Chairman, Lower Brook-street, Grosvenor-square; Thos. Martin, Esq., Treasurer, (Reigate); Chas. F. J. Lord, Esq., Honorary Secretary, Hampstead; Adolphus Barnett, Esq., Limehouse; John Liddle, Esq., Alice-place, Goodman's-fields; Wm. Lord, Esq., Aldersgate-street; George Ross, Esq., Farringdon-street; Josh. Thos. Mitchell, Esq., Kennington; Jas. F. Vallance, Esq., Stratford; Edward White, Esq., Lamb's Conduit-street; Jas. Heygate, Esq., M.D., Derby; Peter Martin, Esq., Reigate; Edwd. Boulger, Esq., Blechingley; George Bottomley, Esq., Croydon; Wm. Cantrell, Esq., Wirksworth, Derby; Edwd. Daniell, Esq., Newport Pagnell; Alfred Ebsworth, Esq., Bulwell, Notts; John Burton, Esq., M.D., Walsall, Stafford; Thos. Parker, Esq., Woburn, Beds; Rd. Thos. Tasker, Esq., Melbourne, Derby; Hy. W. Livett, Esq., Wells, Somerset; John A. Pearson, Esq., Woolton, Liverpool; Jas. Stedman, Esq., Guildford; Thos. H. Smith, Esq., St. Mary's Cray; and that it is essentially necessary that a more liberal contribution be solicited from the Poor-law Medical Staff and the Profession generally, to sustain the objects of the Convention, otherwise it will be impossible for the Committee to continue their exertions."

Mr. Soden, late of Bath, in seconding the motion, stated a case in which he had been called to attend a man with a fractured leg. He set it, and as soon as possible obtained an order from a Guardian. He then applied to the Board for indemnification, but was met by the plea, that the man held property in a horse, and therefore should not have been attended to, and the application was rejected, though the very next week, an allowance of 7*s.* per week was voted to him as a pauper.

Mr. Wm. Thompson, of Westerham, moved:—"That this Convention publicly records its sense of obligation to the Colleges of Physicians and Surgeons, the Society of Apothecaries, and very prominently the National Institute of Medicine, Surgery, and Midwifery, and the Provincial Medical and Surgical Association; as also to the medical and general Press, for the support which all have rendered to the Poor-law medical officers and the sick poor, a continuation of which co-operation and advocacy is earnestly requested, until the objects of the Convention shall be happily realised."

Mr. J. Stedman, of Guildford, seconded the resolution.

James Vallance, Esq., moved,—"That the thanks of this meeting are eminently due, and are hereby given, to its noble chairman, Lord Ashley, for his unceasing efforts to benefit the sick poor; and, having full confidence in His Lordship as to his desire to see justice done to medical officers of Unions, this meeting earnestly requests His Lordship to kindly undertake the advocacy of the cause of the sick poor, and of the Poor-law medical officers in Parliament or otherwise, in such manner as to His Lordship may seem most advisable, in order to obtain a final adjustment of the long-agitated question of Poor-law Medical Relief."

Dr. Barnett, of Limehouse, seconded the resolution.

After a vote of thanks to Dr. Hodgkin, as Chairman of the Committee, the meeting, which was well sustained to the close, broke up, the Secretary having stated that he had received many letters—some signed by as many as seventeen members of the Profession—from gentlemen unable to attend.

DISTRICT LUNATIC ASYLUMS IN IRELAND.

[To the Editor of the Medical Times.]

Sir,—I beg to express my acknowledgment of your ready insertion of my letter in your publication of the 27th ult., in reply to some animadversions on the Irish District Lunatic Asylums, which appeared in a preceding Number. I have now to request permission to offer a few observations on the letter of "Vindex," in the *Times* of the 10th instant.

It is not correct, as represented by your Correspondent, that the Richmond Asylum possesses the privilege of getting rid of incurable patients. A very large proportion of those now in the Institution belong to this class, of whom more than 100 have been resident within its walls for periods exceeding five years, and several for twenty years and upwards. Those which were transferred to the House of Industry during the last three years, consisted chiefly of persons received from the prisons—fit objects only, at the time of their admission, for an incurable establishment, and to which they ought directly to have been sent, but that a financial arrangement required them to pass through the District Asylum, in order that their future support might be provided for by local assessment. The principal part of the House of Industry, hitherto supported by Parliamentary grants, having been converted into the North Union Workhouse, it was necessary, in order to fit it for this purpose, to remove a number of the inmates. Those persons, consisting of idiots, epileptics, and incurable lunatics, were placed in a temporary asylum, where it was intended they should be allowed to die off without any addition to their numbers. However, the inconvenience arising from the accumulation of lunatics in the prisons, induced the Government to depart from this regulation—hence the arrangement mentioned above. This explanation is a sufficient reply to the observations of "Vindex," as to the number of cures which, in his estimation, ought to have been effected in this Asylum.

The medical assistant in the Richmond Asylum, so slightingly spoken of by "Vindex," holds the office of Resident Clinical clerk. The regulations under which he is appointed require, that he should have previously been a pupil; and no person can enter as a pupil who is not at least of three years' standing as medical student. The appointment of Clinical Clerk is held for two years, and was lately vacated by Dr. Thomas Green, a gentleman of high professional attainments, a graduate in medicine of the London University, and a member of the College of Surgeons. In "The General Rules for the Government of all the District Lunatic Asylums in Ireland," issued by the Lord Lieutenant and Privy Council in 1843 (a copy of which is forwarded for your perusal), the duties of the various officers are strictly defined. Nothing whatsoever will be found in these rules to warrant the assertion of "Vindex," that the manager, although a medical man, dare not administer a dose of the simplest medicine, nor interfere in any case of emergency without the direction of the physician. So far is this from being the case in the Carlow Asylum, so confidently brought forward in exemplification, that I have the authority of Dr. Tuomy, the physician to that Institution, for stating that the manager, Dr. White, is not only authorised, but enjoined, to give assistance in all cases of emergency, in the absence of the physician.

The readers of the *Medical Times* will now be enabled to appreciate the statements of "Vindex," and I think the conclusion is inevitable, that either he is totally ignorant of, or wilfully perverts the facts with which he deals. He appears to me to belong to a class of persons who delight in a grievance, and are apt to confound personal feeling with patriotic sentiment. I shall hold myself excused from further notice of any anonymous writer on the same subject. I wish to remark, however, in conclusion, that I am by no means opposed to any reforms that may be required in our institutions. On the contrary, I sincerely desire to see them brought to the utmost degree of improvement of which they are capable, but I contend that such an object cannot be promoted by detraction and misrepresentation. We have, at the present time, unfortunately, but too many objects calling for the strenuous exercise of benevolence; and I should heartily rejoice, were it possible, to provide equally for the wants of other classes of the community requiring public support, as is done for the insane poor, whose welfare has never been overlooked by the Government, amidst the unparalleled difficulties in which this country has been involved during the last two or three years.

I am, Sir, your obedient servant,

John Mollan, M.D.

Dublin, February 19th, 1849.

ON DR. STEVENS'S SALINE TREATMENT OF ASIATIC CHOLERA: BEING THE FOURTH LETTER OF E. A. TURLEY, M.D., IN CORRESPONDENCE WITH G. ROSS, ESQ.

My Dear Sir,—I find, on inquiry, that the first attack of cholera on the prisoners at Coldbath-fields

did not terminate until the middle of May; and, as Mr. Wakefield's letter is dated the 25th of April, it is obvious that I could not obtain from that source an accurate list of the cases that occurred in the prison during the first irruption; neither could I obtain this information from anything that is stated by Dr. Stevens, in his work on "the blood," for he merely says, that out of the first 100 cases in which the saline treatment was used, there were 3 deaths and 97 recoveries. Being anxious to get a correct list of the exact number of the prisoners attacked during the first irruption, I have applied for, and just now received, a document from the authorities of the prison, containing the list of all the cases that occurred during the first irruption, viz., from the 5th April to the middle of May. It appears from this document, that the first case occurred, as stated by Mr. Wakefield, on the 5th of April; and the last, a case of collapse, was admitted into the cholera infirmary on the 10th May. By this official document I find, that from the first to the last of these dates, exactly 140 cases were admitted into the cholera infirmary, of which 10 patients died and 130 recovered. I believe that there were, early in the disease, one or two fatal cases, attended by Mr. Whitmore, who lived opposite to the prison; but, admitting that these cases are included in Mr. Wakefield's 4 cases of deaths under the mode of treatment recommended by the Central Board of Health, and that only 3 died out of the first 100 cases that were treated on the new plan, it is then clear, that if we deduct 7 from the first 104 cases, there must have been 3 deaths in the remaining 33 cases, consequently, that of the 136 cases treated according to Dr. Stevens's method, there must have been 6 deaths and 130 recoveries. Such was the successful result of the first trial of the new plan; and, from the unpretending manner in which Dr. Stevens speaks of the result, in his Work on the blood, he appears to have considered it 'neither more nor less than what might have been expected from the effects he had previously witnessed of the saline treatment in the yellow and in other malignant fevers. From the commencement of his success at the Coldbath-fields Prison, I perceive, by his printed papers in the Journals of that day, as well as in his Work, Dr. Stevens was aware that evil agents were acting against him; but, conscious of his own integrity, he little dreamt that the happy results of his labours, would be made use of to subvert for a time the sanguine hopes he entertained of diminishing the mortality of the suffering portion of the human race.

I am now in possession of evidence that will amply prove the accuracy of the statements made by Mr. Wakefield as well as by Dr. Stevens, relative to the cases that occurred in the first outbreak of the disease, which commenced, as I have said, on the 5th of April, 1832, and terminated about the middle of May. Now, as all the difficulties relative to the counter statements of the parties I shall introduce occurred subsequently to the last date above, I shall give a summary of

THE SECOND IRRUPTION OF THE DISEASE AT COLD-BATH-FIELDS PRISON.

I find, by Dr. Stevens's work on "the blood," that he ceased to attend the prisoners on the 30th April, and, probably, was not aware of the cases which occurred after that date. On the 3rd of June the second irruption commenced, and Dr. Stevens soon afterwards revisited the prison; but, finding that the cases were under the saline treatment, and were all doing well, he did not return for some time, and the management of the cases then occurring entirely devolved on Mr. Wakefield, the then and present surgeon of the prison. Everything progressed satisfactorily till the 18th of June, when one patient died. At that period there were many dangerously ill, and several appeared nearly dying. Five did die early on the 22nd, two on the 23rd, one on the 24th, and one on the 25th. On the evening of the 21st, Dr. Stevens received a note from Mr. Wakefield, requesting him to meet him at the prison without delay. Late on the evening of the 21st, Dr. Stevens went to the prison, and, after a strict investigation, both by Mr. Wakefield and by himself, it was discovered *that every one of these patients now under treatment had been using nothing but small doses of carbonate of soda in place of the stronger salts which had been employed in the first irruption.* As soon as this discovery was made, all the patients, excepting those already moribund, were immediately put under the same treatment that had proved so successful in the first onset of the pestilence; but, as I said, five of these patients perished within a few hours from this period. Two patients were admitted on the 23rd, both in a state of complete collapse, and both died on the day of their admission. On the 24th, Mr. Crook returned to the prison for the purpose of seeing that the medicines now prescribed were properly taken, and, as long as he remained everything went on well. Sometime afterwards Mr. Crook left the prison, and Dr. Stevens ceased also to attend there, excepting occasionally. The disease, however, continued till about the end of the year, as I find by the books of the prison, for the last death occurred on the 20th December. As Dr. Stevens left England for Denmark in the month of October, thus before the termination of the second irruption, I, of course, cannot find in his book the exact number of cases during the second period. I must, therefore, refer to the certified copy of cases which I have obtained from the prison. It may here be proper to observe, that an infirmary journal was kept in the prison, in which were entered the name, age, and state of every cholera patient admitted into the infirmary wards. This list was, I believe, made out daily, and signed by Mr. Wakefield. The journal was then placed before the visiting justices, so that they might compare it with the cases, and *vice versâ*.

From this record I find that, during the first attack, viz., from the 5th of April to the 10th of May, there were 140 cases and 10 deaths; 4 of which were lost under the treatment, as already stated, recommended by the Board of Health. (a) Out of the first 100 cases treated by Dr. Stevens, as I before stated, there were 3 deaths and 97 recoveries; out of the 36 remaining cases, I find that there must have been 3 deaths and 33 recoveries; thus, even including those deaths under Mr. Wakefield and Mr. Whitmore in the list, the total mortality was but 7 1-7th per cent.

To complete, in your mind, the whole mortality, in all the cases occurring in the above prison, I must now state, in addition, that the disease re-appeared in the year 1833, and, by the prison list, there were 24 cases in this period; viz., from the 29th July to the 5th September, of which there were 2 deaths and 22 recoveries.

According to the cholera statistics of London, it appears that, in 1832, there were 11,018 cases of cholera; of this number 5,745 recovered, and no less than 5,273 died,—nearly 48 per cent. Now, if this statement can be relied on, and if it be equally true that, of the 136 patients in which the saline treatment was first tried, there were only 6 deaths and 130 recoveries, and, in the second attack, there were 362 cases and 32 deaths, being 8¾ per cent., there must have been some cause or causes why this extraordinary fact did not make a stronger impression on the Medical Profession, on the Government, and on the public at large, so as to have induced medical practitioners to give a trial to this new treatment. In justice to the Profession, it is right I should state, that there were most active and insidious causes in operation to veil from them the success of the saline treatment. In my next correspondence, I shall there exhibit the motives and misrepresentations employed to involve this subject in darkness, and to divert the current of public opinion into other channels.

Throughout these letters I have carefully stated nothing which I cannot prove, and which it will be my duty, in the sequel, to do. You will observe that, up to this period, no one has, according to my researches, attempted to deny the statistics of the first irruption of cholera at the prison. You will now, my dear Sir, see that I had, up to the end of the first irruption, good grounds for my entire confidence in the saline treatment; and, as I at first stated, would have made it my "sheet-anchor," should I have been obliged to treat cholera. During the continuation of the second attack of the pestilence, at the above prison, I find facts doubted, adverse statements made, chicanery and juggling practised, and, being left on the ocean of doubt, without a rudder, I had reason to say, as I did in my letter, that I was determined, whatever turmoil or trouble it might cost me, either to strip Dr. Stevens of his supposed merit, or establish his just claims to our confidence and gratitude. As I was personally acquainted with the leader of each party, my mind was made up to let no stone remain unturned till I found out the truth or falsehood of the origin of the allegations against the saline treatment, so successfully employed, not only at the prison, but in other places, as well as at the Greville-street Hospital, as affirmed in your third Table.

The labour, cost, and trouble employed to effect this, no one can appreciate better than yourself, as testified in the pains taken in your lectures on cholera. Now, according to the document which I lately obtained from the authorities of the prison, it appears, that the saline treatment was not quite so efficient in the *second* as in the *first* attack. There must have been causes for this change, whatever they were; but, admitting this, on comparing the Tables of mortality with other statistics of cases and deaths, I am obliged to believe, that still the saline treatment of Dr. Stevens, even in the second irruption, saved more lives, in proportion to the number of cases, than any other remedial plans employed in any part of the world. For, admitting that all the fatal cases were under the saline treatment, which, as I have stated, was not the truth, still the *average* mortality scarcely exceeds 8¾ per cent., inasmuch as the prison authentic documents now before me prove that, during the second attack, there were 362 cases and only 33 deaths.

In the progress of my researches into the facts I have stated in my preceding letters, I find a mass of evidence proving the animus of certain parties to hoodwink the public, and to lead them to form a wrong conclusion as to the value of the saline treatment of cholera. To enter into this in our present correspondence would lead me to an extent *ad nauseam* as regards the majority of the readers of the *Medical Times;* but certainly I will, in a work on the subject, place on record a demonstration of the means employed by selfish persons to direct public opinion into wrong channels. In the next and concluding letter to you, I will arrange in a condensed form the *assertions, proofs,* and *deductions* of all I have advanced. This is the more essential now, as cholera is still progressing, and with its accustomed fatality. I wish to disabuse the professional mind of its erroneous views and treatment of this awful pestilence, and, if possible, to impress it with the true anatomical, chemical, and physiological relations it bears to the hypothesis of Dr. Stevens.

I remain, my dear Sir,
Yours very faithfully
EDWARD ASTBURY TURLEY.

To George Ross, Esq.

(a) See Mr. Wakefield's letter of the 25th April.

NEW ANÆSTHETICS.

[To the Editor of the Medical Times.]

SIR,—Though my paper "On Anæsthesia, and the Agents by which it may be produced," will appear in the forthcoming part of the next volume of the "Transactions of the Provincial Medical and Surgical Association," now in the press; yet as some little time will necessarily elapse before it can be published, it may not be improper, nor without interest, to state, that, amongst the many substances upon which I have experimented, there are two which are most worthy of attention, as of easy practical application.

The one, which was amongst the earliest I tried, is common coal gas. It is a safe, manageable, and effective anæsthetic, and very cheap, as everybody knows; though the smell is at first unpleasant, it is inhaled without difficulty or repugnance.

The second is a substance which I have more recently discovered; and if my anticipations be well founded, it will be found to be the best agent yet mentioned, and will, I think, supersede those now employed.

I believe it to be possessed of all the good properties of chloroform, and, in a great degree, free from those which are objectionable. It is equally pleasant, potent, and speedy in action. The anæsthesia produced by it may be rendered as profound and as prolonged as may be wished. While a smaller quantity of it than of chloroform will produce a sufficient degree of insensibility, a larger quantity may be given with impunity. The state of collapse is not so great. The animal may be recovered from a more dead-like condition than where this is induced by chloroform; at the same time, the process of recovery is more rapid, and it is unattended by any of those distressing symptoms so often witnessed in animals recovering from a large dose of chloroform.

The substance is the *chloride of olefiant gas,* as named in "Fownes' Manual;" the hydrochlorate of *chloride of acetyle, or oil of olefiant gas,* in the eighth edition of "Turner's Chemistry;" and formerly called *Dutch oil,* or *oil of the Dutch chemists.*

In appearance and smell it is not very dissimilar from chloroform, but in composition it differs most materially; chloroform being composed of *two* atoms of carbon, *one* of hydrogen, and *three* of chlorine, with a boiling point of 140°, the specific gravity of the liquid being 1·480, of the vapour 4·2; while the chloride of olefiant gas is composed of *four* atoms of carbon, *four* of hydrogen, and *one* of chlorine; its boiling point is 180°, the specific gravity of the liquid 1·247; of the vapour, 3·4484; constituting differences which are very important, and sufficient, I believe, to explain the fact of its superiority.

I need not here detail any of the experiments upon which this statement is founded, nor the reasons which induced me to make trial of this and many other substances, as they are mentioned at length in the paper to which I have alluded, and which will shortly be in the hands of the members of the

Association, my object now being simply to mention the fact.

I am, Sir, yours faithfully,
THOMAS NUNNELEY, F.R.C.S.E.
Leeds, Feb. 12, 1849.

MEDICAL BENEVOLENT SOCIETIES.

[To the Editor of the Medical Times.

SIR,—Having read with considerable interest an article inserted in your last Number of the *Medical Times*, "On the Necessity of Medical Provident Institutions," I beg to express my conviction of their importance to the majority of the Profession; and, at the same time, the facility of carrying out the objects of such a Society or Institution. I have, during a long and varied practice, associated much with medical men, and am convinced that the general feeling of the Profession would be favourable to the establishment of a Society on an extended and liberal basis, in short, a "National Medical Benevolent Fund," the object of which would be, to afford assistance to medical practitioners, who, from age or infirmity, might be unable to continue their professional exertions, and whose family thereby might be reduced to great penury and distress; and, furthermore, it would be of paramount importance to afford the means of a decent livelihood to the widows and orphans of such members of the Profession who might be left with a very scanty means of subsistence, or even wholly unprovided for. It may, perhaps, be said, If a Society or fund of this kind is so generally acknowledged to be desirable, why has it not been carried into effect before? This, I think, can be easily accounted for, when we consider the little time medical men have to devote to carrying out an object of this nature; also, a supineness and apathy on the part of individuals to bring forward a subject of which they might feel diffident of advancing to maturity. However, I feel thoroughly convinced, if the undertaking was commenced in a proper manner, and the respectable and wealthy portion of the community as well as the Profession generally as well as individually, appealed to, the result would be most satisfactory, and the object obtained in a very few months; and, when once established, the task of keeping it in a flourishing state would not be difficult. As a brief outline of the plan, I would suggest, that the subscription from members should be from two guineas annually and upwards, which would yield a very handsome income to commence with. There would, no doubt, be considerable labour necessary in the commencement, but this must be overcome by persevering energy on the part of the projectors. Should my views of this desirable object accord with that of the Profession, I shall feel most happy in giving it my cordial support.

I am, Sir, yours, &c., &c.,
A MEMBER OF THE COLLEGE OF SURGEONS UPWARDS OF THIRTY-FIVE YEARS.
Feb. 15, 1849.

ASSURANCE OFFICES AND MEDICAL MEN.

[To the Editor of the Medical Times.]

SIR,—I send you inclosed my full address, which, for the present, is *entre nous*. I am a physician, of long standing, and insure my house and furniture at 1,600*l.*, in a most opulent concern. This I have done for many years.

Some few years ago a gentleman, brother to an M.P., wished to have his life insured at the office hinted at above, as I had been for many years the referee of the said Society. Upon making a strict investigation I informed him, in a most delicate way, that I would not recommend him as insurable at the said office. He gave me no fee, nor did the Executive of *the office*; in fact, I did not ask for any amongst those that I thought then were all they pretended to be; nor had I ever attended professionally the person designing to be insured. About twelve months afterwards, I learnt that another medical man, who had no qualification as such, had effectually certified for his quondam patient, and that I was displaced. Still continuing, even up to this moment, to insure in the same office, whose fee, by-the-by, is only a pitiful *half-fee* for an M.D., I remonstrated with the Secretary of the said Society, (who did not deign to reply to me,) that he had substituted a person who, having been in practice before 1815, had no qualification as a medical man. I found, not long afterwards, that a regular M.D. was appointed, and all things progress accordingly. I am referee to several Assurance Companies; and, as I have often been cheated out of my fees by persons, whether in the list of my patients or not, I have chalked out my plan, and find that it works well. If I certify for the office, I have at once paid to me, by the agent, the stipulated fee; if for a person whose family I never attended, I say my fee is a guinea,—ay, and receive it, too. Insurances are, in nine cases out of ten, pecuniary transactions. That poor medical men should be choused so frequently is most disgusting. MEDICUS VERUS.

"PERFORATING ULCER OF THE STOMACH."

[To the Editor of the "Medical Times."]

SIR,—Under the above title, a little pamphlet has just made its appearance, by Dr. Young, of Gravesend. The subject is a most important one, and, I am inclined to think with the Author, that the disease is more common than is usually expected.

Although the question is not very elaborately discussed in this work, and there are one or two important omissions, it is yet deserving of attention, as embodying in a small space, and in an unpretending manner, much really useful matter for inquiry. There are two points for remark. Dr. Young is evidently aware, although he only cursorily alludes to the fact, that *irritation of the bladder* exists as a symptom of actual perforation having taken place. I believe this to be *always present*, and to be one of the surest signs of diagnosis. There is frequently *total suppression of urine*. Secondly, the patients, in these cases, almost always complain, at the moment of seizure, of a tearing pain,—a sensation of *rending*, as if something had actually given way, and is really a symptom worth bearing in mind. On the whole, the pamphlet is well worth a perusal, as containing a summary of much useful information, and I can but wish it and its Author success. I have the honour to remain, Sir,

Your most obedient servant,
AN OLD PHYSICIAN.
February 19, 1849.

GOSSIP OF THE WEEK.

QUEEN'S COLLEGE, BIRMINGHAM.—Owing to unavoidable circumstances, the decision of the prizes for the last collegiate year was not given till a few days since. At a special meeting of the Council, the following gentlemen were announced as the successful candidates:—Anatomy and Physiology:—(Medal)—Mr. Thomason, Shiffnal. Practice of Physic:—(Medal)—Mr. Whittle, Leamington; (Hon. Certificate)—Mr. Moore, Hales Owen. Surgery:—(Medal)—Mr. Whittle, Leamington. Materia Medica:—(Medal)—Mr. Blake, Birmingham; (Hon. Certificate)—Mr. Low, Birmingham. Chemistry:—(Medal)—Mr. Blake, Birmingham. Midwifery:—(Medal)—Mr. Lane, Grosmont; (Hon Certificate)—Mr. Stead, Congleton. Forensic Medicine:—(Certificates)—Mr. Mills, Tipton; Mr. Partridge, Darlaston. Demonstrator's Prize:—Mr. Moore, Hales Owen. Warneford Essay:—"On the Articulations of the Human Skeleton."—Mr. Lane, Grosmont, (1st); Mr. Dunn, Birmingham, (2nd). Governors' Gold Medals:—Mr. Lane, Grosmont; Mr. Jones, Cleobury Mortimer.

KING'S COLLEGE HOSPITAL.—On Thursday evening week, a Quarterly General Court of the Governors of the above Charity was held at the Board-room of the Hospital, Portugal-street, Lincoln's-inn-fields; the Rev. W. Ellis in the chair. From the Report read by the Secretary, it appeared that the resident patients, during the past year, numbered 1,253. The number of patients receiving out-door treatment reached 19,385; and it was mentioned, that it was scarcely possible, with the present accommodation, to assist a greater number, owing to the crowded state of the rooms appropriated to that class of patients. The expenditure of the Hospital, during the year, somewhat exceeded the income, leaving a total amount of 380*l.* 4s. 4d. due to the Treasurer. The receipt of a legacy of 50*l.* was reported from the late Mr. C. T. Pearce; and it was observed, that such additions to the funds of the Institution were of high importance, as tending not only to supply a great benefit to the poor and afflicted, but to secure to them the same advantages on a more extended scale. Thanks having been voted to the Rev. Chairman, the meeting broke up.

LIFE ASSURANCE OFFICES AND MEDICAL MEN.—We are happy to state that the Legal and Commercial Assurance Society and the Sovereign Life, have resolved to allow medical referees the fee when their advice is required in reference to persons who wish to assure their lives.

APPOINTMENT.—Wilbraham Falconer, M.D., has been elected Physician to the Bath United Hospital, in the room of Dr. Daniel, resigned.

APPOINTMENTS.—Samuel Griffith, Esq., late House Physician to King's College Hospital, and Surgeon to the Royal Maternity Charity, has been appointed Surgeon to the Star Life Assurance Society, in the vacancy occasioned by the resignation of A. Hamilton, Esq., of the London Hospital.

OBITUARY.—On Tuesday, in his 72nd year, Thomas Kirkby Fife, Esq., surgeon. Mr. Fife, for about thirty years, practised in Gateshead, but for the last thirteen years had retired.—On Friday, the 9th instant, aged 32, Mr. George Greenwood, surgeon, son of the late Mr. John Greenwood, solicitor, Preston.

GERMAN HOSPITAL, DALSTON.—At a recent meeting, the Secretary of the Institution read an account of the present and past condition of the hospital; from which it appeared, that 443 in-patients and 1,739 out-patients had enjoyed the benefits of the charity in the course of the last twelvemonth. The number of in-patients, since the foundation of the hospital in 1845, was 1,380; and that of out-patients, 4,925. The donations made to the hospital, in the course of the evening, amounted to 1,356*l.* 6s.; and the joint amount of annual subscriptions, which were signed at the table, was 170*l.* 2s. Her Royal Highness the Duchess of Kent, the Duke of Cambridge, His Excellency the Count Kielmannsegge, &c., were among the donors

CHOLERA AT THE FEMALE REFUGE, HACKNEY.—A rumour has prevailed, which has since turned out not to be without foundation, that the cholera had suddenly developed itself, in a malignant and fatal form, in the female establishment of the Refuge for the Destitute. The institution in question, which is appropriated to the reception of women and girls whose former course of life had been of an immoral or improper character, but of whose future amendment sufficient guarantees had been afforded, is a large brick-built erection at the corner of Thomas-street, in the Hackney-road, embracing a frontage of considerable extent, and running back, including the grounds, for a distance, apparently, of several hundred yards. The number of inmates so accommodated is variously stated at from sixty to eighty, and it appears that, up to the 14th of this month, only two deaths had been returned from the establishment for a period of many years; the wards and rooms are represented as all being spacious, cleanly, and well ventilated; the food and clothing of the best description supplied to such institutions, and all the inmates in apparently the rudest health, until the day just mentioned, when two of the young women 17 and 19 years of age, were suddenly attacked by the disease, and after the lapse of fourteen hours, during the greater part of which one of them was perfectly senseless, both expired in such a condition as to justify its designation as Asiatic cholera. These deaths were registered at about three o'clock on Saturday afternoon, and the corpses were buried at Hoxton at four o'clock, followed to the grave, amongst others, by one of the matrons, a fine healthy woman named Tew, 40 years of age, and who had been in the establishment several years. These deaths, in the few days which have subsequently elapsed, were succeeded by three others in rapid succession, all attributed to the same disease, of girls aged 14, 16, and 17 respectively; and notice had scarcely been given to the registrar of this number, when it was augmented on Tuesday night by the death of a seventh, between five and six o'clock; and an eighth, whose state was so precarious that she had more than once been thought dead by the nurse, expired in the course of yesterday morning, her

death being speedily followed by that of a ninth inmate, a woman named Wilson, 35 years of age, who had been engaged in the capacity of temporary matron, and had only been three or four days in the asylum. The number now reported upon the "sick-list" for this disorder is eleven or twelve, making twenty in all so affected, but those persons are stated to be going on favourably. The disease is believed to have had its origin in a vast ramification of courts and alleys abutting upon the rear of the building, and scarcely 100 yards from it, filled with tenements of the vilest description, and closely packed with families in the most squalid state of wretchedness and rags, many of them keeping pigs and other animals, and vegetating in a mass of filth that is truly shocking. All these "courts" and "gardens" are constantly immersed ankle-deep in mud, decaying vegetables, and other refuse; the contents of the cesspools of many of the houses are incessantly percolating upon the mould and footpaths for want of channels to properly carry them off; and the only idea of a sewer amongst the whole of them is represented by the Registrar to be an open ditch, the fœtid miasma exhaling from which is intensely more powerful and deleterious than even the other abominations surrounding. In one of these courts a man died of cholera on Thursday or Friday, was followed to the grave by his wife, in apparent health, and in three days afterwards she also was dead; in another alley a second man and his wife perished in a similar manner; and in a third a woman, who had previously lost a child, was suddenly seized with the same disease, and died in a few hours succeeding. These undrained nuisances are suspected to have been the cause of this malignant disorder exhibiting itself among the inmates of the Refuge for the Destitute; but it is considered remarkable, as they have for years existed, that the disease should have so suddenly and fatally taken hold of that Institution, where it is stated to have never previously shown itself: and it is anticipated that, for the satisfaction of the many benevolent persons interested in it, an inquest will be held upon one of the unfortunate sufferers by the unlooked-for calamity.

Derby.—Cholera has increased in the workhouse during the past week. The disease has not yet appeared in town.

Belfast.—The cholera has very considerably increased within the last two or three days. The following is the official return:—Monday, new cases, 24; deaths, 6; recoveries, 13. Yesterday, new cases, 22; deaths, 4; recoveries, 8; remaining, 104. Total since commencement, 419; deaths, 141; recoveries, 174; remaining under treatment, 104.

Eccentricity of the Cholera.—An Edinburgh correspondent of the *Daily News* observes:—"A remarkable instance of the eccentricity of the cholera is, that, whilst extending its ravages in eastern, western, and southern directions, it has not yet gone northward, scarcely a single case having occurred north of the Frith of Forth, notwithstanding the constant intercourse between both sides of the estuary."

Gateshead Board of Guardians and the Board of Health.—In consequence of the Board of Guardians having altered the arrangements in reference to medical relief of the poor during the prevalence of cholera, the members of the Board of Health have resigned their posts. We think they have acted with energy and spirit.

Edinburgh and London.—In a recent lecture at Edinburgh, Mr. Bond pronounced the very worst localities in London Elysiums compared with many of the closes of "Auld Reekie."

A Few Hints on Cholera.—Dr. John Findlay, of Glasgow, says: "Keep the patient perspiring by means of external heat (hot water, &c.), applied to centre of body. Give calomel and opium till gums are slightly affected, or till stools are natural. The calomel, say in two grain doses, given as required. Some patients require two grains every quarter of an hour, till sixty grains or more are taken. Others require only six grains calomel in all. The opium,—say not not more than six grains per twenty-four hours. Give as little opium as possible. Opium pills are perhaps the best form of exhibition. Treat all cases of diarrhœa with calomel and opium."

Cholera.—Edinburgh.—During the last week there have been only three cases,—namely, one on Thursday, another on Sunday, and a third yesterday. There have been four deaths, two on Wednesday, and two on Friday.

Other Places in Scotland.—In Hamilton, the total number of cases, up to the 18th February, amount to 431, with 227 deaths, and 111 recoveries. In Paisley, there were 22 cases reported last week, with 16 deaths and 16 recoveries. In Johnstone and Elderslie, last week, there were 20 cases, 16 deaths, 14 recoveries. In Barrhead, for the week ending February 17, the new cases amount to 21; deaths, 15, and recoveries, 7. In Galashiels, 7 cases have occurred, 2 fatal. In Cambuslang, since the 1st of January, there have been reported 60 cases, 35 fatal. In Newarthill, the total number has been 181, 72 fatal. In Stirling, there have been upwards of 50 cases during the last fortnight, 30 fatal. In Kinnaird, there have been 30 cases, 10 fatal. In Dalry, there have been 14 new cases, 10 fatal. In Newmilns, there have been 50 fatal cases last week. In Kelso, there have been 4 new cases, 3 fatal, making the total number of cases, 215; and deaths, 107. In Ancrum, 2 fatal cases have occurred.

Beneficence.—The late George Richards, Esq., of Cheltenham, has bequeathed the following munificent sums to medical charities, viz.:—The Cardiff Infirmary 1,000*l.*, Cheltenham Hospital and Dispensary 500*l.*, Gloucester Infirmary 500*l.*, and to other charities nearly 10,000*l.* The deceased has also left 50*l.* per annum to King's College, Cambridge, for the benefit of scholars there, and a similar sum to Eton College for the benefit of superannuated Collegians, and 21*l.* per annum for Latin and English Essays.

MORTALITY TABLE.

For the Week ending Saturday, Feb. 17, 1848.

Causes of Death.	Total.	Average of Five Winters.
All Causes	1,225	1,169
Specified Causes	1,221	1,164
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	333	221
Sporadic Diseases:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	56	54
Tubercular Diseases	170	203
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.....	131	141
Diseases of the Heart and Blood-vessels.....	50	40
Diseases of the Lungs, and of the other Organs of Respiration	236	243
Diseases of the Stomach, Liver, and other Organs of Digestion	69	67
Diseases of the Kidneys, &c.	14	13
Childbirth, Diseases of the Uterus, &c.....	11	9
Rheumatism, Diseases of the Bones, Joints, &c.....	11	7
Diseases of the Skin, Cellular Tissue, &c.	..	1
Malformations	5	3
Premature Birth.....	28	23
Atrophy	18	15
Age.....	50	73
Sudden	10	14
Violence, Privation, Cold, and Intemperance	26	37
Causes not Specified	4	5

Electric Light.—A gentleman near Waltham Abbey, experimenting with the electric light a few days ago, having an incised wound on his left hand, touched the conductor, a copper wire, and shortly afterwards experienced an irritation, which immediately spread in inflammation to the arm. The arm became immensely swollen, and large tumors appeared all over the body and limbs. Eminent surgeons from London have been in attendance. Some of the tumors were opened, and every means resorted to for the purpose of checking the poison, but without avail. We learn that the unfortunate patient lies without the least hope of recovery.

TO CORRESPONDENTS.

"Chemicus."—In France, it is necessary to obtain a license to sell arsenic, or any other poison. It would be well if a similar precaution were in operation in our own country.

"A Constant Reader, Edinburgh."—The Apothecaries' Court of Examiners requires Celsus and Gregory to be grammatically construed. A candidate properly instructed in his Profession may have no fears in reference to his passing.

"A Student"'s question was answered a fortnight ago.

"A Provincial Practitioner."—Application should be made to the Clerk of the Apothecaries' Society.

"M.D."—The London College of Physicians forbids any of its Fellows or Licentiates to practice pharmacy, on pain of expulsion.

"Mr. Chapman."—Admission can be obtained to the College Library by gentlemen not members.

"Junius."—The Paper on the Contagiousness of Cholera has been received.

"Q."—The complaint is certainly a legitimate one; but we must decline being the medium of its publicity.

"An Old Friend."—It is not usual to deduct the items referred to.

"Inquirer, Mile-end."—The symptoms denote rather intestinal irritation, than primary mischief in the brain.

"Junior."—The work has passed through two editions; and is considered by the Profession a talented publication.

"Spectator."—We will look into the matter, and will use our best efforts to see justice done to the students.

"Mr. Jacobson."—We must decline the offer, in consequence of numerous claims on our space.

"G. D."—The work is published by Mr. Renshaw, Strand.

"A.M., Trinity College, Dublin."—Licentiates of the London College of Physicians who have not been educated at Oxford or Cambridge, may now become Fellows.

"Delta."—The letter should be sent to the War Office, where it will receive immediate attention.

"Carolus."—We never act as inquisitors on any gentleman's private practice.

"A Qualified Surgeon."—It is no uncommon thing for individuals to style themselves Doctors of Medicine without any right to the title. It is probable, the person referred to is liable to a prosecution; the Apothecaries' Company however, would have nothing to do with the matter, unless there was a good prospect of conviction.

"Zeta."—The letter, not being authenticated, was destroyed.

"A General Practitioner."—We cannot give an opinion of the examination for the degree of M.D. at Rostock.

"M.R.C.S."—The true nature of the compound has not yet been determined.

"A Poor-law Surgeon."—Yes; if sent next week.

"A Pupil and Subscriber."—We have made arrangements with a distinguished Lecturer to publish a course on the subject referred to.

"Mr. S. Mead."—The Capsules are made from the cuttings of fresh skins.

"Tyro."—The mismanagement of the Hospital tells sadly against its usefulness, not only to patients, but medical pupils.

"Lector, Cheltenham."—There are great difficulties in the way of securing the appointment. The double qualification is necessary.

"A Non-Medical Subscriber."—The questions we must decline answering. They had better be sent to some respectable newspaper.

"Amicus Justitiæ."—We can only engage to publish the letter, on the condition of receiving (in confidence) the name and address of our Correspondent. We cannot promise to return communications not accepted

"Pro Bono Publico."—A well-written article on the subject should receive immediate insertion.

"Sigma."—Chelius' work, edited by Mr. South.

"M.R.C.S. and L.A.C."—The qualifications will entitle our Correspondent to appear before the College of Physicians for examination.

"A Correspondent" wishes "to be informed of the cheapest way by which he may become a Physician."

"Dr. W. Reid, Clanny, Sunderland."—Communications received.

"M.D."—The strictures on a gentleman who has recently been admitted a Licentiate of the Royal College of Physicians, but who has had no means of acquiring practical knowledge, cannot be inserted unless authenticated.

"Mr. James Holland, Sheffield."—A letter addressed to the gentleman will reach him, directed to be left at the Office of the *Medical Times*.

"A.B."—A useful work on the class of diseases referred to has been published by Mr. Churchill. The other questions we cannot satisfactorily answer.

"Dr. Young, Gravesend."—Communication received.

ORIGINAL LECTURES.

LECTURES ON FEVER.

BEING AN ATTEMPT TO DEVELOPE MORE DEFINITE VIEWS OF ITS NATURE AND TREATMENT, BY THE CONSIDERATION OF THE PHENOMENA, AS OBSERVED IN THE PRACTICE OF MEDICINE AND SURGERY; BEING IN CONTINUATION OF "MEDICINE AND SURGERY ONE INDUCTIVE SCIENCE."

By GEO. MACILWAIN, F.R.C.S., Author of the above mentioned Work, "Unity of the Body," "Tumors," &c., &c., &c.

LECTURE VI.

Effects of External Influences, abstractedly, simple, and uniform, as modified by the condition of the body multiform.—Of Cold, Heat, Mechanical Injuries, Alcohol, Pleasures of the Table, &c.—The Passions.—The Essential Nature of Fever.

Man, organized with certain definite relations to the various influences to which he is exposed, the primary effects to which (*abstractedly considered*) they give rise, are *comparatively* simple and uniform, the variety being generally and obviously referrible to the different intensity of any given influence, or that which may arise from the form in which one or more may be combined. Nor, so long as man or any other animal is placed under *really natural* conditions, do these varieties seem greatly multiplied by the varying conditions of the body. Organized beings are, it is true, constantly undergoing changes; but, so long as these changes are the results of natural external influences on the one hand, and a state of *real* health or the operations of instinct on the other, they exemplify that tendency to simplicity and uniformity which is so much the rule in nature. To us, few animals are so rare as a *perfectly* healthy human adult; but in wild animals, who live in a state of nature, where health is the rule, we observe uniformities, which we perceive readily modified by the smallest circumstance of interference, still more remarkably by anything approaching to the artificial habits of domestication. And when we examine Man in what is called a highly civilized state of society, we begin to lose sight of much of that uniformity which we observe in wild animals; and the interferences become so multiplied, that varieties of result, almost numberless, occur, constituting the greater part of what we call disease.* For, in man, we not only find a system of organs, having very refined relations to external influences, and to each other, but a system under the influence of the moral as well as the physical laws; and nothing short of a constant, and, so to speak, circumspect recognition of both, represents the requisitions of a sound physiology. A free agent, in the emphatic sense of the term, a responsible volition enables Man almost indefinitely to vary the conditions of his body; so greatly, at least, as would be represented by a daily violation of the moral and physical laws, as daily an observance of them, or any other condition intermediate between such extremes. A very little careful observation, therefore, irrespective of anything strictly arising from professional experience, would, I think, suggest to us, that whilst we should seek most auspiciously for an explanation of the abstract effects of external influences in the general relation of such influences to surrounding nature, we must necessarily look for the interpretation of those which constitute disease, in the varying conditions of the body. In the few injurious influences which we mentioned in the last lecture, and which we purpose shortly to consider in this, we shall observe sufficient to illustrate the foregoing, and to suggest further examination to those who are disposed to go into the subject more satisfactorily than our immediate objects or limits allow. The first influence we spoke of, in the conclusion of our last lecture, was cold. Whether cold be regarded as a positive principle, or a diminution or any other condition of caloric, whenever it is applied to the body it produces certain effects, which may be modified by its intensity, or by the powers of resistance in the body.

In a certain degree it produces a momentary depression of the circulation at the surface, presently followed by increased determination of blood thereto, as seen in the ruddy arm of the milk-maid, or the rosy face of the vigorous boy on a frosty morning. We are familiar with a similar effect in the glow succeeding to a cold bath; but the same degree of cold frequently produces in other persons very different results; there may be no redness, but paleness and shivering. The rosy face of the boy, in the aged, is replaced by paleness or blue; the membranes of the eye and nose alone representing, in limpid secretions from their mucous surfaces, that activity, which youth, and vigour, almost as wholly place on the skin. Another degree of cold,—or the same cold in another person,—or in a *different part* of the same person,—may produce determination of blood to a part, of a more permanent kind. This may give rise to itching; and friction may restore the usual condition of the part, or inflammation may occur, giving rise to ulceration, or sloughing. There are the various conditions of chilblain; and you see them beautifully demonstrating how *site* indicates power, and influences the processes which are such true exponents of it. You may have, for example, in the same boy, a rosy face, a chilblain on the hand, arriving only at the congestive state, and another in a sloughy or ulcerative form on the foot, just, you see, giving you processes of power or weakness *pari passu* with their contiguity to the trunk. You have seen in fever how the progress of the eruptions from trunk to the extremities evidences the minus state of power on their first appearance, and the comparatively plus as the fever is mitigated by these surface actions, in the gradual extension of them to the extremities. Cold may, also, at once produce mortification. Here, again, there follows local activity of vessels, and, more or less, perfect removal of the affected part, which may, or may not, be succeeded by reparative actions. The mortification, *ceteris paribus*, always takes place in parts most remote from the sources of circulation.

These trite facts illustrate equally the different effects of the same degree of cold in different persons, or of different degrees of cold in the same person; they also show the influence held by different parts as near, or as more remote, from the sources of circulation, which we know to imply more or less power. The differences arising, you see, from these conditions, are nothing less than such as are indicative of perfect power, and the most subdued condition of it, short of entire subversion; or any intermediate condition. Cold may be applied to the skin so as to produce determination and secretion from other organs, or, in fact, from any organ of the body, though, as you know, more commonly to the mucous surfaces; or it may be applied so as to produce fever; but you cannot here say beforehand in what degree, and how it should be applied, so as to produce it with *certainty*, because you cannot, in any way, by the application of cold *merely*, command what will appear, I think, to be the necessary conditions; but you may apply cold so as to destroy, so as to produce similar results in all persons, yet short of that which is IMMEDIATELY destructive; but then you have no fever. This is, you will find, common to every injurious influence which, in certain intensities, pass those limits prescribed to the re-actions of the body. We shall find no essential difference in the common and *necessary* effects of any injurious influence which we may examine. They will all produce certain re-actions, comprising *elementarily* the same phenomena, or a complete prevention of any by the intensity of their force exceeding the limits of re-action. Some of them, however, as ordinarily observed, are more positive and uniform than others, and more instructive as regard the conditions on which fever depends.

HEAT.

If heat be applied to the body, it gives rise to additional actions; the excitement is general; the circulation, as a whole, is increased; the body must be kept at an uniform temperature; the general excitement is accompanied by special actions of the respiratory organs; the lungs and skin both throw off largely increased quantities of vapour charged with caloric. The heat of the body, notwithstanding the high surrounding temperature, remains uniform; there is no mischief. But now continue your high temperature, and suppose that these actions do not take place, and that no additional action of liver, bowels, or kidneys be set up to compensate for the absence of that augmentation in the action of the skin of which I have spoken. What happens? Why, fever. Suppose that we take heat in a much higher degree; and apply it partially to the body, so as to scald or burn. What happens? If the district be *small*, there is a rush of blood again to the part, and accordingly, as the injury has been productive of excitement merely, or *more* destructive effects, processes succeed which repair the injury, renewing anything which is actually destroyed. But the injury is *small*. It does not, at least, sensibly affect the *general functions* of the skin as an organ; there is no fever. But say that your burn has destroyed large districts of skin; then, indeed, you have other phenomena. You have now subjected the body to an injurious influence; you have imposed the necessity of extensive repair, (a continued resistance,) and you have done this simultaneously with a seriously deranged condition of an important organ. You have here the real elements of what you call fever, and fever you uniformly have; with its coldness or shivering, re-action, &c. But you will say, Invariably? No, not invariably; for fever is, in its worst form, essentially a vital action. Your burn may be so extensive as not to destroy life in an absolute sense; there may be a few lingering hours; but you have exceeded the limits of re-action; there is in fact, no fever.

Let us now take some medicinal substance, such as antimony, aloes, jalap, rhubarb, ipecacuanha, or mercury, and subject the body to its influence. What happens? Why, in general, the surfaces to which they are applied have the action of their vessels increased; the alimentary canal either rejects them at once by vomiting, as in the case of antimony and ipecacuanha, or pours forth the fluids and ejects the noxious substance by an increase of its ordinary expulsive action. But suppose that these matters, instead of being expelled, or exciting secretions from organs on which they more usually act, or from organs on which (as occasionally happens) they act less frequently; that neither result follows; and that, so far as we can perceive, they excite *no* secretion; you may have inflammation, eruption, or some disturbance on the surface of the body, or you may have nausea, indisposition, determination to the skin, and then all goes well again. In short, you have a disturbance in general—fugitive, it is true, but not distinguishable from some forms of fever. Sometimes, *the organ you first wished to act on* at length begins to secrete, sometimes *some other*, very commonly the skin; and all subsides. Let us take another kind of injurious influence,—the more apparently different the better.

MECHANICAL INJURIES.

A man has received an incised wound, for example; it heals; there is a temporary smarting, a determination of blood to the part; as in the other cases, a uniting medium is secreted; it becomes endued with vessels, and, by the usual processes, the part is healed. In another case, the wound is still succeeded by a determination of blood to the part; but, instead of simply healing processes, the activity of the vessels seems extended. Inflammation is *diffused*, a severe form of fever takes place, and various destructive processes occur, of which I have formerly spoken. Here, indeed, the difference resulting from the injury is very marked. In the one case a fever of a destructive kind, in another no fever at all. It is evident, from daily observation, that the ordinary law of a clean cut is the healing process, of which I first spoke; therefore it is clear, that here there have been some interferences with that law. What are they? that is our question. But now, if we exalt the injury to a violent

* The facts here alluded to being already given, in some detail, in connexion with the "Nature and Treatment of Tumors," to avoid repetition, I am obliged to state them here in a few general propositions.

degree, and produce a bad compound fracture, we get a fever in *any body*; marvellously different in kind in different cases, it is true,—very different in its results, too, in different people,—but still a *fever*. But what happens? There is great injury to important organs,—skin, muscle, bone, nerves, and vessels,—injury, too, of the worst description, that is, laceration,—when the powers of resistance are put to the greatest extent before they are overcome; in short, a very exhausting injury for a time, even in its infliction. You have here, again, severely injured important parts, and, at the same time, imposed additional functions on them. Well, then, first you have coldness, perhaps shivering and sickness, then re-action with fever; and this is coincident with special determination of blood to the part. Little happens for a certain number of hours, but actions are slowly set up, new functions (strictly speaking) are established, secretion takes place, and the greater part of the excitement,—and probably the whole of the fever, properly so-called,—subsides. Now, here we have something very different from our incised wound, and, if the law here was to heal without fever, or with only a mild and fugitive excitement, here, again, we must ask, What was the law of interference?

But you may have an injury from mechanical force also, which shall exceed the reparative powers of the body, and yet which shall not be *necessarily at once* fatal; but then you have no fever.

The retention of anything in the body that is usually rejected is another very interesting form of injurious influence; but it requires care in estimating its effects, and in appreciating its reality. If any excretion be imperfectly performed, invariably almost we have compensating actions set up; there is an increased action elsewhere. The remedy is still a greater activity of vessel,—still secretion; and it is usually to some part with which the torpid organ has a concurrent function, as from skin to kidney, lungs and skin, and so on, as has been sufficiently explained, when we discussed the sympathies of the body. But suppose you have *no* compensating action set up,—that is, a *real retention*,—why you have chilliness, faintness, sickness, followed by excitement; in fact, you have what is not distinguishable from a slight form of fever, or you may have fever of the most dangerous description. As I must again allude to this subject of really retained secretion, I now pass to another injurious influence.

Say that a man takes a quantity of alcohol, perhaps not greater than he has often taken before, with, as regards suffering, perfect impunity; he now feels at first nothing but excitement, which is neither painful nor disagreeable; but some few hours afterwards he feels ill,—he is chilly, has a disposition to be sick, perhaps headache; at last he is violently sick, and then, in a short time, he is tolerably well again; or, whether he is sick or not, his indisposition may continue; he goes to bed, then he gets, after a time, into a great heat; at length his skin begins to secrete, and, having lain some time bathed in perspiration, he gets up, somewhat shaken, but comparatively well,—not so soon, perhaps, nor so perfectly, as he would, had his stomach or the bowels at once ejected the injurious influence. Well, but that was the direct effect of the alcohol, you will say,—it acted like a foreign body; but you will recollect we began by saying, that he had taken as much or more before with impunity, so that here, again, there seems evidence of some interfering influence modifying the *mode* in which his œconomy has *heretofore* dealt with alcohol. Another class of injurious influences with which alcohol is too frequently combined, is seen in the pleasures of the table. Few, when followed out, are more instructive. A *bon vivant*, who is born with (as he generally must be) a good constitution, at first presents evidence of little beyond excitement, with an energetic action of the vascular system and the secretions. After a time, the system becomes laden and inactive; already the functions are out of balance,—this may be in various ways,—the most common is, the skin and kidney work plus, whilst the liver secretes less than usual. We next get deposition,—and at first fat. After a time, the habit continuing, we get actions of disease,—eruptions,—more commonly boil or carbuncle,—on the surface. But if these surface actions have been established; and, after the relief which the system receives from them and the moderation they usually compel; if the former habits are resumed, the joints are usually the next surfaces affected, and gout or rheumatism are the examples of that determination and secretion which are the common results of injurious influences.

The exact phenomena vary in different examples, and some or other of the surfaces may be passed over, or omitted as it were; but the order in which diseased actions occur is almost always from surface inwards, after they shall have ceased *to be represented* by augmentation or interchange of existing secretions. So, after boil, or carbuncle, or abscess, or ulceration of the extremities, gout, and so on; we get sensible affections of the viscera, with still diminishing power, and then comes affection of the serous membranes with effusion, there having been, or not, an intermediate delay, from frequently returning chronic bronchitis. Now, all this *may* occur without any fever; but, during the time that necessity has compelled a repeatedly recurring armistice with injurious habits, the resources of the economy may not have had any sudden or unusual increment to their agenda; but, if there be such as a moderately severe accident, or an unusual feast or debauch, we now perceive a condition which had not previously occurred. In the latter case, the excess of that food intended for health and strength; which had been made the source of so much enjoyment, has become an injurious poison; the organs on which it acts are in a state which we shall, by-and-by, more particularly describe, and which disables them from disposing of it, by increase of secretions from the various new organs comprised in various inflammations; all resources have been exhausted, save that last, which is the effort necessary when injurious influences act on the body, during an already greatly disturbed condition of the functions; and that effort is fever, which may occur at any period; when the *agenda* are, in this, or any other mode, suddenly increased.

If a foreign substance be driven into the body it produces excitement; if the part be considerable in extent or important in function—fever. Here we have determination to the part, increased action; but to show the final purpose, they may be almost exclusively, after a time, confined to the absorbent vessels; repair of injury by the depositing, and a pathway for the expulsion of the foreign body may be contemporaneous operations. Another phase of the determination of actions to the part, is the surrounding the foreign body with secretion, which really places it external to the body, and in the case of bullets they are sometimes, as I have myself seen, enclosed in a complete cyst. In none of these processes is the essential condition different; there is an increased action of vessels, ending in what is essentially the expulsion of a foreign body. The practical universality of this, in relation to the retention of any matters of an injurious kind, is sometimes seen in that of very small quantities of matter or pus; for, if the endition of the economy require its discharge, and failing power or some mechanical endition of interposing structures impede that discharge, fever is induced, which immediately subsides on the evacuation of the offending matter. If there were not resources by means of which the body relieved itself of these matters, fever would be constantly taking place from apparently trivial causes; we shall see more of this relation when we recur to the subject of hectic fever; but this we shall, I think, do with more force when we arrive at what, in the first lecture, I have called our synthetical argument.

Now, all the foregoing phenomena evince an obvious simplicity and uniformity in their essential characters. Determination of additional actions to the parts on which the injurious influences impinge; this depending on increased activity of vessels. It matters not whether we select an influence as coarse and tangible as a bullet, or refined, and mysterious, as the Passions. So far as they are injurious influences acting on our physical organization, the mode of dealing with them is uniform; they alike produce secretion—gradual and more or less continued disturbance—exactly according to the state of the body and the intensity of their action. Take anger or grief, for example: and, just as we see them applied with greater or less intensity in different conditions of the system, we see every class of result in kind that we observe to follow other injurious influences. Their immediate effect in certain persons is excitement and secretion, and I have elsewhere (a) shown that although any of the bodily organs may be excited by any one of the passions, just as any of the bodily organs may excite any other with which it is not accustomed to show ordinarily a vivacious sympathy; yet that, as in bodily organs, concurrent functions and other circumstances establish a more prompt recognition between some than others, so, in regard to the passions, we observe relations between them and individual organs illustrated by their more easily excited sympathies. It is true, certain intensities of passion over-rule these relations; but that does not render their ordinary phenomena less practically interesting; for all this is far from being of merely speculative interest. Well, anger and fear in great excess will equally stop the heart's action; but, in their usual forms, both will much more frequently excite; but anger will much more frequently excite the heart and skin; fear, the heart and kidney. If the passions are applied in more subdued and continued form, they appear like alcohol as compared to grosser forms of injury; they become, like it, a poison alike mysterious and penetrative; applied, perhaps, so gradually as not to produce excitement ending in secretion, but just that insensible increase of action on organs which leads to gradual deposition and an almost annihilation of the natural structure, before we even suspect disease. In this case they may not, according to the amount of mischief produced, excite fever; but they are instituting a condition, which is essentially one of "reduced power," and which, whether it arise from previous influences on the body, or those special conditions of different organs of which we shall endeavour to prove the existence in different states of fever, will, I think, be found to be the most correct *general* expression of that element which is *furnished* by *the body* in the *causation* of fever.

It appears, then, that the primary effect of injurious influences which do not at once annul the powers of the body, is ordinarily vascular determination and secretion. There is usually an increased quantity, and sometimes an alteration in the sensible properties of the secretion, and this takes place on the organ to which the influence is directed. But this may not be the case. An irritant which usually acts on the stomach may be transferred to the liver or bowels, and the excitement and secretion is seen to take place from those organs. But if you excite an organ, and some interfering influence prevents it from responding to the same, then you have other phenomena. Fever? No, not necessarily; you may have one of the multiform varieties of disease comprised in the various inflammations, any of the cutaneous diseases without fever; or you may have erysipelas with fever; or you may have inflammation of the organ or the membrane investing it; in short, you may have any of these occurrences which I have described as falling under the "law of inflammation," which law, so far as I see, is full and expressive of that phase of the conservative power impressed on the body, comprised in our ideas of inflammation or deposition. At the same time, it is clearly, in my view, a modification of those secreting actions which are the more perfect mode of dealing with injurious influences obscured by interfering influences, represented by disturbed conditions of organs; because I have shown already, (b) by the clearest evidence, that if you correct this condition, the inflammation subsides without the addition of any anti-inflammatory measures, commonly so called, whatever. Now, as the interference is greater, so your inflammations

(a) Unity of the Body.
(b) First Volume.

become more grave; and as they do so, fever, as it is called, appears as a symptom; the inflammation being the more salient fact, the fever regarded more as a symptom; but now, if the interference be still greater, that is, if any organ or organs be more disordered, or the disturbing influence *ab extra* be intense, you may have fever, in which the fever now appears the *dominant* fact, the inflammation of some part an *accessory symptom;* or you may have no symptom suggestive of actual inflammation at all; and, if you have inflammation, you find that, whatever its site may be, that, *cæteris paribus*, it designates more or less power strictly in accordance with the law there mentioned; that is to say, it keeps to the surface rather than the substance of organs, and in the order in which the surfaces have been enumerated; and, in proportion as the processes are simply adhesive or suppurative, or aqueous, diffused, ulcerative, or sloughy. By this it would appear, that fever is, in fact, only one phase, or, speaking of its varieties, one series of phases of the ordinary processes by which injurious influences on the body are, more or less, counteracted, modified in its phenomena by the variety and degrees of the interfering influences from that more simple expression of the law represented by secretion. Now, that is exactly the fact for which I mean to contend; but, if the interferences, on the part of the body, be represented by various degrees of disorder in one or various organs, one sees at once how Protean the forms of fever may be; and, although we see, in the same manner, how far a man may be from the right who thus may place fever as a disease of this or that organ, we begin to see how he *may be led* to do so, and, what is much more important, how one man may be led to ascribe fever to the brain, another to the mucous membranes, a third to the liver, and so on. So that, whilst some place fever nowhere, in a definite form, contenting themselves by saying, that it is a *general disease*, others place it in particular organs; although, as Dr. Tweedie has, correctly enough, said, they cannot agree on the organ to which they would refer it, apparent contradictions, which we think it not difficult to explain. To me it is equally unsatisfactory to say one or the other. The one is obviously untrue, and the other is obviously unintelligible. In the first place, the very nature of the whole affair shows that fever is not an entity; and, however various and complicated its details may be, still we have arrived at that view which exhibits it as a law conservative in itself, exceedingly simple, and of which, from its common characters, we have educed an intelligible expression; but a law which, as operating in fever, has its simple or elementary form clouded by a number and variety of interferences; and then, again, when we understand that these interferences are represented and, in fact, consist in certain disordered conditions of different organs, and of the varied relations of these to each other, the whole mystery, in a practical point of view, is unveiled. The original form of the conservative law which determines activity and certain processes to the vessels of the part or of the body, on which such influences as are combatable impinge, we regard as *ultimate fact*, just as we do the law impressed on the seed which orders the conditions on which it should remain inactive or proceed with the process of germination; and no longer talking of some ideal force under the vis medicatrix or vis conservatrix, if the seed does not germinate under the usual conditions, or does anything *unusual*, we look for the influences which *interfere* or modify the usual form of the law; so in fever, exactly; with these views we now know *what* to look for; we set about our business with objects as clear and definite as we do in the local business of a compound fracture; of this we know the law; we know the interferences (I speak here merely of those which are local); and, in order to have the one carried out properly, we consistently remove the other. In a fever, knowing, as I say, what to look for, we bring our previous knowledge to bear in detailing the actual and *antecedent* condition of the different organs, and the difference in different individual cases; and we very soon thus perceive, not only why different fevers may require different treatment, but also why different cases of what we may understand as the same former type of fever may require very *different* modes of proceeding. All this, of course, tends most powerfully to impress the great influence excited by the previous state of the body, and this, too, is universally admitted in the use of the term predisposition; but it is obvious that saying that a person has fever *because* he was predisposed, of itself conveys no more positive information than the simple fact that he is affected; nor is it much better to tell us that he has been subjected to this or that "predisposing cause," unless we deduce from it the *actual state of* body which has been induced. I believe that this condition is one that is proximately ascertainable if we adopt the proper means, and that it is as necessary to the proper treatment of fever as it is to our arriving at any really true or clear views of the subject.

To bring this before you in the clearest way that the great importance of the subject demands, it will be best, I think, to set down, in a series of propositions, that which is intended to be affirmed as to the true nature and practical relations of fever, and then state *seriatim* the facts and arguments on which I conceive the propositions can be supported.

1. That fever is, essentially, neither more nor less than the body dealing with an injurious influence, under the very same law by which it disposes of all others; and that the apparent complexity and real variety of the phenomena depends merely on the number and variety of certain explicable interferences; that the most accurate expression of the whole is, that the phenomena result from a force compounded of an injurious influence *ab extra*, acting on a definite but in different cases varied condition of body; the common circumstance in all being a state of minus power.

2. And though, in certain combinations of forces, such as the severer forms of mechanical or chemical injuries, certain rare cases of peculiar poisons may, by their direct effect on some organ of the body, simultaneously institute, and, in fact, compose, both the injurious influence and the particular condition,—yet that the *histories of all fevers* demonstrate, that the condition of body referred to, almost always *precedes* the occurrence of fever.

3. That this condition is not a general, indefinable state, such as is loosely recognised in the term "predisposition," but one in which one or more of the various organs of the body are ascertainably in an unnatural or unhealthy relation to each other.

4. That predisposing causes, as they are called, are not, strictly speaking, *causes* of fever, because any one or more of them may be *in operation without producing fever;* but that they constantly *tend to*, and frequently *do*, induce that state of organs which is a necessary link in the chain, and, in fact, an essential *element* of fever.

5. That the condition of organ or organs here intended, is any one in which its structure is impaired, or its function improperly performed, whether in *defect* or *excess*; that it may, and frequently does involve organic disease, but that *more commonly*, the condition is one in which the organs are unbalanced, that is, wherein the various functions antecedent to the occurrence of fever may have been *performed*, but wherein they have not been naturally *distributed;* and that this is the more important, because, although it does not affect that *general* treatment applicable in all fevers, as repose, pure air, free ventilation, silence, subdued light, &c., yet it is the condition whence we can alone deduce the *special* treatment of fever.

6. That no mere symptomatology will enable us to ascertain such condition, because the essential facts are never developed by the symptoms *merely*, to say nothing of a symptom being *very commonly* seen in *one organ*, while the cause of it is in *another*. The evidence required is to be gathered from the *previous history of the patient*, and the absolute and *relative condition* of the various secretions.

7. That having ascertained the real condition of organs, the primary and general object will be to induce secretion; but the mode in which this is to be effected, and the organ which is to be addressed, depends on the particular evidence in the *case* on principles which will be presently submitted.

8. That, as the rule, most power will be gained by restoring secretion from the organ which the history shows to have been *primarily* affected, where this can be elicited; but that this will depend very much on whether that organ shall be more or less affected, or entirely free from organic disease; as, in the latter case, we must excite it in a different manner, combine with it the excitement of some compensating organ, or refrain from acting on it at all. In the next Lecture we will consider the grounds on which these propositions are to be supported.

ORIGINAL CONTRIBUTIONS.

OBSERVATIONS ON INTRA-CRANIAL HYDATIDS.

By Dr. GEORGE GREGORY, Physician to the Small Pox Hospital, &c. &c. &c.

The concurring testimony of the best modern pathologists tends to show, that the intra-cranial structures do not develope those morbid growths, known by the name of acephalocysts, or hydatids, with the same readiness as the thoracic or abdominal tissues. Nevertheless, there will be found, dispersed through the journals, and collected in works specially devoted to morbid anatomy, numerous cases of what are called "hydatids in the brain." Dr. Craigie, in the last edition of his "Elements of General and Pathological Anatomy," published in the present year (1848) expresses a doubt—not whether the genuine animal hydatid can exist in the brain, but whether that designation can fairly be applied to any considerable number of the cases so recorded. "They are," he says, "for the most part, solitary, serous, or vesicular cysts." Of such a kind is the case described by Lemisi, where an hydatid, as large as a pigeon segg, was found in the posterior part of the right hemisphere of the brain. Clustered hydatids, adds Dr. Craigie, are certainly rare in the cranial cavity. Rendtorff described such a case in 1811. A girl, aged eight, after remaining hemiplegic for some months, died lethargic. On opening her body, a cluster of hydatids was found in the right ventricle of the brain.

In the second volume of the "Transactions of the Medical and Chirurgical Society," Mr. Mowat, of Worthing, details a case of "Hydatid of the Brain." A girl, aged nineteen, after suffering from headache and giddiness for a considerable period, had a succession of epileptic fits, followed by loss of vision, first of the right, and then of the left eye. To this succeeded loss of smell. At the end of three years she died apoplectic. On dissection, a large cyst, three inches long by two inches broad, was found imbedded in the substance of the brain, on the right side, near the surface. The left ventricle contained a small quantity of fluid.

The history of a case of hydatids in the lateral ventricles of the brain was communicated by Mr. Burnell to the late Dr. Baillie, who remarks, "that encysted tumors of that character are very uncommon in the substance of the brain, and still more so in the ventricles, and that none such had ever fallen under his own observation." In Mr. Burnell's case, the person had been subject, for a long time, to pain in the head, which was often violent. Towards the close of the disease, he had several convulsive fits, in one of which he expired. In this case, neither the sight nor the hearing was impaired.

The result of my reading would give the following as the normal series of symptoms flowing from the development of intra-cranial hydatids:—Pain of the head, succeeded, after a considerable time, by epileptic fits, and terminating in apoplexy.

The pathological museum of the Army Medical Department at Fort Pitt, Chatham, rich, in almost every form of morbid growth, contains only two cases of "hydatids of the brain." To the kindness of Dr. French, late principal Medical Officer at

Chatham, I am indebted for the following particulars regarding these cases :—

Case 1.—Thomas Williams, aged 41, of the 57th Regiment, died of chronic dysentery. No cerebral symptoms were noticed during life. On opening the head, cysts, described as hydatids, were found dispersed through several of the intra-cranial structures. They occupied chiefly the surface of both hemispheres, being situate immediately under the pia mater. One, however, was found in the anterior part of the right corpus striatum, and another was imbedded in the substance of the cerebrum, in the immediate vicinity of the corpus striatum.

Case 2.—Private Thomas Christmas, of Her Majesty's 26th Regiment, was attacked by acute rheumatism, on the 7th Nov., 1830, and had several subsequent attacks of the same malady. In 1833, he was twice in hospital for fever. In April and June, 1834, he had epileptic fits, accompanied by symptoms of dysentery. Between this period and the 2nd of August, 1837, he was twenty times in hospital for epileptic seizures. He was then invalided, but not under the idea that his death was near at hand, or that any such serious organic disease existed in the brain as was soon to be manifested. On the 8th of September, 1837, he had a severe attack of cholera, which yielded to the usual treatment; but it was followed, in a few days, by epileptic fits in augmented severity, which proved fatal on the 20th of September, 1837, he being then 31 years of age, and the epileptic fits having been present three years and five months.

On removing the upper part of the cranium, it was found, in many places, quite *transparent*, and generally of less than half the natural thickness. The dura mater was much thickened, and, in the course of the longitudinal sinus, appeared granulated and fleshy, and adhered more than usual to the adjoining parts. The pia-mater showed great vascularity, being, in many places, of a bright scarlet colour, and through it were seen a number of small round bodies, like hydatids, about the size of peas, some of which felt hard and almost cartilaginous. These small tumors were found, in some instances, adhering firmly to the pia mater, but they were present also, generally, throughout both hemispheres, imbedded in the substance of the brain and cerebellum. They were collected to the extent of an ounce or more, and, when put into spirits, resembled macerated grains of Indian corn. Each consisted of a distinct membranous sac, which sometimes appeared double, (as if formed at different times,) and in layers like an onion. All the cysts contained a clear fluid, with more or less cheesy-looking matter. Before maceration in spirits, some of them appeared clear, and partially transparent.

The thoracic and abdominal organs were sound.

In all the cases now detailed, as well as in others which I have found recorded the seat of hydatid development, was either the pia mater, the arachnoid, or the substance of the brain. On the 25th of May last, while at Woolwich, in consultation with Dr. Stewart, of the Royal Artillery, I heard from that gentleman the details of a case of intra-cranial hydatids, which had been examined the preceding day at the Artillery Hospital, where the generating structure was the outer surface of the *dura mater*. The case presented peculiarities of phenomena during life, not less remarkable than the situation of the diseased growth as displayed after death; and was thus distinguished from all the cases of intra-cranial hydatids which, so far as my reading extends, have been hitherto recorded. It illustrates, at the same time, the usual course and normal evidences of the disorder. At my request, Dr. Stewart kindly furnished me with the following short history of this curious and interesting case :—

" John Broughton, gunner, of the Royal Artillery, aged 24 years and 9 months, was admitted into the Artillery Hospital, Woolwich, on the 29th April, 1848, immediately on his arrival from Malta. He had been one year and eight months in the service. He left Malta, invalided, early in March, bringing with him the following history of his case, drawn up by Dr. Richardson, Surgeon R.A. :—

" ' Gunner Broughton arrived at Malta, with his company, in Feb. 1847, and has complained ever since of constant headache. In November, 1847, he was in hospital with rupia, and had then a severe epileptic fit, succeeded by protracted coma. Since that period, he has shown symptoms of imbecility, and his vision is impaired. The pupils are sluggish under strong light. There is slight ptosis of the left eyelid. His memory subsequently became defective; but the most remarkable evidence of cerebral disease that has presented itself consists in immoderate and uncontrollable fits of laughter, into which he falls when spoken to. He is a man of gluttonous propensities, but he is not addicted to drinking.'

" On his arrival at Woolwich, it was noticed, in addition to the above-mentioned symptoms, that he staggered in his gait like a drunken man, and that the expression of his countenance was idiotic. The fits of laughter still continued, and formed the most characteristic symptom of his complaint. His hearing was little affected, but both eyes had become amaurotic.

" On Monday, May 22, while at dinner, a large piece of meat, which he had attempted to swallow, stuck fast in his œsophagus, and so compressed the trachea that he became black in the face, and would have died upon the spot had not tracheotomy been instantly performed. The breathing was thus relieved, and the meat was subsequently extracted from the œsophagus. For some hours he appeared to be in a fair way of recovery from the state of asphyxia; but epileptic fits then succeeded, with supervening coma. He died on the following morning, May 23, at half-past eight, a.m.

" The body was opened the next day, May 24, when the following appearances presented themselves :—

"The body was muscular. The face was congested. On removing the calvarium, there was perceived, on the left side, situate between the cranium and dura mater, and completely filling up the middle portion, or fossa, of the cranial base, a diseased mass, about the size of a closed fist, which, on examination, proved to be a nest of hydatids. These hydatids were very numerous, and they varied in size from a large pea to that of a small orange. The bones in contact with the diseased mass were much roughened, and so was the lower portion of the parital bone, where it is connected with the temporal bone.

"The brain, with its dura-matral covering, was pressed towards the right side, where the dura mater appeared somewhat more vascular than natural. The substance of the brain presented no abnormal appearances. The lateral ventricles were filled with a clear fluid."

A SKETCH OF THE ASIATIC CHOLERA, AS IT BROKE OUT AT THE PAUPER ESTABLISHMENT OF MR. DROUET, SURREY HALL, TOOTING.

By J. GORDON BAILEY, Esq., of Pentonville, one of the Surgeons sent down by the St. Pancras Committee, at the recommendation of the Board of Health.

(Concluded from page 251.)

Such were the appearances presented on a *post mortem* examination of the bodies of those who died in the *second*, or collapsed, stage of cholera at Tooting. There was in one of those examined, however, appearances which more properly belong to the third, or re-active stage, in which the consecutive fever assumed a low typhoid character. There was a great amount of venous congestion in the brain, together with sub-arachnoid effusion; the mucous membrane of the small intestines was very much injected, and the liver and spleen were more congested than is usual; and, while on this subject, I may remark, that the majority of those who passed out of the collapse of this fearful malady, were doomed to experience another affection equally attended with danger, but not so rapidly fatal as that which preceded it. This fever was generally ushered in by a flushed countenance, headache, lassitude, and erratic pains over the body. The incubative stage was not so distinctly marked as in the ordinary fever, a few hours being sufficient to light up this fresh disease in some, while a much longer period was required to develope it in others. There was one peculiarity which I noticed in almost all the cases of this typhoid fever, namely, the *absence* of *maculae*, which are almost invariably present in the endemic typhus fever of Ireland; and this surprised me the more, as the majority of the cases assumed that low character in which lesion of the function of circulation is most apparent. In the case which was examined in this stage after death, the head symptoms during life were very marked—great restlessness, loss of sleep, and low, muttering delirium being present. In many of the younger children, who had passed into the third stage, I remarked, that few of them showed this low fever, but presented admirable specimens of that serious affection of the brain described by Dr. Marshal Hall—I mean hydrencephaloid disease. They lay in bed, blanched, and exhausted by the profuse diarrhœa, which had so nearly carried them off. Their pupils dilated; eyelids half closed; the surface of the body, particularly the extremities and face, cold. In a few of them, there was a peculiar *whine, or cry, almost characteristic* of this disease, which is *indicative of exhaustion*. It is, nevertheless, remarkable how long these little sufferers continued to exist, even in this weak state, while it formed a sad contrast to the rapid manner in which some of the others,—fine, and hitherto healthy children,—were carried off. I had no opportunity of witnessing a *post mortem* of those who died suffering from this affection; but I have very little doubt there was a large amount of fluid effused into the ventricles of the brain.

Since the termination of this disease at Tooting, I have been favoured with a pamphlet on cholera, written and forwarded to me by my esteemed friend, Dr. Robert Cane, of Kilkenny, who is well known to the Profession in Ireland as an accomplished Physician and sound practititioner. This gentleman had most abundant opportunity of witnessing the various phases of the disease in 1832, having been appointed to take charge of the cholera hospital in that city; and, in describing some of the symptoms which are the precursors of death, he mentions one well worthy of notice, and, as the work itself may not be generally read, I think I cannot do better than give his description of it in his own words. He says :—"Another fatal symptom was a peculiar appearance of the eyes, seen only in the worst forms of congestive collapse. The up-turned eye, congested upon its under surface, had a square, or nearly square, well-defined ecchymose at the inner canthus, situated upon, and rather below than above, the central axis; it is not a mere distension or congestion of the blood-vessels, but a palpable escape, under the conjunctiva, of the dark tarry cholera-blood. Congestion occurred upon the under half of the eye in all those cases where collapse was present for some hours, and was more or less intense, according to the violence or duration of other symptoms, in all these cases. The upper lid fell paralysed; but the under lid did not rise to meet it, but rather shrunk down and under the eye. The eye itself was upturned, so that the under half, exposed between the lids, was always congested with muddy blood; but this symptom, which I count a fatal one, is a *patch of blood at the inner canthus*, perhaps a quarter of an inch square. I saw no case in which it presented itself recover, nor did any of them rally into the consecutive fever."

This very remarkable symptom, I, too, observed, and I can add my testimony to that of the acute observer, who has previously noticed it, and he is quite correct in remarking, that it is the almost invariable attendant of the cases that are likely to terminate fatally, and, though it must not be taken individually as a positive indication of danger, still, when coupled with other symptoms, it may serve to awaken our fears for the safety of our patient, and make the prognosis be delivered with great caution.

Microscopic Appearances. — I forwarded the stomach and intestines of a patient who died in the collapse of cholera to my friend, Dr. Brinton, of

King's College, London, requesting him to submit them to microscopic examination, and give me his opinion, which he has kindly done. He writes to me thus:—"The appearances presented by a microscopic examination are chiefly of a negative character, since the ordinary cell-growth everywhere covered the surface; but, in general terms, the amount of this constituent of the mucous membrane was greater than usual. Thus, in the stomach, I think one can confidently speak to the fact, that the cells were much more numerous and smaller than they are in the healthy subject; while the columnar shape which generally so greatly predominates, was rarer than usual, though here and there noticeable. I think, also, that the tubes were more distended than natural, and that their contents were rather of a darker colour. The fluid contents of the canal contained a large quantity of shed epithelia; but further than this, and the enlargement of the solitary and Peyerian glands (which is not a microscopic feature), nothing was observed."

Treatment.—I now enter on a subject which has, up to the present time, baffled the skill of many clever and sound men, and, though I will not stop to consider or speculate on the merits of the various remedies what have been vaunted forth as specifics for the cure of cholera, I will endeavour to inform my readers which of them all I selected for the cure of those under my care, and how far they seemed to answer the end in view.

Now, taking the same view of this disease with that distinguished physician, Dr. Chambers, namely, that its primary influence is exerted on the ganglionic nervous system, and that its second effect is on the circulation, I arranged my treatment on principle, stimulating those whose vital powers were at a low ebb, and endeavouring to check those cases when I saw them early, which commenced mildly, but, if neglected, would soon run into the most dangerous form of the disease. But I cannot more advantageously detail the plan of treatment I adopted, than by taking a case for illustration which afforded special indications, and required at each time a different plan of treatment.

Sarah Goat, a young woman about 18 years of age, was parlour-maid at Mr. Drouet's; she had also assisted in some minor department of the school as a kind of governess. She was attacked on a Friday with diarrhœa and cramps, slight sickness of stomach, and considerable uneasiness about the epigastric region. She placed herself under my care, (as, in conjunction with Mr. Kite, I took charge of the female wards). I prescribed for her a mixture, composed of compound powder of chalk and opium, rubbed up with mucilage; aromatic spirit of ammonia, and tincture of catechu; jars of hot water to the feet; with directions to have her well covered with blankets. She was seized about nine in the morning; during the day the diarrhœa got less, and, by the same hour in the evening, she was considerably better. On going round that night I found her pulse quick, her skin hot, tongue white, and a good deal of thirst present. I placed three grains of calomel, dry, upon her tongue; she slept soundly during the night, and perspired freely. Next morning, before I came into the ward, she was up and moving about the house, to my great surprise; and, being told how foolishly she had acted in getting up without my leave after being so dangerously attacked the previous day, she replied, "Oh, Sir, thank you, I feel all right again." I immediately directed her to leave off what she was engaged at, and sit by the fire during the day, and have some light mutton broth for dinner. From the kind disposition of the girl, which had endeared her to all her companions as well as master, she could not remain quiet when every one else seemed so fully occupied, and my importunings went for little, as she did not take that rest which I so strongly enjoined her to do.

My friend and colleague, Mr. R. B. Penny, of Walworth, who was one of the Medical Staff, was called to her the following morning at one a.m., when he found her vomiting violently, and discharging, or rather, as he termed it, "spouting" out that well-known rice-water fluid from her stomach. Her bowels, too, were acted upon simultaneously, but the matter evacuated from the intestines was more of the consistence of gruel, without smell or any appearance of bile. She was seized with agonising cramps, which caused her to moan and writhe violently in the bed, exciting in those who surrounded her the greatest horror and pity. Those symptoms continued a short time, when others equally severe and dangerous supervened. Her eyes sunk in their sockets; she became cold and blue, and broke out into a cold clammy perspiration (which may be considered a most fatal sign); her tongue became cold, and, in a word, she was marked for death. My friend, who had seen a great deal of the disease in India, administered to her ammonia, ether, opium, and hot brandy and water, with warmth to her feet, and friction of the extremities, which was persisted in for a considerable period without any apparent benefit. I saw her myself at eight a.m., next morning. She was then in the worst stage of collapse. I gave her half-drachm doses of carbonate of ammonia, in a glass of brandy, every half-hour; applied mustard plasters to the pit of the stomach, and over the region of the heart; inside of the thighs, calves of the legs, and soles of the feet, having been previously rubbed with flannels moistened with hot turpentine, and an enema, containing two ounces of the same remedy, administered per rectum. She rallied for a little, (often expressing her regret, that she did not take the advice of her doctor in keeping quiet,) after which she sank in the space of two hours.

I give this as an example of the majority of cases we had to deal with, so far as regards their severity; but fortunately this treatment was more successful than in the case just recited, as many who appeared almost hopeless were restored by the unceasing application of those powerful remedial agents. Many of those cases which were checked in the commencement, I am bound to state, were owing to the diligence with which diarrhœa was sought for in the daily examinations of those unattacked and previously reported well; and those cases, when treated at the onset, were prevented from merging into the more dangerous stage of the disease. These simple cases of diarrhœa were treated by aromatic astringents, where the relaxation was at all considerable. When sickness, with vomiting, preponderated, ether and ammonia, with small doses of tincture of opium in brandy, and mustard plasters to the epigastric region, were the remedies that succeeded best in arresting the course of this fatal malady; but I must equally confess, that many who were in this state died, notwithstanding every treatment which could hold out the slightest hope of success was tried. Here, as elsewhere, each took a different view of the treatment that was required; some tried calomel and opium, others calomel and stimulants, and a third a mixture of all three. I must confess, that I used calomel, in the true stage of cholera, very sparingly; for I hold, with that most deservedly distinguished pathologist, Dr. Graves, of Dublin, that the object for which it is administered cannot be obtained while such a deranged state of the system continues; the functions of assimilation and secretion, are destroyed, and there is time lost in its administration which might be better employed for the patient, and with more hope of success if it was not so exclusively trusted to.

I used in several cases the acetate of lead, as recommended by this physician, and am happy to state, that in nearly all the cases of diarrhœa and sickness in which I tried it the effect was most satisfactory; the purging and vomiting ceased, and the patients did not sink into collapse. For drink, I allowed my patients the free use of cold water, which was as useful as it seemed grateful in allaying the distressing thirst. In two or three cases, in which the patients had relapsed into the collapse stage, attended with violent sickness, the inhalation of *chloroform* succeeded effectually in relieving it.

On the whole I may state, that the experience of this outbreak at Tooting is an additional illustration of the fact, that, no matter what form of treatment is adopted, this capricious disease succeeds in depriving doctors, however skilful, of the large bulk of their patients; and, when the statistics of the outbreak at Tooting come to be made out, I have little doubt that the ratio of mortality, under any plan of treatment, will be found pretty nearly equal.

Remarks.—In the *Times* newspaper of January the 9th, Mr. Rose, of Stamford-street, Blackfriars, states that he carefully inspected the children of the Holborn Union, removed from Mr. Drouet's establishment at Tooting to the Free Hospital at Gray's-inn-lane; and, though he does not positively assert that what he saw was not cholera, still he thinks that the cases "differ very materially from those which the cholera exhibited when it prevailed last in this country," leading those who read his letter to infer, that of necessity the disease which was then raging at Tooting was not cholera." After detailing the symptoms which characterise an aggravated case of this disease, he concludes by attributing the deaths to bilious fever, which, he says, "prevailed to a great extent in London for several months past." Now, I will neither weary the patience of my readers, or occupy unnecessarily the pages of a valuable journal, by replying to the various opinions which have been advanced in the public journals, and through the Medical Press, on the nature of the disease which produced such fearful mortality at Surrey-hall; but this I will say to Mr. Rose, with every kind feeling of professional faith and respect, and in applying it to him I do so concurrently to all who adopted the same views, it should be the constant and anxious endeavour of all those who practise the healing art, to weigh well, and attentively consider, every opinion on matters of such importance, before giving publicity to what may be fraught with danger to the public at large as well as great injury to the Profession to which he belongs. This conviction I am bound to state; for I heard many medical men jump at conclusions, without bestowing on the matter the slightest consideration, and attempt to draw conclusions from the observation of a single case. I will tell Mr. Rose, that what he saw at the Free Hospital was not bilious fever, *but cholera in a modified form*; and I am quite sure he will himself admit, that cholera is just as likely as any of the fevers to be modified under peculiar circumstances, and that the addition or absence of certain symptoms, on the present occasion cannot do away with the fact, that the disease, in its most leading and most fatal features, was precisely similar to that of 1832. There was the sunken eye, the pinched-up countenance, the cold tongue, the leaden lips, and blue-bordered ears, the fingers and toes both cold and blue, the distressing thirst and constant vomiting, the torrents of soapy water from the bowels, and the painful cramps,—the whispering voice, which saddened the heart. All were present; and yet some who call themselves medical men came down, and had the hardihood to assert that it was not cholera, but according to one, a bilious fever; another, a gastro-enterite; and a third, the "Tooting disease." This sobriquet, as fanciful as it is singular, has been given to the cholera which made its appearance at Tooting. Mr. Southee, of Cambridge, has also stated, through the pages of this Journal for the benefit of the Profession, his doubts of its being cholera. As I included him among the gentlemen who were sceptical on that point I will only state, as one of the two medical officers who accompanied him in his passage round the wards, that he is quite incorrect in the statement he made regarding the "urine" and "thirst." He was distinctly told by my colleague and self, that, in all those cases which had run into collapse, thirst and suppression of urine existed. I do not, for one moment, mean to insinuate that this gentleman, or any other professional brother, would state knowingly what was incorrect; but, on this point, he certainly was in error, for the rapid manner in which he passed through the wards, and the consequent limited opportunity he had of making himself accurately aware of the real facts of the cases, led to this little inaccuracy, which I doubt not inadvertently crept into his paper.

Mr. Grainger, in his report, read before the Coroner at the inquest, after detailing the symptoms

as before enumerated, goes on to say, "I witnessed all those marks in the Tooting cases, and the medical officers at Mr. Drouet's all gave me evidence of having witnessed them in that establishment; all these symptoms of cholera, when taken in the aggregate, occur in no other disease yet known to medical men. Some medical practitioners, with the experience of only one or two cases, and sometimes with none at all, had ventured to pronounce this disease not to be Asiatic cholera. But there were different *modifications and variations* of the disease which rendered it necessary to examine a large number of cases before anything like an accurate opinion can be warranted. The best pathologists of Europe consider the disease could only be determined after most careful research into the changes of the body, which indispensably required the use of the microscope; and, therefore, the general practice of the Profession did not admit of the truest and only satisfactory tests for ascertaining the real character of the disease."

Dr. Alfred Taylor, the eminent lecturer on Chemistry, at Guy's, says—"Mr. W. J. Kite has given me a description of the symptoms with which the children at Tooting have been attacked, as well as the appearance found in the bodies of some of those who have died; I have also inspected a portion of the matter vomited, and, taking into consideration these facts, and the rapidity with which death has taken place in certain instances, I have no hesitation in expressing my firm belief, that the symptoms are not due to any poison taken into the food, they can only be regarded as cases of epidemic cholera in a malignant form. I should recommend the use of animal food daily, less gruel and liquid food, and isolation of the attacked."

The poison of cholera, in my opinion, is received into the system by infection,—the nervous primarily, and the circulating system secondarily, becomes deranged,—*what in those who are susceptible of its influence, and seem naturally predisposed to it, will be true cholera*, will, in another set, be tormina in the bowels, diarrhœa, and any of the milder forms of this affection. In Surrey-hall, during the time this disease was highly concentrated, all the children were exposed, at the onset, to the operation of the same exciting and predisposing cause; and, as the the disease began, after Tuesday the 9th instant (if I recollect rightly), to get milder, I could perceive, towards the termination of the week, that few of the fresh cases presented the violent features witnessed during the preceding one, and the mortality was also sensibly on the decrease. Again, many of the children who left Tooting carried with them, in their blood, the germ of the disease, and those who did not had imprinted on their youthful memories the recollection of the sad fate of their companions; and *this*, I doubt not, as much as anything else, acted as a predisposing cause in those who were taken ill after their removal to town.

Since the occurrence of this disease at Tooting, different portions of London have been visited by it; the medical officers in attendance are nearly all unanimous in pronouncing it cholera; and, were any other evidence wanting to confirm the fact, we have had it painfully and abundantly furnished to us by the ravages which it has so lately made in many parts of Scotland; and more particularly in Glasgow, an opportunity is a second time afforded to the members of the Medical Profession to investigate the true cause and nature of the disease. I quite agree with Mr. Grainger, that those engaged in general practice are hardly fitted for the calm and philosophic investigation of a malady over which medicine exerts so little control; and it is to be hoped, that our brothers in the Profession, who have less of the anxieties and toils of practice, and more leisure for taking advantage of the valuable information which has resulted from the labour of analytical chemists and microscopical anatomists during the last few years, will give to Practitioners rules to guide them that are based on sound pathological and physiological views, deduced, not from the experience of a single explorer in the same field of science, but confirmed and supported by the testimony of all those who labour in the same vineyard, of the many debateable points in medicine; the one, I think, of all others, that has courted the Ten, and has exercised the ingenuity of the brain, is that of cholera. "The Press" (says Dr. Knox in the introduction to his excellent "Inquiry into the Actual State of our Knowledge of Cholera," just published, which I would warmly recommend to those who wish to study the literature of this disease,) "literally groaned beneath conflicting expressions of opinion on every point connected with the nature, diffusion, and treatment of the disease. The periodical publications of the day engaged eagerly in the controversies, and the medical literature of this country was literally inundated with the discordant views of various writers, and to such an extent as to create amongst professional readers a sense of satiety, almost amounting to disgust."

Let this not be the case on the present occasion. Those who will take the trouble to investigate this disease in a true scientific spirit, and who will furnish, as the result of their labours, valuable facts, and not faulty hypotheses, will, I venture to say, obtain that full meed of merit from the Profession, which they are so fully entitled to.

The object I had in view in writing this Paper was merely to furnish the Profession with a sketch of the disease as it came under my own observation; the symptoms, treatment, and *post mortem* appearances that I witnessed; and not an elaborate disquisition on a subject of which, in common with most others, I freely confess myself to be but imperfectly informed on. I do, however, intend shortly publishing some remarks on the "Cholera of Children," which certainly is, in some degree, modified by age, as an opportunity was afforded me of witnessing its occurrence in many who were very young.

In conclusion, I take this opportunity of thanking my friend, Mr. Kite, resident surgeon at Mr. Drouet's, who kindly furnished me with the particulars of the outbreak of this disease before I came down, and whose politeness to his colleagues, as well as his devoted attention to those under his care, commands the warmest thanks of all those who were associated with him on this melancholy occasion.

London, February, 1849.

NOTES FROM MY CASE BOOK.

By THOMAS BROWN, Esq., Castle Donnington.

WOUND OF THE CORNEA, AND DISLOCATION OF THE IRIS.

A boy, aged four years, received an incised diagonal wound in the cornea, three lines from the pupil of the eye, causing great loss of the vitreous humour and dislocation of the iris, —this the result of an accident in play with another boy. Being called to see him one hour after the accident, I at once applied two sutures with my smallest curved needle; and by the use of antiphlogistic remedies, the little fellow's iris regained its vocation, the humour re-accumulated, and no permanent injury is the result.

GONORRHŒA IN THE FEMALE CURED BY SECALE CORNUTUM.

Mrs. Greenwood, a married woman, requested my advice relative to a gleety discharge, which, on examination, was found to have been imparted to her by her husband. She had been, for the long period of six months, making unavailing attempts, by multifarious remedies, to get rid of the disease. I found no good to accrue from the employment of copaiba and lyttæ, and, therefore, at once administered the secale cornutum, in five grain doses three times a-day, with perfect success, and greatly to the satisfaction of my patient, who was entirely cured in ten days.

DIARRHŒA LIENTERIA.

Mrs. Winfield, aged 60, requested my advice concerning a long continued lientery of herbowels. She informed me that for some months no food of any description would remain long in the stomach, but would in a semi-assimilated state pass the bowels. She had consulted many gentlemen of the Profession, but they had never afforded her any relief. Without any idea of being of much service, (suspecting the constitution of the old woman was breaking up,) I gave her a mixture consisting of the following ingredients:—

℞ Tr. Catechu ʒiv.
— Opii ʒj.

Infusi Vjalerianæ, q.s. ft. ʒvlij., cujus sumend. coch. mag. duo ter die.

This medicine acted to the satisfaction of all parties concerned; and after some eight bottles had been taken, the subject of this report returned to her laborious occupation (that of a gardener,) which she has continued for one year since her recovery, and is now in good health.

A NEW DOUBLE INCLINE FOR FRACTURES.

By S. GIBBONS, Esq., Congleton.

Through the medium of your Journal, I wish to call attention to an improvement I have made in the double incline for compound fractures of the leg; simplicity, and not complexity, in the construction of our instruments, ought to be our principal object.

The machine known as Liston's, though in general use, is too complex. I have had several opportunities of using it, and have been long satisfied that it is imperfect. The great objection to it is, that there is often more or less inflammation and sloughing produced in the *popliteal space, and particularly about the ancle*. The foot-board has too free motion, and cannot be fastened by the screw without bringing the sides so near together as to cause pressure about the ancle, and is often left, therefore, too loose. Another objection, in my view, is, that the leg is put in an unnatural and uncomfortable elevation. There appears to me as great a chance of curing the fracture close to the bed, as if the leg were elevated half a yard. A third objection is, its expense.

The instrument I have contrived, and which costs 10s. only for the make, consists of wood. A drawing will make the description better understood.

The machine is cut out of a solid piece of wood. The parts in which the thigh and leg rest are hollowed out, in accordance with their shape. There are depressions for the heel and calf; notches in the sides for the ancle-bones, and light elevations just above the heel and at the bend of the leg. The foot-board is placed in accordance with the angle of the foot when in the recumbent posture, and may be let down on raising the hook. It is connected by a hinge underneath. The dotted line shows where the leg-piece is separated for inserting a piece, 1, in case the machine is wanted for a longer leg than ordinary. These pieces are fastened with four screws underneath. If the hook 2 be raised, the machine may be flattened; 3, 3, are hinges; 4 is an eye in which the hook may be placed, in case so great an angle as that represented in the figure is not required. The same provision is made with respect to the foot-board.

Should any one desire to make a machine, he had better lie on his back and put his leg in the position in which it ought to be placed when fractured, then let the axis of that position be taken, and the carpenter will perform his work with more satisfaction. The machine must be made to suit either leg. Care must be taken in cutting the ends at which the leg and thigh pieces are joined, as represented.

A leg may be placed in this simple machine, when it will be perfectly secure and comfortable to the patient. I have given it the name of the box double incline.

HOSPITAL REPORTS.

[From our Edinburgh Correspondent.]

EDINBURGH ROYAL INFIRMARY—SURGICAL HOSPITAL.

REMOVAL OF A TUMOR OF THE LOWER JAW.

BY MR. SYME.

Thomas Donaldson, aged 24, blacksmith, admitted January 25. Has a tumor of the body of the lower jaw on the left side. It is about the size of an egg, and more prominent on the outer than the inner side of the bone. It extends from the canine tooth backwards to the last molar, and is of tolerably firm consistence but not bony. It is not the seat of any uneasy sensations beyond what arise from its bulk; the patient, however, is anxious to have it removed, and has come some distance from the country for that purpose. The swelling began to make its appearance about six months ago, at the inner side of the last bicuspid tooth. This became loose, being pushed upwards by the tumor, and on being removed its cavity was filled by the foreign substance. For some time the increase of the tumor was rapid, and some time ago it was punctured, but nothing except a little blood escaped.

Jan. 27.—The operation for the removal of the tumor was performed to-day. Chloroform was given to the patient, at his own earnest request, though contrary to Mr. Syme's usual practice, who objects to its use for the most part in operations about the mouth, from the risk of blood flowing into the air passages during the insensibility of the patient. He became very violent, and on that account there was difficulty experienced in performing the operation, which would not have happened in ordinary circumstances. It was found impossible to get the jaws opened sufficiently to remove the wisdom tooth. An incision was made from the angle of the jaw forwards, to within an inch of the symphysis. The vessels being tied as they were cut, the soft parts were then separated from the bone. The last incisor tooth having been removed, the jaw was notched at that point with the saw, and again at about an inch from the angle. The tumor was then easily removed by the cutting pliers. A piece of lint was put into the cavity, and the edges brought together by a number of sutures. About three quarters of an hour after the operation, it was observed that a good deal of blood was coming from the mouth. Some dry lint was introduced, and cold applied externally. It soon, however, came in a perfect torrent. The stitches were undone, and a very large vessel was seen bleeding. It was in the portion of bone which had not been removed, and seemed to be in the canal for the inferior dental nerve. The hæmorrhage was, after considerable difficulty, restrained by two small plugs of wood, which were forced into the bleeding points, for there seemed to be two vessels, close beside each other. This had the effect at the time. The sutures were again introduced, and, for half an hour, it seemed as if there would be no further trouble from this source. The hæmorrhage, however, again returned; and, before the patient was seen, he had lost about thirty ounces of blood. The wound was re-opened, and one of the plugs was found to have fallen out, and the other become loose. This time three were put in, one beside the other. A small vessel below the mucous membrane of the cheek was also secured by ligature. The wound was now allowed to remain open till late in the evening, when it was stitched up for the third time, there not having been the least bleeding from four o'clock in the afternoon. The patient altogether, during the operation and subsequently, lost an enormous quantity of blood. On the most moderate calculation, at least seventy ounces—probably a great deal more. For several hours his pulse was imperceptible or very indistinctly to be felt.

Jan. 28.—Slept very well all night, and now feels quite comfortable. The large amount of blood he has lost seems now to have affected him very slightly. There has been no bleeding since yesterday, not even an oozing, and he complains of nothing but a bad taste in his mouth.

Feb. 4.—The wound is now entirely united, except a small portion about an inch and a half in length, the edges of which are thick and somewhat hard.

Feb. 5.—Had several rigors last night, but makes no complaint. There is this morning slight fulness of the left side of the face, and some redness.

Feb. 7.—Has a severe bowel complaint, and is not taking his food so well as formerly, but makes no complaint.

Feb. 9.—Was delirious last night. There is slight erysipelas of the whole side of the face. His pulse is about 110, and feeble. The diarrhœa is somewhat less severe. He has a very yellow appearance. During the night there was a discharge of blood from the mouth, to the extent of three or four ounces.

Feb. 10.—Spent a very restless night. His pulse is now about 120, and very feeble. He has considerable difficulty in swallowing. Towards evening, the diarrhœa returned with increased severity. The matters passed from the bowels looked very like those from cholera patients.

Feb. 11.—Is sinking rapidly. Died at 11, a.m.

TWO OPERATIONS FOR LITHOTOMY.

BY PROFESSOR MILLER.

David Nicholl, aged 49; admitted Feb. 6, with stone in the bladder; has been labouring under the usual symptoms of stone for the last eight years, and attributes its origin to stress of labour, and cold caught while working in wet fields with the spade making drains. Sounded, and stone detected.

Feb. 14.—Professor Miller performed the lateral operation of lithotomy, and extracted the stone with great facility, the patient having been previously put under the influence of chloroform.

Charles Irving, aged 52; admitted Feb. 6. Fifteen years ago was cut for stone by Mr. Liston, who removed a calculus of large size, weighing, according to the patient's statement, 5 oz., and more than two inches long. He continued in good health until five years since, when he sustained a severe injury of the back by a loaded cart being overturned upon him, and soon after he felt a recurrence of the symptoms of stone, similar to what he had formerly suffered. On the introduction of a sound, the presence of a stone was instantly detected; and, on the 14th, chloroform having been administered, it was removed by Mr. Miller, by the lateral operation.

REDUCTION OF DISLOCATION OF THE HIP UNDER CHLOROFORM.

BY MR. MILLER.

William Gillies, aged 42, admitted Feb. 7. This afternoon, while carrying a sack of corn, lost his footing, and fell upon his side. On being taken up, he was unable to walk or stand. His left leg is much shortened, the knee being thrown over that of the opposite limb, and the ball of the great toe resting on the instep of the other foot. The head of the femur is felt on the dorsum of the ilium. Chloroform was fully administered, and reduction effected with great ease, by simply seizing the leg with the hands and making extension.

PRIMARY AMPUTATION OF THE ARM.

BY MR. MILLER.

Alexander Simpson, aged 15, brassfounder, admitted Feb. 9. Half an hour before admission, his arm got under the endless chain of an engine. In attempting to release his apron, which had been caught by it, it was instantly crushed, and almost twisted off. The soft parts were very much torn up, and there was a compound comminuted fracture of the humerus in its middle third. The arm was amputated in the upper third soon after admission. Very little blood was lost.

Feb. 10.—Patient is pretty well, but complains of great pain and uneasiness in the arm. Small doses of tincture of aconite ordered to be administered every hour.

Feb. 19.—Patient goes on favourably.

RICHMOND SURGICAL HOSPITAL.

[From our Dublin Correspondent.]

DISEASE OF THE KNEE-JOINT—FALSE ANCHYLOSIS—AMPUTATION.

Under Care of Mr. Hamilton.

Richard Clinton, aged 20, admitted into the Richmond Hospital, Dec. 17, 1848. Four years before, he became affected with pain in the left knee, which, after a time, became swollen; he continued going about for two years before he applied for advice; he was then admitted, under Mr. Adams' care, from whose treatment he was much benefited, and left the Hospital able to walk, though lamely; in spite of lameness and occasional pain, he contrived to work so as to support his family, till a fortnight before admission, when the pain in the knee became very severe.

He had, when admitted, constant pain, aggravated by motion, worse at night, and with painful startings. The knee was considerably enlarged; a uniform swelling, with an elastic, pulpy feel, conveying the feel of fluctuation to a careless observer. Mr. Hamilton remarked, however, that it arose, in a great measure, from a pulpy thickening of the synovial membrane, and that the cartilages were ulcerated. The limb was quite straight, the flexion of the joint, usual in such cases, being absent. The pulse was quick, and he perspired at night.

By the local application of the strong tincture of iodine, blisters, and perfect rest of the limb, and the internal exhibition of bark and hydriodate of potash, he improved considerably. Unfortunately, erysipelas, at that time prevalent in the Hospital, attacked a small unhealed portion of a blistered surface on the knee; it spread downwards to the foot, and upwards to the groin. After this the joint became affected with the most intense pain, for which he was constantly imploring relief; the least motion caused such suffering, that he could not bear the bed or bed-clothes to be touched, and, in moving the limb, he used both his hands and the sound foot under the ankle of the diseased limb. His misery was further increased by the supervention of a bowel complaint, and he was constantly bathed in profuse perspiration, large beads of which stood on his forehead. He could not bear the prone position in bed, but sat up, supported by pillows. His pulse was most rapid and very feeble, the tongue of a deep bright red colour, and morbidly clean, the strength greatly reduced, and emaciation great. The joint was much increased in size, and there appeared a greater fullness at the inside. In the belief that an abscess had formed in the joint, and hoping to afford him some relief, Mr. Hamilton passed a straight bistoury in this situation, and let out a quantity of thin flaky matter. This was followed by great ease, but, unhappily, only temporary; pain was now referred to the outside, and, by another opening, more matter was let out, with the same result. Nothing, therefore, remained, to relieve him permanently, and to save his life,—which would evidently be jeopardized by further delay,—but the removal of the limb. As the least motion gave exquisite pain, Mr. Hamilton thought it best to put him under the influence of chloroform before removing him from his bed. He was accordingly carried, in an insensible state, to the operation theatre, and was kept so during the operation, of which he was quite unconscious. When in bed, and recovering from the effects of the chloroform, he complained of much smarting pain in the stump.

Dissection of the Amputated Limb.—The disease was, as already observed, of four years' standing, and during that time nature had made a great effort to obliterate the joint, by the formation of strong ligamentous adhesions between the articular surfaces of the femur and tibia, and the patella and femur, so that, in order to examine the interior, it was necessary partly to cut, and partly to tear, through the adhesions. It was, therefore, an example of false anchylosis, between the two opposing surfaces, when the cartilage had previously been removed by ulceration. The synovial membrane presented a well-marked specimen of that peculiar condition of the membrane which Sir Benjamin Brodie has

denominated "pulpy degeneration." It was thickened from a quarter to half an inch, of a soft, pulpy consistence, and a pale brownish colour, and uneven surface. The cartilages had almost disappeared, leaving the roughened surface of the subjacent bone bare, or covered with the ligamentous substance which had formed the adhesions. A large cavity existed in the head of the tibia, filled with thick, yellow matter. In long-continued disease of the knee, the cancellated structure of the head of the tibia is not unfrequently the seat of abscess: it will be remembered that such an abscess existed in the preparation of true bony anchylosis which Mr. Hamilton recently exhibited. On examining the openings made previous to amputation for the discharge of the abscesses at the inside and outside of the joint, they were found to pass by a very tortuous course into the joint. Another feature worthy of note was the hypertrophied state of the fatty substance external to the joint. It is well known, that, except to fill up the hollows about the patella, and at the popliteal space there is very little fat about the knee joint, yet here, notwithstanding the general emaciation of the rest of the body, the joint was completely surrounded by a thick mass of coarse yellow fat.

With regard to the pulpy degeneration of the synovial membrane in this case, Mr. Hamilton said he ventured to differ from Sir B. Brodie, as to its being "of the same class of disease as tubercles of the lungs, scirrhus of the breast, the medullary sarcoma, or fungus hæmatodes of the testicle," &c.; nor is he disposed to regard it as a distinct disease, with a peculiar train of symptoms, as he has met with the pulpy degeneration of the synovial membrane, where the disease had begun with the symptoms of synovitis, or with those of ulceration of the cartilage, or in children when the disease of the joint commenced with scrofulous disease of the extremities of the bones, and where, in all, the original disease had finally ended in an affection of all the articular tissues, cartilages, synovial membrane, and bones; in one instance, when a woman was admitted with lupus exedens of the integuments of the left knee, which perforated the joint, causing abscess and ulcerated cartilages, this pulpy, thickened state of the synovial membrane was found to exist. Nor is he disposed to agree with Sir B. Brodie, "that it is equally incurable with other maladies of the same order." On the contrary, he has reason to believe, that many cases where synovitis has continued till this state of the membrane existed, have got well; and also, that, when patients have recovered where abscess has taken place in the joint with destruction of the cartilages, this state of the membrane must have previously existed; and though, in these instances, there will be a stiff anchylosed joint, yet, if this is in a right position, it is a better limb than one of wood; therefore, the conviction of the existence of this state of the synovial membrane in a joint is no reason *per se* of the necessity of amputation.

ROYAL MILITARY HOSPITAL, PHŒNIX PARK.

(From our Dublin Correspondent.)

INTERESTING CASE OF FEMORAL ANEURISM —RUPTURE OF THE SAC—DEATH.

A painfully interesting case of femoral aneurism was present lately in the Royal Military Hospital, Phœnix Park. This case excited much attention among the surgical circles of Dublin, on account of the admitted hopelessness of any effort which art could suggest for its relief. The sufferer, a young and intrepid soldier, was willing to submit to any operation which his surgical attendants might advise; but the disease was so far advanced at the period of his admission into the Hospital, that it was reluctantly decided to be unadvisable to risk the credit of any heroic treatment, whose immediate effect might be sudden death, and which could not, under any circumstances, be expected long to retard the fatal event.

This man, aged 34, a sergeant, remarkable for his good conduct, of five feet ten inches in height, muscular and finely formed, was, to all appearance, in perfect health up to the month of March, 1848, when one day, being engaged in the extension motions, he felt, at the instant of attempting to touch the ground without bending his knees, a sudden pain in the left groin, as if something had given way. This sensation, however, gradually ceased, and he thought no more about it; but, subsequently, on two different occasions, he was obliged to go into hospital for a few days each time, for foot soreness and œdema of the left foot, occasioned by long marches in convoy of provisions. On both occasions he rapidly got well; and as such occurrences are frequent in the army, they excited no attention. In April he was sent to England on the recruiting service, and he commenced and continued to perform the arduous duties of that service till the latter end of November. While in England, however, he afterwards stated, the swollen condition of the left leg became persistent, and he discovered that he had a lump about the size of a hen's egg in the left groin. In November he asked permission to return to his regiment; and on the 22nd of December he sought, for the first time, medical advice. He was now examined by the surgeon of the regiment, who ascertained that the lump in the upper part of the thigh was an aneurism, forming a large, pale, flattish tumor. Aware of the hazard of attempting to treat a disease of this description in depôt, the regimental surgeon wrote to Sir James Pitcairn, the Inspector-General of the medical department in Ireland, describing the case, and requesting directions how to act. Sir James immediately ordered a medical court of inquiry to be summoned, to report on the practicability of transferring in safety the man to Dublin. The court decided in the affirmative; and, accordingly, the patient was brought by easy stages to the Royal Military Hospital in the Phœnix Park, where he arrived on the 20th of January, and was placed under the care of Dr. Fox, staff-surgeon.

When Dr. Fox examined this soldier, who had been in active duty, and without complaint on his part of illness, up to the 22nd of the preceding month, he saw the upper part of the thigh occupied by what seemed to be an enormous fungus hæmatodes, encroaching on the abdomen. The tumor was of a nearly conical form, the base being one foot eleven inches in circumference, and the elevation not less than five inches. It pulsated under the hand, and yielded to the ear a single bruit. The surface was abraded, ecchymosed, and discoloured. The thigh, below the tumor was of enormous size; the leg œdematose. A consultation of some of the chief surgeons in Dublin was summoned; Sir Philip Crampton, Mr. Cusack, and Mr. Adams assisted Staff-Surgeons Fox and Barrett; every possible mode of treatment was discussed; for it was pitiable to see a fine, intelligent young fellow, with courage to suffer and firmness to endure, and to be forced to leave him to his irremediable fate.

It was doubtful whether the external iliac could be reached, so much did the base of the tumor overlap the abdomen; but, admitting that a ligature could be passed round it, what good result could be hoped for? The œdema of the leg, as well as the size of the tumor, rendered it more than probable that the femoral or saphena veins, if not both, had become obliterated, and thus, if it should happen that the artery was sound, and that the patient escaped suppuration of the sac, still gangrene of the limb might be ultimately expected. It was found possible, in this case, to compress the aorta, and thus control the circulation in the extremities; under such circumstances would it be warrantable to perform the old operation for aneurism—to open the sac, empty it of its contents, and pass ligatures round the artery immediately above and below it? This was certainly practicable; but it was more likely that the artery should be diseased in the immediate vicinity of the sac; and this operation would not preclude the ultimate supervention of gangrene. A third possible mode of proceeding was the combination of either of the former operations, with a subsequent amputation at the hip joint, which would obviate the occurrence of either gangrene of the limb, or suppuration of the aneurismal sac; but, the statistics of this amputation are too unfavourable to encourage its being tried under such circumstances. Any of these operations might involve death *in isto opere*; and it was at length decided to let the disease proceed without surgical interference. Sir Philip Crampton had known two instances in which aneurisms of equal magnitude had undergone spontaneous cure; the pressure of the sac having caused inflammation and obliteration of the artery; similar cases have been described by the older authors; and, it was resolved, in the present instance, to watch the case closely, but to give to nature the chance of herself affecting a cure.

The aneurism rapidly enlarged during the few days succeeding: and, on the 25th, it ruptured, the blood spouting to a distance of at least three feet. Drs. Fox and Barrett, who had been in constant and assiduous attendance, immediately rushed to the man's aid. The latter at once compressed the aorta in the abdomen, and arrested the hæmorrhage; the former opened the sac, turned out the coagula, and tied the artery just above its entrance into it. It was found that this completely controlled the circulation. The other means proper for the occasion were had recourse to. Wine was abundantly given; but the shock was too severe; the man slept for about four hours, then awoke with a sensation of faintness, and gradually sank in six hours afterwards; he died on the morning of the 26th.

At the autopsy, the anticipated appearances were discovered. The arterial system was natural, except at the seat of the aneurism. The aneurism was found to be double, one sac occupying the large tumor which had burst, and communicating with another which extended down the thigh under the fascia lata. The femoral vein was obliterated along a considerable part of its course. It was plain that surgery had no resources to meet a disease so complicated and appalling; but the case, although terrible is not the less instructing.

WHITWORTH HOSPITAL.

TRAUMATIC PLUERO-PNEUMONIA SUPERVENING ON DILATATION OF THE AIR-CELLS, AND TERMINATING IN GANGRENOUS ABSCESS.

A policeman, 37 years of age, was admitted into Hospital, under the care of Dr. Gordon, on the 4th of January, 1849, stating that, a few days before Christmas, he was on duty at the door of a chapel, and received a severe crush, by which his left side was greatly hurt. Some days after the receipt of the injury he complained of a very severe sharp pain in the side, with cough and bloody expectoration, which continued without his obtaining any relief until his admission into Hospital. He was now suffering from dyspnœa, an incessant harassing cough, and severe pain in the left side anteriorly. There was a great deal of constitutional irritation, furred tongue, very rapid and full pulse, and great heat of surface. He had been troubled with cough for several years, and his companions said "that he had always a bad chest." The upper and anterior parts of the thorax were greatly arched, and the shoulders were elevated as in cases of chronic dilatation of the air-cells. The right side and upper portion of the left side were loudly resonant on percussion, with feeble respiratory murmur. There was a slight shade of dulness over the central part of the left lung, with slight crepitating rattle, and there was still some tenderness on pressure over this part, which corresponded to the seat of injury. The progress of the case was extremely slow; for some time there was no alteration in the above physical signs, except that they became gradually more pronounced, the cough continued most distressing, and the expectoration became very abundant, of a reddish colour, and remarkably fetid, having a sharp alliaceous odour, so that his breath

was most offensive, even to himself. A week after his admission, the following note was taken of his state:—He is daily becoming more emaciated; the cough continues very severe, with most abundant and fetid expectoration, and he is exhausted by copious perspirations; no physical sign of any cavity can be discovered, and there is considerable obscurity of any signs indicating a lesion proportional to the constitutional symptoms and progressing debility and emaciation. There is still crepitus over the anterior, central, and lower portions of the left lung, and a sonorous râle is heard over both sides of the chest. There was an accurate examination of the physical phenomena made and registered, from day to day, and the first change observable was that on the 21st, a whistling sound was heard with inspiration in the space between the third and fifth ribs, and a ringing metallic sound when the patient coughs. On the night of Tuesday, the 23rd, he had a severe paroxysm of dyspnœa, which was followed by profuse expectoration, and a most decided aggravation of all his distressing symptoms. On the morning of the 24th there was distinct pectoriloquy, and whenever he coughed or spoke the metallic phenomena were well developed. These signs were confined to a space about a hand's breadth in the anterior and central portion of the left side, and were accompanied by a dull sound on percussion. They continued to exist for two days, during which he survived, and were listened to with interest by several of the Hospital class.

He died on Friday, the 26th, and the *post mortem* examination showed, that the right lung was extensively emphysematous, as also the upper portion of the left lung. The inferior portion presented a mixture of red hepatization and engorgement. There was an abscess in the central and anterior portion of the lung, which could contain a large orange; it was in contact with the wall of the chest, the intervening pulmonary structure having been destroyed; it was bounded anteriorly by the pleura, the cavity of which had been obliterated by recent inflammation, the two layers being still separable. Elsewhere it was bounded by the pulmonary structure, which was gradually being destroyed. There was a small quantity of reddish-coloured fluid in its cavity, and there were two large vessels found traversing it. Dr. Gordon said, he looked upon the foregoing case as an example of traumatic pleuropneumonia, which supervened on an emphysematous condition of the lungs; but that, in the early stage of the disease, the usual physical signs were somewhat obscured by the dilatation of the air-cells of the lungs. That this pneumonic inflammation terminated in an abscess of a gangrenous character, but that the evidences of the existence of this cavity were wanting for a considerable time, in consequence of the intervening dilated air-cells, and also the collapse of the two portions of emphysematous lung obliterating the cavity. That in proportion as the part of the lung which lay between the abscess and the wall of the chest became involved in the disease, the physical signs of the existence of an abscess became apparent. Dr. Gordon was confirmed in this view of the present case, by a somewhat similar one which had occurred in the same Hospital some years ago when he was intern, the particulars of which were, at that time, laid before the Pathological Society by Dr. Corrigan, under whose care the patient was. (See Proceedings of Pathological Society, Dublin, vol. xxi., p. 297.) A groom, 33 years of age, had for some time dilatation of the air-cells of the lungs with bronchitis; he died with well-marked hectic, but without any corresponding physical signs to account for the rational symptoms which were present. On examination *post mortem*, a cavity large enough to contain a middle-sized apple was found at the apex of each lung, and a considerable number of isolated tubercles. These cavities were surrounded on every side by emphysematous lung. It is also worthy of remark, that the existence of pleuritic inflammation, which subsequently terminated in obliteration of that cavity, was the means of preventing the occurrence of pneumo-thorax, which otherwise would doubtless have taken place in the present instance.

PROGRESS OF MEDICAL SCIENCE.

SCOTLAND.

[From our Edinburgh Correspondent.]

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

Wednesday, February 21, 1849.

JAMES SYME, Esq., President, in the Chair.

The following "Observations on the Asiatic Cholera, as it appeared in St. Petersburgh in 1848, by Dr. Maurice Margulies, Physician in Ordinary to His Highness the Grand Duke Alexander, Prince of Hesse, translated from the French by Dr. J. M. Duncan," were read to the Society:—

Ever since the year 1845, there has been an extraordinary prevalence of epidemic diseases in St. Petersburgh, and especially of typhus fever, influenza, dysentery, scarlatina, and intermittent fever. This circumstance is the more worthy of remark, as cholera seems everywhere to be preceded, for a longer or shorter time, by a series of epidemic diseases, which prepare the atmosphere, and so affect the individual constitutions of some persons as to render them susceptible of being taken with the new epidemic which is on the march to visit them. In the years 1830 and 1831, the same extraordinary prevalence of epidemic diseases was observed in Russia, France, and Germany, to precede, and afterwards give place to cholera, as it swept across Europe.

On the 4th of June, 1848, there arrived at St. Petersburg a vessel from Ladoga. It was on board this vessel, that the first case of cholera occurred. A man, the subject of it, had come from a district where cholera was raging. During the voyage, his health was good, but he was seized with the disease on the day of his arrival, before he left the ship. On the same day, several individuals, in the most different and distant parts of the city, were also suddenly seized with the malady, and that without having had any communication with any one arrived from an infected district, or with any one already affected with the disease.

The manner in which cholera thus appeared in St. Petersburgh, and its subsequent progress, have confirmed me in the opinion that it is re-produced in two very different ways. Firstly, by a certain atmospheric constitution, produced by telluric or planetary influences, and by the epidemic diseases which prevailed before its outbreak; in other words, by a miasma developed under these influences. Secondly, it may appear in a place, after having gradually approached it step by step, from localities where it has raged, and having individuals or fomites for the instruments or means of its diffusion. In this case, it is said to spread by contagion.

Having this double mode of re-production and development, cholera must be regarded as a contagious and miasmatic disease. In considering a disease whose progress is so alarming, and whose attacks are as much to be feared as those of an assassin, the first question which naturally suggests itself is, How can immunity from it be obtained? For this purpose there are general and individual prophylactic means—the former intended to secure communities, the latter to secure persons, against the disease.

In St. Petersburgh, nothing whatever was done with the view of preventing cholera from reaching the city, either because the Government thought it impossible to stop all communication from without with a city so important, or because (as was the case) several of the physicians of the Board of Health regarded the disease as not contagious, but as one originating spontaneously, and whose progress a system of quarantine, however strict, can have no influence in arresting. In regard to the prophylaxis of individuals, it is scarcely necessary to say, that very few could avail themselves of the most efficient means, namely, to quit St. Petersburg, where it was raging, to seek a residence distant from its ravages.

Reasoning from the observations very generally made during the epidemic of 1831, that individuals living in a city where cholera prevails, have their blood more highly charged with carbon than in the normal condition, I have been in the habit of prescribing, as a preservative against cholera, the regular use of small doses of sulphuric acid, a substance which has the power of changing venous into arterial blood; and, in the case of persons of a nervous temperament, I add to each dose of the sulphuric acid a few drops of the tincture of nux vomica, as a stimulant to the nervous system, without affecting the sensorium. I encourage the continuance of old habits of diet and regimen, excepting that salads and unripe fruits be abstained from. Further, I recommend the wearing of flannel over the abdomen, and to encourage an open state of the skin. And I add the warning, that, in deserting this strict regimen, individuals submit themselves voluntarily to one strong predisposition to cholera. In addition, I will in this place take occasion to mention, that the only effect traceable to the influence of the variations of the weather has been this, that the number of persons taken with the disease increases when the temperature rises considerably above the ordinary point.

The poor of the city have been attacked by the disease in a very much larger proportion than the rich, a circumstance easily accounted for when we consider their manner of living, their privations, and the want of prompt medical aid at the supervention of the first symptoms of the disease. Poor patients being generally taken to some distance to an hospital, in very bad and ill-constructed carriages, arrive for the most part in a moribund state, and die soon after in spite of the best and promptest medical aid. The prostration resulting from the disease is so much increased by the improper mode of transportation to the hospital, that they had better be treated in their own houses. And if the system of treating patients at their own houses can be carried out in London, as is proposed, it may be safely tried in St. Petersburgh, where physicians are more numerous than even in the English metropolis.

At the same time with the cholera, there have prevailed, in St. Petersburgh, acute diarrhœa, intermittent, rheumatic, and bilious fevers. In the year 1831, during the former epidemic, the presence of cholera seemed to exclude all those diseases during its continuance. In 1831 a larger proportion of young than of old people was taken with the disease; but, in the present epidemic, a larger proportional number of old people than of children has been seized and carried off. The cases among children generally have ended fatally. It has not been determined whether, in St. Petersburgh, males were more frequently affected than females with the disease.

From 80,000 to 100,000 of the labouring population left the city, either from fear of the epidemic, or to seek for work and occupation, which could not then be found in it. In the month of October, when I left St. Petersburgh for Great Britain, 20,000 had already perished from the epidemic, and certainly this number is not exaggerated. During the months of its greatest prevalence, June and July, the whole city bore an aspect so melancholy that I could have wished entirely to have escaped from it! The busiest streets were now almost empty; scarcely a single person was to be seen except now and then a domestic bearing a prescription to a druggist, or returning with the medicine; no vehicles were to be heard except an occasional carriage bearing either a physician or a corpse, and the dead were very frequently unaccompanied by the ordinary train of relatives; either because they were themselves so sick as to be unable to render this last homage to their departed friends, or because they remained at home to care for other relatives lying sick, or because all the relatives had succumbed to the epidemic. For my own part, it was when I was in the streets that I felt most depressed and sad, and this disagreeable feeling ceased only when I was engaged with the sick; for I have a profound conviction that the medical art can effect as much for those struck with cholera as for those labouring under any other serious acute disease.

During the months June, July, August, and Sep-

tember, I was entrusted with the care of a very large number of cholera patients, in hospital and in private practice. Some of the results of my observations I shall now briefly detail, premising that, during the first eight days of the epidemic, it was impossible either to observe or watch the disease, or attempt its treatment, because, during that time, its intensity was so great, that in a town so large the physician seldom, if ever, arrived to see his patient before he was either past all hope or already dead. It was only at a later period, when the public in general became frightened by the sad experience of others, that individuals began to take precautions as to their manner of living, and considered it expedient to send for a physician as soon as any suspicious symptoms supervened.

The general character and circumstances of the attack varied much in different cases. They may be classified under four principal groups or forms.

Form 1.—Characterised by vomiting and purging of a whitish serous fluid, sometimes mixed with a reddish matter, the bile being altogether absent. Pulse not to be felt. Coldness of the superior and inferior extremities, of the abdomen, and particularly of the face and the tongue. Cold perspirations. The respirations very difficult, yet scarcely perceptible, and sometimes, but rarely, accelerated. During all this time the functions of the kidneys are entirely arrested, and yet the patient constantly seeks for cold drinks. Subsequently, spasms of the inferior extremities and of the abdomen take place. After, and sometimes also before, the coming on of these symptoms, the patient complains of a feeling of oppression in the epigastric and hypogastric regions. When they first commence, he is so restless as to be unable to keep the same position many minutes; this state does not continue long, but gives place to an apparent apathy, which is the more astonishing, for the patient retains all his mental powers, and has a strong premonition that his last hour is come.

Form II.—In this form, a person in good health finds himself suddenly seized with spasms of the inferior extremities, and of the abdomen, causing intolerable pain. The respiration is oppressed. The face becomes blue and pinched, the eyes, sunk into their orbits, are surrounded by a dark circle, and bear an impression which inspires a spectator with fear. The skin is covered with a cold sweat. The whole body is cold, even in the mucous cavities, and yet the patient generally complains of a feeling of heat, and seeks for cold drinks. The function of the kidneys is completely suppressed. The pulse can be felt neither over the heart nor elsewhere. The voice is scarcely audible, and is changed into the characteristic *vox cholerica*. In this form, as in the first, the patient retains his mental powers, but does not exhibit the same apathy and indifference. There is neither vomiting nor purging, but merely uneasiness of stomach, hiccough, and desire to vomit. The patient dies after some hours of suffering.

Form III.—Two or three days before the attack, premonitory symptoms present themselves. The digestive functions are deranged. After eating or drinking, the patient feels as if his stomach were distended with fluid. There is constant noise and rumbling in the abdomen. The stools are irregular, somewhat loose, and mixed with an extraordinary quantity of bile. The tongue is yellowish white. If, when in this state, the patient neglects medical treatment, here supervenes diarrhœa, followed after some hours by vomiting, continual thirst, with a train of symptoms exactly as in the form first described.

Form IV.—In this, the malady commences with general indisposition, vertigo, and slight feverishness. The tongue is warm and red. The pulse is frequent, and not small. After some hours, or even a day, the patient begins to vomit, and, if the disease is not successfully combated, it quickly passes into the second or third form already described. At a later period, if the patient survives, this form has a tendency to merge into an affection, resembling, in many respects, the ordinary typhus fever.

Several months before the cholera appeared in St. Petersburgh, a great number of the inhabitants complained of indigestion, constipation, inclination to sleep, unaccountably low spirits, and general irritability of the nervous system, symptoms which are all explained by the peculiar highly carbonized state of the blood, of which I have already spoken, and which, doubtless, exerts a great influence during the prevalence of cholera. The cholera may, in fact, be regarded as a disease which primarily affects the blood, chemically changing it, in a manner that remains yet to be discovered and explained by organic chemistry. In consequence of this decomposition of the blood, there come on the symptoms of cholera, varying according to the organ or system upon which this changed blood exerts its injurious influence. In any individual, the organ, or part attacked, is that which offers the least resistance (so to speak) to the toxic effect of this changed blood.

If the sympathetic nerves are the parts first and most readily affected, then the symptoms take the form first described.

If the medulla spinalis is most affected, then we have the second form.

If the mucous membrane of the stomach is affected, then we have the *third form*.

If the mucous membrane of the great intestine is chiefly affected, then we have the *fourth form*.

If, in the course of cases of the third and fourth forms, the medulla spinalis or the sympathetic nerves become affected, directly or by way of reflexion, then the symptoms are changed from those of the one form to those of another. This passage from one species to another is the more easily understood when we consider that the blood, which is primarily affected, acts directly at the same time upon the nervous system, as well as upon all the other parts of the body.

In all the forms of cholera the secretory functions lose their activity, as if the various organs of secretion found the blood presented to them altogether unfit or unsafe for the performance of their functions. The urine and bile are no longer secreted, and in nurses the supply of milk is stopped. The evacuations from the stomach and rectum are not the secretions of those organs as in cases of ordinary vomiting and diarrhœa, but consist of the morbid liquids which escape easily from the blood in consequence of its changed composition. The blood loses a large portion of its serum by the mucous membrane of the stomach and large intestine, while the solid parts remain in morbid excess. Sometimes with the serum thus discharged from the blood, there is mixed a small quantity of its solid constituents in the form of a clot.

The cholera has been observed to end in three different ways:—

1st. In complete cure in two or three days.

2nd. In an incomplete cure, some organ remaining affected. Thus there may remain liability to vomiting after eating or drinking, or constipation, or insufficient action of the kidneys, or continued diarrhœa.

3rd. In death, by paralysis of the heart or of the lungs, their nerves becoming affected, or else by coma, the result of the anæmic state into which the patient is reduced in consequence of the loss of the serum of the blood.

Death may take place within four or five hours, or in four or five days.

Sometimes the cholera has been observed to pass into another disease, characterized by symptoms referrible to the brain and the intestines. This has generally been called cholera typhus. After one or five weeks this state ends, either in death or recovery.

The results of *post mortem* examinations have been altogether unsatisfactory, nothing characteristic having been discovered. The traces of inflammation sometimes found in the membranes of the brain and spinal marrow, have been regarded as accidentally co-existent with the cholera, rather than as having any essential connexion with it.

Sometimes patients have recovered from the most violent attacks, where every symptom presented in its highest intensity. Patients even have recovered, in whom for many hours no pulse was to be felt at the wrist or in the carotids, and no pulsation of the heart could be discovered. It is true that such cases were rare; but, nevertheless, the few remain as examples of what medical aid can do in this disease, where the powers of nature are so completely annihilated as to afford in themselves no chance of restoration. It has always been considered necessary to watch patients very carefully during their convalescence, as a relapse of the disease has almost invariably proved fatal.

Treatment.—It would be tedious to enter at length into the discussions of the merits of all the various drugs which were tried in the various stages of cholera as it appeared among us; I shall merely mention those which have appeared to me to be most efficacious.

In treating the premonitory symptoms, I was in the habit of administering small doses of nux vomica and ipecacuanha; and, after having put the patient to bed, I used to order frictions, with spirits of wine, to bring out free perspiration.

In treating patients during the attack, I have always guided myself according to the form which the disease takes on. The remedies administered may be divided into external and internal.

External Applications.—In all the forms this part of the treatment is the same, except where the spasms and the general nervous symptoms are very distinct, in which case they are resorted to with more diligence. The liniment which I more commonly used is composed of camphorated oil, oil of turpentine, and liquor ammoniæ, to be rubbed over the inferior extremities and the spine for five minutes every second hour.

When the skin appears still to retain all its functions, and to be capable of absorption, I order a liniment containing nitric and sulphuric acids.

Sinapisms should be applied to the extremities, and, if it can be had at the time, a vapour bath should be tried; this means has often been followed by a favourable critical perspiration.

When I have discovered local irritation in any organ, the cupping-glass, or a few leeches, were applied.

Medicines taken Internally.—In the first form. For the vomiting I prescribed small doses of fuming nitric acid in distilled water,—say ten drops of a mixture of half a drachm of acid to an ounce of water. For the diarrhœa, small lavements, with five or ten drops of the tincture of opium. After the vomiting has been stopped, medicines are given to arrest the diarrhœa. Generally, I gave a few drops of the tincture of nux vomica, and of opium, every quarter of an hour. When the pulse became feeble or imperceptible, then resort was had to a mixture, compounded with phosphoric ether (1 grain of phosphorus to ʒj. of ether.) Five to ten drops to be taken every quarter of an hour. If the pulse returned, then all specific treatment was given up.

In the second form. For the spasms, ipecacuanha in large doses, to excite vomiting. When the pulse became imperceptible, then small doses of nux vomica and camphor were administered.

In the third form, the treatment was conducted as in the commencement of the first form, characterised by vomiting and purging. If the nitric acid does not succeed in arresting the vomiting, then ice pills are often very effectual.

In the fourth form. The treatment of the vomiting and diarrhœa was conducted as in the other forms. If the diarrhœa is bilious, it is necessary to add to the drops of tincture of nux vomica and opium, some drops of the tinctura rhei aquosa.

The diseases which were observed to follow the cholera, were affections of the membranes of the brane, of the intestines, and of the liver. They demanded an attentive treatment, in which it has been found necessary to keep in mind, that they were merely secondary affections, and have a tendency to assume a nervous character.

In general, they were treated according to the symptoms and organs affected. If vomiting was found to continue, it usually yielded to aromatic tonics. If the diarrhœa persisted, then nux vomica, with ipecacuanha or opium, was generally successful. No special treatment was required for constipation of the bowels, and feeble action of the kidneys which often remained, but which very generally disap-

peared, after the functions of the skin had been perfectly restored.

In a letter from St. Petersburgh, dated 20th January, I learn that the cholera has again increased, as might be expected to arise, from the great influx of strangers to that city during the winter. The winter is the season at St. Petersburg, as spring and summer are in London. It is to be hoped, that the intense colds of the winter will have the effect of completely driving away the epidemic.

At the conclusion of this paper, on the motion of Mr. Wood, seconded by Dr. Robertson, the thanks of the Society were unanimously voted to Dr. Margulies for his interesting communication, and were accordingly conveyed to him in a short address by the President.

We must postpone the rest of the transactions of this meeting, which were of much interest, till a future opportunity.

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THE MEDICAL TIMES.

SATURDAY, MARCH 3, 1849.

In taking a general view of the wonderful improvements in the arts and sciences of the present day, and the numerous ingenious contrivances for rendering human existence comfortable and agreeable, it becomes a speculation of some interest to inquire how far these improvements tend to lessen, to increase, or to mitigate "the various ills that flesh is heir to." It has been too often the fashion of moralists to declaim against civilization and refinement as the sources of all evil, both bodily and mental, and to take as their standard an ideal period, a golden age, when men lived according to nature, and, of course, were all that a poet could imagine, or an optimist wish for. Now, in plain prose, this primitive period is nothing more nor less than the savage state,—a condition which will be found as unfavourable to the growth of moral excellence as to physical improvement. To the latter topic only will our present remarks be confined, and we are induced to allude to this subject from the occurrence of recent events,—which, at the proper period, we shall fully discuss, —in order at this time to demonstrate that, in proportion as mankind emerge from the savage stage, and advance in civilization, the average duration of human life increases, population makes progress, and violent and fatal epidemic diseases become less prevalent,—facts well known even to the keepers of menageries and the tenders of wild and domestic animals, who, in their receptacles for the "brute" creation, assign ample room for each, fresh and unpolluted air to breathe, and warmth sufficient to avoid the necessity of their huddling together to obtain it. "I hate animal heat," once said a friend of ours; and truly that produced by the congregating together, either of brutes or human beings, is of the most loathsome and injurious description.

But a favourite opinion has among some people obtained, and, as it would seem, especially among Poor-law Guardians, that if men followed the dictates of nature they would live exempt from disease; and certainly no reasoning, *à priori*, would lead us to suppose a living body liable to mortality, so perfect is it in every part, so complete as a whole, and so closely interwoven with its texture are the principles of life. Its integral parts are, indeed, liable to daily waste and decay; but its digestive and assimilative organs are continually at work to repair and renew every deficiency. Yet no fact is more certainly demonstrated by experience, than that every organic substance is liable to a derangement of its structure and functions, and to consequent disease and decay. In the lower animals, which are guided by the unerring impulse of instinct, and which may, consequently, be said to live the most regular and natural lives, we find that there is by no means an exemption from disease. Derangement of structure, or diseases of the liver, intestines, brain, &c., are common among them; epidemical diseases not unfrequently prevail among the wild herds of animals to a great extent. Lucretius mentions a plague which committed great ravages among different kinds of animals, both wild and domestic. Every sportsman must have observed that, in particular seasons, disease and great mortality take place among grouse and other species of game; deer sicken, and not unfrequently die, at the time of shedding their antlers; fowls evidently labour under a sort of fever at the periods of moulting; and the numerous tribes of insects that pass through the wonderful metamorphoses of larvæ or grubs till they become winged flies, always sicken, and often die in vast quantities, while undergoing these modifications of being. Dr. Richardson, in his work on the animals of North America, mentions, that in some seasons a great mortality occurs among the beavers, from some unknown cause, many being found dead in their habitations. We have repeatedly found fishes lean and sickly, from the effect of intestinal worms preying upon them; and this is a very prevalent cause of disease both among birds and quadrupeds. To descend lower in the scale of organization, almost all vegetables have their peculiar distempers, principally proceeding from the influence of the atmosphere, such as blight, mildew, and other causes.

That man, then, with a frame in which there is such nice, and delicate, and complicated adjustment, should be exempt from the casualties incident to organization, could not be reasonably anticipated. Externally, less defended by nature than any other animal, he has to contend with all the inclemencies and vicissitudes of the atmosphere, the equinoxial heat as well as the polar cold, and exhalations from the earth and from the waters pregnant with the seeds of disease. He has not the unerring dictates of instinct to direct him in the choice of salutary food, or to guard him against excess in its enjoyment,—experience alone guides him to make a selection amid the perplexing variety.

Neither is it consonant with fact, that the most robust and healthy frame lives on "until the whole of the oil that feeds it is consumed." Sydenham, long ago, remarked, that the most aged were cut off by some species of disease; and Dr. Rush, Sir A. Carlyle, Sir Henry Halford, and, lately, Dr. George E. Day, to whose recently-published work "On the Diseases of Advanced Life," we shall, ere long, call attention, have confirmed the observation; so that such death as that produced purely by old age or gradual decay of all the functions rarely occurs, but some disease, either of structure or of function, puts a period to existence.

The diseases which afflict the human race present, in their number, a fearful and appalling catalogue. Dr. Cullen enumerates no less than 1387 distinct species! and, since his day, how many have not been added to fill up the measure of the bitter woes of human life! Of these, a portion are caused by derangements of the structure of the different parts of the body, whereby the organs affected are unable to perform their appointed functions; of this nature are enlargements of the heart and arteries, ulceration of the lungs, &c. &c. Other diseases have their origin in the inclemencies and vicissitudes of the atmosphere, and in the miasma arising from the earth, such as fevers and many inflammatory diseases. A third kind are caused by irregularities in diet and every species of intemperance,—irregularities in exercise, mental and bodily; and a fourth description are those contagious diseases which generally occur only once in a lifetime, such as small-pox, measles, hooping-cough, and others. It must be obvious from this enumeration, that the notion pretty generally entertained, that every disease is an unnatural state brought about by the conduct of man himself, is extremely vague and unfounded. The heart becomes ossified; or an artery gives way at a particular part, and ultimately bursts, in the young, the healthy, and the temperate, without the slightest apparent cause; mortal fevers occur from states of the atmosphere which man can never anticipate, and over which he has not the slightest control; and from many contagious diseases, he has neither the means of escaping nor of protecting himself. It is true, there remain the diseases arising from repletion, from irregularities of diet and exercise, and from every species of intemperance, all which may be truly said to be diseases of men's creating; and out of the whole list of 1387 diseases already mentioned, 612 are classed by Cullen as nervous,—a train of maladies which are peculiar to luxurious and highly civilized communities.

In the savage state, according to the statements of our most intelligent travellers, the list of diseases is very circumscribed; but those that prevail are of a violent and acute nature, suddenly producing death. As might be supposed, the diseases are those which originate in vicissitudes of the climate, and in irregularities

of diet, from alternate states of extreme fasting, and of consequent repletion. Dr. Rush reports of the aboriginal natives of North America, that fevers, inflammations, and dysenteries make up the sum of their complaints; and mentions, in particular, that, after much inquiry, he had not been able to find a single instance of madness, melancholy, or futuity among them; neither did he hear of a case of consumption. Mungo Park, in his travels in Africa, reports the same of the negroes. He says they are generally healthy, but not long-lived, and that fevers and fluxes are the most common and fatal diseases; and Cook, La Perouse, and Bruce, declare that they never saw an old man among the savages. Neither are savages so strong, nor will they undergo so much bodily fatigue as the average of civilised Europeans.

Among savages population increases slowly; and, from their mode of life, it must be evident that all the diseased and delicate children die early, and that only a few of the most robust are reared to manhood. A handful of savage tribes inhabited for ages the continent of North America, and traversed its vast forests, scarcely deriving a bare subsistence for their scanty numbers; whereas, a civilised colony has possessed it only for a comparatively short period, and already the axe and the pruning-bill are heard resounding throughout its remotest corners, and its population, independent of foreign importation, goes on doubling itself every twenty or thirty years. In our own country we shall find, that population has increased along with increased civilization. In 1688 the population of England was 5,300,000; in 1822 it was 12,340,000: thus more than doubling itself in the course of 134 years; while, according to the last Census, it had arrived at 18,800,000.

We have been induced to these remarks from a desire to impress upon the public, that man was not intended for what is called a state of nature; that he was not born to be herded like beasts, in flocks; nor to be lodged like them, or even worse than some of them, in threes and fours, in kennel-like cribs; that he was not meant to be scantily and improperly fed, and worse clothed, or to seek for warmth in the body of his neighbours; nor to breathe a foul and polluted atmosphere: for it is evident, that where such fearful things prevail, there disease and death are ever found, and that in their most loathed and forbidding aspects. On the contrary, the great and important facts at which we have glanced, and which, to use the quaint expression of the Germans, is but an "*augenblick*" of a subject so momentous that it ought to be studied by every magistrate, every Poor-law guardian, every clergyman, and every parish officer in the land, and on which we will, from time to time, as occasion offers, endeavour to impress some lessons on their hearts, too often hardened by heartless theories and the dogmas of the pseudo-philosophers of the day; —these, and the many others we could adduce, render it evident, that as man improves in civilization—as he learns to drain the marshy grounds, to clear the closely-wooded country, and, by the arts of cultivation, raises a sufficient and constant supply of wholesome food, invents a comfortable shelter from the inclemency of the weather, and a protection against "Heat, moist, and cold,—three monsters dire," clothes himself in convenient garments, and, at last arrives at all the niceties and elegancies of refined life,—he becomes less liable to acute and pestilential diseases. It has been said, and said truly, that "as an animal is educationable, so it is reasonable;" and we may safely assert, that as man is civilized, so much the less will "rank diseases grow," and so later will "dark and cloudy death o'ershade his beams of life."

ILLEGAL PRACTITIONERS AND THE APOTHECARIES' ACT.

The Apothecaries' Act of 1815, with all its imperfections, has been serviceable upon the whole to members of the Medical Profession. Improperly administered, it might have been employed to defend monopoly and to check the progress of medical education. The power which the Company obtained, under this Act, required to be used with judgment and caution, and, of late years, we are not aware that it has been selfishly used for the sole benefit of the Company.

The glaring defects of this Act are the Apprenticeship Clause, by which a youth is compelled to serve five years in the dispensary; the demanding of two distinct fees for the Certificate, according as it authorises to practise in London or the country; and the necessity of the Court of Examiners being composed of members of the Apothecaries Society.

Whatever may be the opinions of other sections of the Profession in reference to the penal clause, a large majority of General Practitioners view it as a grand bulwark against the aggressions of uneducated Quacks. For a series of years, this clause was little better than inoperative, in consequence of the expenses incurred in sustaining an action at law against those who were considered as worthy of prosecution. Hence quacks, without fear of punishment, took upon them the name and assumed the functions of educated medical men, and the Licentiates of the Company, naturally looking to the Corporation for protection, and failing to obtain it, became loud in their complaints against the Society. The Licentiates considered, that as they had paid for their diploma, not having conferred upon them any corporate privileges, they were at least entitled to protection against quacks. The name of "apothecary" gave no prestige to the qualification, and hence it derived all its value from the apparent protection which it afforded to the possessor.

That the general practitioners consider a penal clause essential to their safety, in any new measure of reform, is evident from what took place in the grand movements of 1845; and no Bill will be permitted to pass the Legislature which does not contain stringent regulations against uneducated practitioners.

It is only within the last two or three years it was found out that quacks might be punished without incurring the expense of an action at law. Legal acumen discovered that an indictment would lie against any person who had practised as an apothecary without a proper qualification, and that this might be preferred by a private prosecutor. A case shortly afterwards occurred which decided the point, but still the Company appeared unwilling to do anything more for their licentiates than to afford to persons desirous of carrying out the law, "such advice as the Society's experience in the administration of the Apothecaries' Act may enable them to give." As a natural consequence, quackery has flourished as luxuriant as ever, no private person being willing to incur the odium of becoming a common informer.

Within the last three months it has been thought that illegal practitioners might be prosecuted at little expense in the County Courts, and an opportunity was only wanting in order to try the matter. This has now arisen, and the facts are recorded in another part of our columns this day.

The defendant on this occasion was a Mr. Raphael Louis Lobo, who, having given a certificate of cause of death of a person whom he had attended, was requested by the Registrar to state by what authority he took upon himself to sign such certificates. Mr. Lobo stated in reply, that he had obtained a diploma as Doctor of Medicine and Surgery from the University of Giessen; but, whether this was simply a Post-office diploma, or one obtained by examination, did not transpire. The Giessen parchment is looked upon by the English Medical Profession as a very suspicious document, in consequence of its having been in the market for a long time on sale, almost to any one who chose to pay the fee required by the agents and the University. The defendant was convicted in the full penalty of 20*l.* with costs.

In this trial, authorities were cited to show who is really an apothecary. According to the testimony of Lord Denman, he is a person compounding medicines and selling them, though he may not make out prescriptions like a physician, or *keep a shop;* if he prescribed and prepared his medicines, he acted as an apothecary. Mr. Justice Williams has given the same opinion almost in the same words; for he has declared that the practising as an apothecary consisted in preparing medicine prescribed by the party who did so. If such be the case, there are many who, in the eye of the law, are Apothecaries, but despise the name; while there can be little doubt, that all prescribing Druggists render themselves obnoxious to the Apothecaries' Act by counter practice.

In the settlement of the question of Medical Reform, the Licentiates of the Apothecaries' Company are a body of Medical Practitioners, whose interests cannot be overlooked, and it is desirable that the privileges which they now possess should be enjoyed by all British General Practitioners.

REMUNERATION OF MEDICAL OFFICERS.

When the cholera first broke out amongst the inmates of Drouet's establishment at Tooting, a Deputation was sent by the Directors of the parish of St. Pancras to inquire into the reports of the outbreak, and communicate with them. The Directors received intelligence that several of the children belonging to the parish of St. Pancras had been seized with cholera, and that many of the cases had terminated fatally. In consequence of this, a meeting was immediately convened, and a communication promptly

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of diet, from alternate states of extreme fasting, and of consequent repletion. Dr. Rush reports of the aboriginal natives of North America, that fevers, inflammations, and dysenteries make up the sum of their complaints; and mentions, in particular, that, after much inquiry, he had not been able to find a single instance of madness, melancholy, or futuity among them; neither did he hear of a case of consumption. Mungo Park, in his travels in Africa, reports the same of the negroes. He says they are generally healthy, but not long-lived, and that fevers and fluxes are the most common and fatal diseases; and Cook, La Perouse, and Bruce, declare that they never saw an old man among the savages. Neither are savages so strong, nor will they undergo so much bodily fatigue as the average of civilised Europeans.

Among savages population increases slowly; and, from their mode of life, it must be evident that all the diseased and delicate children die early, and that only a few of the most robust are reared to manhood. A handful of savage tribes inhabited for ages the continent of North America, and traversed its vast forests, scarcely deriving a bare subsistence for their scanty numbers; whereas, a civilised colony has possessed it only for a comparatively short period, and already the axe and the pruning-bill are heard resounding throughout its remotest corners, and its population, independent of foreign importation, goes on doubling itself every twenty or thirty years. In our own country we shall find, that population has increased along with increased civilization. In 1688 the population of England was 5,300,000; in 1822 it was 12,340,000: thus more than doubling itself in the course of 134 years; while, according to the last Census, it had arrived at 18,800,000.

We have been induced to these remarks from a desire to impress upon the public, that man was not intended for what is called a state of nature; that he was not born to be herded like beasts, in flocks; nor to be lodged like them, or even worse than some of them, in threes and fours, in kennel-like cribs; that he was not meant to be scantily and improperly fed, and worse clothed, or to seek for warmth in the body of his neighbours; nor to breathe a foul and polluted atmosphere: for it is evident, that where such fearful things prevail, there disease and death are ever found, and that in their most loathed and forbidding aspects. On the contrary, the great and important facts at which we have glanced, and which, to use the quaint expression of the Germans, is but an "*augenblick*" of a subject so momentous that it ought to be studied by every magistrate, every Poor-law guardian, every clergyman, and every parish officer in the land, and on which we will, from time to time, as occasion offers, endeavour to impress some lessons on their hearts, too often hardened by heartless theories and the dogmas of the pseudo-philosophers of the day; —these, and the many others we could adduce, render it evident, that as man improves in civilization—as he learns to drain the marshy grounds, to clear the closely-wooded country, and, by the arts of cultivation, raises a sufficient and constant supply of wholesome food, invents a comfortable shelter from the inclemency of the weather, and a protection against "Heat, moist, and cold,—three monsters dire," clothes himself in convenient garments, and, at last arrives at all the niceties and elegancies of refined life,—he becomes less liable to acute and pestilential diseases. It has been said, and said truly, that "as an animal is educationable, so it is reasonable;" and we may safely assert, that as man is civilized, so much the less will "rank diseases grow," and so later will "dark and cloudy death o'ershade his beams of life."

ILLEGAL PRACTITIONERS AND THE APOTHECARIES' ACT.

The Apothecaries' Act of 1815, with all its imperfections, has been serviceable upon the whole to members of the Medical Profession. Improperly administered, it might have been employed to defend monopoly and to check the progress of medical education. The power which the Company obtained, under this Act, required to be used with judgment and caution, and, of late years, we are not aware that it has been selfishly used for the sole benefit of the Company.

The glaring defects of this Act are the Apprenticeship Clause, by which a youth is compelled to serve five years in the dispensary; the demanding of two distinct fees for the Certificate, according as it authorises to practise in London or the country; and the necessity of the Court of Examiners being composed of members of the Apothecaries Society.

Whatever may be the opinions of other sections of the Profession in reference to the penal clause, a large majority of General Practitioners view it as a grand bulwark against the aggressions of uneducated Quacks. For a series of years, this clause was little better than inoperative, in consequence of the expenses incurred in sustaining an action at law against those who were considered as worthy of prosecution. Hence quacks, without fear of punishment, took upon them the name and assumed the functions of educated medical men, and the Licentiates of the Company, naturally looking to the Corporation for protection, and failing to obtain it, became loud in their complaints against the Society. The Licentiates considered, that as they had paid for their diploma, not having conferred upon them any corporate privileges, they were at least entitled to protection against quacks. The name of "apothecary" gave no prestige to the qualification, and hence it derived all its value from the apparent protection which it afforded to the possessor.

That the general practitioners consider a penal clause essential to their safety, in any new measure of reform, is evident from what took place in the grand movements of 1845; and no Bill will be permitted to pass the Legislature which does not contain stringent regulations against uneducated practitioners.

It is only within the last two or three years it was found out that quacks might be punished without incurring the expense of an action at law. Legal acumen discovered that an indictment would lie against any person who had practised as an apothecary without a proper qualification, and that this might be preferred by a private prosecutor. A case shortly afterwards occurred which decided the point, but still the Company appeared unwilling to do anything more for their licentiates than to afford to persons desirous of carrying out the law, "such advice as the Society's experience in the administration of the Apothecaries' Act may enable them to give." As a natural consequence, quackery has flourished as luxuriant as ever, no private person being willing to incur the odium of becoming a common informer.

Within the last three months it has been thought that illegal practitioners might be prosecuted at little expense in the County Courts, and an opportunity was only wanting in order to try the matter. This has now arisen, and the facts are recorded in another part of our columns this day.

The defendant on this occasion was a Mr. Raphael Louis Lobo, who, having given a certificate of cause of death of a person whom he had attended, was requested by the Registrar to state by what authority he took upon himself to sign such certificates. Mr. Lobo stated in reply, that he had obtained a diploma as Doctor of Medicine and Surgery from the University of Giessen; but, whether this was simply a Post-office diploma, or one obtained by examination, did not transpire. The Giessen parchment is looked upon by the English Medical Profession as a very suspicious document, in consequence of its having been in the market for a long time on sale, almost to any one who chose to pay the fee required by the agents and the University. The defendant was convicted in the full penalty of 20*l.* with costs.

In this trial, authorities were cited to show who is really an apothecary. According to the testimony of Lord Denman, he is a person compounding medicines and selling them, though he may not make out prescriptions like a physician, or *keep a shop*; if he prescribed and prepared his medicines, he acted as an apothecary. Mr. Justice Williams has given the same opinion almost in the same words; for he has declared that the practising as an apothecary consisted in preparing medicine prescribed by the party who did so. If such be the case, there are many who, in the eye of the law, are Apothecaries, but despise the name; while there can be little doubt, that all prescribing Druggists render themselves obnoxious to the Apothecaries' Act by counter practice.

In the settlement of the question of Medical Reform, the Licentiates of the Apothecaries' Company are a body of Medical Practitioners, whose interests cannot be overlooked, and it is desirable that the privileges which they now possess should be enjoyed by all British General Practitioners.

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tice to those who attended on the occasion, at great pecuniary sacrifice and much personal inconvenience, as well as for the information of the Poor-law Medical Staff generally, many of whom, in their correspondence with the Committee, have evinced the great interest they feel in the proceedings of the Convention.

With this object, therefore, in view, I beg to forward to you, for publication, an *abstract* or *digest* of some of the communications made to the Committee, which, from pressure of business at the general meeting, were reluctantly left unnoticed; they will doubtless, however, be read with satisfaction by those of your readers interested in the question, as they tend to show that the Poor-law Medical Officers are not only sensible of the injustice inflicted, but that they are determined to effect their emancipation and that of the sick poor, from the many evils with which they are at present surrounded.

Mr. Armitage Pearson, of Woolton, one of the first opposers to the exactions made upon Medical Officers by the recent sanitary regulations, issued by the Board of Health, forwarded from the West Derby Union a *protest*, signed by thirteen Medical Officers, against the imposition of such duties, and another of a similar character from the Prescott Union with five signatures attached.

In the first of these documents, the disclaimers pronounce the regulations in question to be "*such as sacrifice their rights, not only as Medical officers but as private citizens;*" the second declares such exaction of services to be a "*violation of their contracts and an infringement of the just rights of all Union surgeons.*"

Mr. W. H. Smith, of St. Mary's Cray, unable to be present from indisposition, drew the attention of the Committee, by letter, to an assurance made by Lord Lansdowne, in his place in the House, that "*the Government were pledged by him, that sanitary duties should not be required without being paid for.*" Mr. Smith adds, that "*Lord Wynford is ready at any time to question Lord Lansdowne on the matter in the House, should a necessity arise.*"

The following copy of a resolution, passed at a meeting of the Medical officers of the Bakewell Union, held on the 13th instant, was presented by Mr. Cantrell, of Wirksworth, a gentleman who, from the commencement of the present agitation, has been most zealous in furthering the objects of the Convention:—

"That the full concurrence of this meeting be given to the objects and intentions of the Poor-law Medical Convention, and that Wm. Cantrell, Esq., be deputed to attend the meeting of Poor-law Medical Officers, to be held in London on the 19th instant." Similar resolutions were also presented by Mr. Cantrell from the Belper and Ashbourne Unions.

A letter was received from Mr. Wakley, M.P., intimating his intention to attend the meeting, who, however, from some unassigned cause, was unable to be present.

The President of the Provincial Medical and Surgical Association, Mr. Norman, of Bath, being unable to be present at the general meeting, and feeling kindly alive to the objects of the Convention, obtained a substitute in the person of Mr. Soden, formerly of that city, who obligingly attended, and represented him on the occasion by seconding the fourth resolution.

Dr. Cowan, of Reading, a member of the Council of the Provincial Association, and a warm advocate of the cause of the Union Surgeons, wrote expressing his regret at being prevented from attending and raising his voice in furtherance of the objects of the meeting.

Mr. Torrence, of Rugby, attended on behalf of five colleagues,—medical officers of the Rugby Union, and, in tendering a contribution from each, assured the Committee of the sympathy and thankfulness with which they noticed their exertions in furthering the interests of the Union Surgeons.

A letter was received from Mr. Hardwick, of Hempnall, Norfolk, expressing hearty interest in the proceedings of the Convention, enclosing a contribution, and subscribing himself "A much-injured Surgeon, and sincere well-wisher of the cause." A similar communication was also received from Mr. Highmore, of Sherborne, who fully agreed in the importance and necessity of the meeting, and promising a "renewal of his subscription, that the Union Medical Officers, by united efforts, may obtain redress of their grievances, by being properly recognised and requited."

A communication from Mr. Collyns, of Renton, informed the Committee that the medical officers of St. Thomas's, Exeter, had memorialised the Guardians on the subject of their grievances, which had been laid before a Committee appointed to consider and report upon its merits; but that the Memorialists had succeeded in obtaining only a trifling increase of salary for the medical officers attached to two or three remote parishes, out of forty-nine composing the Union.

Mr. Sawyer, of Alfriston, wrote, informing the Committee that he was connected with two Unions, and states as follows:—"That, having remonstrated with the Guardians of the West Firle Union on the inadequacy of 3s. per case, as a remuneration for my services, the mileage being three on an average, and in consequence of another Medical Officer of the Union declining to attend any longer, the Workhouse containing 100 inmates, at a salary of 10*l.* per annum, the Guardians have advertized the whole Union, including the Workhouse, at 3*l.* less than the present inadequate salaries; I do not think, however, they will succeed in getting any one who will have the hardihood to undertake duties it is physically impossible to perform. But it proves the necessity of our urging upon the Legislature and the Poor-law Board our right to hold these appointments permanently, and the justice of being fairly remunerated for very onerous duties."

A strong letter was received by the Secretary of the National Institute, from Mr. Gibson, of Ulverstone, one of the Members of Council, in which he states, "that, although unconnected with any Poor-law appointment, I highly approve and appreciate the motives which have actuated the Union surgeons in endeavouring to obtain from the Legislature a redress of their grievances; the present system is most oppressive and injurious to the Medical Profession and to the poor, also a great calamity and dishonour to a Christian country, as well as being based upon a principle of false economy."

The following gentlemen attended the meeting as delegates:—Mr. Wm. Ingle, on behalf of the Medical officers of the Ashby-de-la-Zouch Union; Mr. Watkins, of the Towcester Union; Mr. Jordison and Dr. Corbet, as representatives of the Medico-Chirurgical Association, for the Billericay, Romford, and Orsett Unions. Several other letters were also received from different parts of the country, the writers testifying their approbation of the course pursued by the Committee, and a general interest in the proceedings of the Convention.

Enough has been said to manifest the deep and diffused feeling entertained generally by Poor-law Medical Officers on the subject of their grievances, which affords fresh stimulus for action on the part of the Committee; but to enable them to labour effectually, the sinews of war—MONEY, must not be forgotten by those for whose benefit and relief such exertions are being made. As respects the expenses hitherto incurred, it is due to the Council of the National Institute to state, that, owing to their kind consideration, a great item of expense for rooms has been avoided,—all along most eligible offices have been gratuitously afforded for the use of the Committee of Union Surgeons. Last year, the Council obligingly provided the spacious room for the public meeting, and they generously did so again on the 19th inst.

It may be interesting to add, that, after the meeting, from forty to fifty gentlemen adjourned to the Craven Hotel, in the Strand, there to partake of refreshment after the fatigue of the day, on which occasion much conviviality and social converse ensued, the business of the meeting forming the principal topic of discussion. A feeling was general amongst those present, that it would be well, were every Union Surgeon to petition Parliament, praying for an amended system of Poor-law Medical Relief, and the question arose as to the best mode of petitioning, whether by a monster petition or distinct petitions from each Union throughout the country; the latter was considered the most likely to make a favourable impression in the House, as immediately showing the extent of the grievance, and the universal discontent pervading the great body of Union Medical Officers.

The Committee will doubtless, ere long, consider the propriety of carrying the suggestions thus thrown out by the gentlemen present at this convivial close of the day's proceedings.

I am, Sir,

Your most obedient servant,

CHARLES F. J. LORD, Hon. Sec.

Office, 4, Hanover-square, Feb. 28, 1849.

IMPORTANT DECISION UNDER THE APOTHECARIES' ACT.

COUNTY COURT OF MIDDLESEX.

An action was brought by the Master and Wardens of the Apothecaries' Company against Raphael Louis Lobo for the recovery of a penalty of 20*l.*, forfeited by him for practising as an apothecary, contrary to the provisions of the 55th George III., c. cxciv. The case is of the greatest importance, as establishing a precedent for a new and more efficacious mode of proceeding against unqualified medical practitioners who have hitherto evaded the law by reason of the expense incurred in suing them for penalties in the superior Courts at Westminster.

Mr. J. A. Griffiths appeared as counsel for the plaintiffs, and Mr. Lobo conducted his own defence.

The defendant took a preliminary objection on the ground of misnomer, but the learned Judge having directed the record to be amended, the case proceeded.

Mr. Griffiths said, that he availed himself of the valuable jurisdiction of the County Court to recover from the defendant the penalty of 20*l.*, which all persons illegally practising as apothecaries were liable to under the 55th George III., c. cxciv. The plaint was laid under the 20th clause of that Act.

Mr. Serjeant Heath asked the learned counsel if he was quite sure that the Court had jurisdiction in the matter, as he was not quite satisfied on that head.

Mr. Griffiths quoted the case of "the Apothecaries' Company *v.* Lolinga," 2 M. and R., p. 499, in which Mr. Justice Creswell defined an apothecary as a person who professed to judge of internal disease by its symptoms, and applied himself to its cure by medicines. In "Woodward *v.* Ball," Car. and Payne, p. 578, Mr. Justice Williams held that the practising as an apothecary was the mixing up and preparing of medicines prescribed by the party who did so. The County Courts were courts of record, and the 26th clause of the 53rd George III., c. cxciv., gave the Apothecaries' Company power to proceed against unqualified apothecaries, by action or suit at law, for penalties to the amount of £20. The sooner the question was decided the better, both for the Profession and the public, who were equally interested, that proper securities should be afforded for the employment of regularly qualified medical men. In the case of "the Apothecaries' Company *v.* Allen," 4 Bar. and Ad., p. 626, Lord Denman said, that a person compounding medicines and selling them, though he did not make out prescriptions like a physician, nor kept a shop, acted, nevertheless, as an apothecary, in the ordinary sense of the word, and that it made no difference if he prescribed as well as prepared his medicines. This opinion was confirmed by the whole Court, and might, therefore, be taken as settled law. He was instructed that the defendant had attended Alexander Reeves, and given the registrar of the district a certificate, stating the cause of his death. The patient appeared only to have lived three days, which might, perhaps, lead to the inference, that, not only was there want of legal qualification, but

also a great want of medical skill. The certificate contained a printed notice in these terms:—"If this form should fall into the hands of any unqualified practitioner, he is recommended not to fill it up."

Mr. Serjeant Heath asked, if the Act provided that none but properly qualified apothecaries should sign such a certificate?

Mr. Griffiths said it did not, but the practice was that no registrar would knowingly receive a certificate from any but a duly qualified practitioner. There being some doubt entertained in this case as to the qualification of the defendant, a letter was written to him by the registrar, desiring to know by what authority he took upon himself to sign such certificates. To this he wrote in reply, alleging that he had obtained a diploma as doctor of medicine and surgery from the University of Giessen. He, therefore, had nothing but the certificate of a foreign university, which could not be made available in England, for there were cases to show that even Scotch diplomas and certificates were not legal qualifications under the Act, and this defence, therefore, could not be sustained. He had been instructed that the defendant admitted the charge, and had thrown himself upon the mercy of the plaintiffs.

Mr. Serjeant Heath read, from a paper which had been handed in by the defendant, a statement by him, that he had made the admission alluded to upon the representation of Mr. Eyre, the solicitor for the plaintiffs, that if he did so further proceedings should not be taken; but, having found that the Apothecaries' Company would not abandon their proceedings, he had thought proper to withdraw that admission and endeavour to defend himself.

The learned Judge said he was willing to accede to anything the parties desired, if it would meet the justice of the case.

Mr. Griffiths said the Apothecaries' Company were a public body, and could not, consistently with their duty, enter into any compromise; but they had no wish to press the case with any degree of harshness against Mr. Lobo. They were, therefore, willing to take judgment for the penalty and the costs. The costs out of pocket only to be paid by the defendant. In the meantime no execution would be issued, the defendant promising not again to practise as an apothecary while he remained unqualified.

The defendant having assented to these terms,

Mr. Serjeant Heath said: I think the Apothecaries' Company have acted very rightly in bringing this case before the public, and very rightly also in refusing to enter into any compromise. Let an order be made for the full amount of 20*l.*, and costs, to be taxed. On payment of taxed costs all proceedings to be stayed until further order of the Court. No order will be made unless it is shown to the Court that the defendant has broken his promise, in which case the judgment will be enforced.

THE ROYAL INSTITUTION.

UNROLLING OF A MUMMY FROM THEBES.

The Theatre of this Institution was densely crowded on Wednesday afternoon, by a highly respectable audience, to witness the process of unrolling an Egyptian mummy, by Mr. Pettigrew. That gentleman, in a preliminary and most interesting lecture, stated, that the mummy in question had been presented to the United Service Institution by Mr. R. B. Wood, Aide-de-camp to Lord Hardinge, who had obtained it at Thebes; but, in consequence of the United Service Institution not possessing facilities for the operation, the Managers of the Royal Institution had kindly offered their theatre for the purpose of the unrolling. Mr. Pettigrew, after remarking on the subject of Egyptian antiquities generally, and of the universal reverence paid to the dead by all nations, attributed the extraordinary efforts made by the Egyptians to preserve the bodies of their dead, to their peculiar views in reference to the immortality and transmigration of the soul; and it was extraordinary how successful they had been in arresting or modifying the influences which tended to decompose animal matter; so much so, that not only were the personal characteristics preserved from decay, but in many instances (as shown by a diagram) the minutest traits of expression on the features, produced by the influence of the passions, were still distinctly recognizable. Besides the artificial means employed, the peculiar dryness of the atmosphere of Egypt tended to this result; as is seen in the fact that the Theban mummies are always in the best state of preservation, the air of Upper Egypt being dryer than that of the Lower. The Lecturer here took the opportunity of correcting misapprehension that had been entertained as to the growth of some wheat which had been taken from a mummy case. That corn was not taken out of the body of a mummy, as had been stated, but from a vase which Sir Gardiner Wilkinson brought over, and which was not opened at the Custom-house; that vase was hermetically sealed, and thus moisture and air excluded. He gave some of the seeds to different parties, and among them to Mr. Farquhar Tupper, who had succeeded in getting them to grow, (some of the stalks of which the Lecturer exhibited, and also a painting, in which the ear appeared in three successive stages of development, the third being, in appearance, exactly allied to the Egyptian corn.)

Mr. Pettigrew then described the five modes of embalming which had come under his notice: 1st, by the black balm, combined with aromatics, diffused over the whole body, and filling up all the cavities; with bandages, each layer glued together; the viscera deposited in vases, four in number, of alabaster, calcareous stone, or wood, each of the vases having the figure of the deity to whom that particular part of the viscera is sacred,—for instance, the stomach to one; the liver and gall bladder to another; the smaller intestines to a third; and the heart and lungs to a fourth; 2nd. By the bitter aromatic wood; 3rd. By a salt; consisting of chloride of sodium, mixed with sulphate of sodium and muriate of lime, and therefore a fixed alkali, such as that used by the Egyptians to scour their linen with; and 4th. Prepared with ashes; these latter mummies being generally supposed to be brought from African Ethiopia to Thebes, and generally being those of artizans. The Lecturer stated, that, not only the mummies, but the sarcophagi in which they were enclosed, and the papyri found in them, were of much interest on account of the light they threw on the habits and condition of the Egyptians, and which served to elucidate many of the passages of Scripture. After a description of the construction and materials of the sarcophagi, Mr. Pettigrew proceeded to the operation of unrolling. From the papyrus found with it, and the hieroglyphics on the cases, it appeared to be the body of a person who had lived at the period of the 18th Theban dynasty, and, in this opinion, he was happy to be confirmed by that of Sir Gardiner Wilkinson. The period belongs to that embraced from B.C. 1575 to B.C. 1289,—a period of 286 years,—embracing the reign of kings from Amosis to Amenophis,—one in which Moses was born and died, and includes the time of the Exodus of the Israelites and the founding of Athens, thus taking us back to the earliest period of Egyptian history. On removing the various cases, three in number, and bands and linen covering which enveloped the body, it was found in a comparatively good state of preservation. It appeared to be that of a youth of about 15. The cases and cloths were highly ornamental; no vases nor trinkets of any kind were discoverable, and there had been no substitute for the eyes, a practice usually adopted when the body was that of a person of good family. The teeth and nails were perfect, and the viscera were mixed up with aromatic wood and a bituminous substance. The operation appeared to be most skilfully performed by the practised hand of Mr. Pettigrew, assisted by his son, who frequently received the hearty plaudits of his auditory.

STATE OF THE MEDICAL CHARITIES OF IRELAND.

TO HIS EXCELLENCY THE EARL OF CLARENDON, LORD-LIEUTENANT-GENERAL, AND GENERAL GOVERNOR OF IRELAND.

May it please your Excellency,

We, the undersigned Physicians and Surgeons of Ireland, beg leave respectfully to offer to your Excellency the expression of our opinion upon a subject of vital importance to the sick poor of this country in general, but especially so to those inhabiting rural districts.

Having a *large portion of the Irish Medical Charities under our superintendence*, and being, for obvious reasons, deeply interested in their well-being, we are anxious to secure their *permanence* as Charitable Institutions, and their *efficiency as establishments for the medical relief of the sick poor*.

The experience of the last few years has clearly shown us, that, without some fundamental change in their present constitution, the Provincial Medical Charities cannot much longer exist,—numerous Dispensaries and Fever Hospitals, and even a *County Infirmary*, having been closed, in consequence of the failure of voluntary subscriptions.

Under these circumstances, we have been led to indulge in the hope that the attention of a *benevolent* Government will soon be directed to the means of placing these useful institutions *upon a firm basis*, so as to secure their continued operation for the benefit of the poor, and under *proper direction and control* so as to preserve and defend the just rights of the medical superintendents.

Such being our experience of the past, and our hope of the future, we beg leave respectfully to suggest to your Excellency, that let the funds for the support of the medical charities be derived from *whatever source the Legislature may think fit*, the control and management of these institutions should be vested in a Medical Board, who should be empowered to regulate, arrange, and supervise all such Medical Charities, so as most effectually to *insure* adequate and efficient medical relief for the sick poor, and at the same time protect the interests of the Medical Profession.

COFFEE *v.* CHICORY.

To an impoverished and famishing people, the question of the character of its food, whether solid or fluid, is no unimportant consideration. It is one of vital moment, it is paramount before all others; and this either as regards the quantity or the quality,—in fact, the latter is, under certain circumstances, a more important consideration than the former, inasmuch as the injury the system can receive from insufficient amount of good food, must undoubtedly be less than that which arises from *bad* food. Bad food is always, *ipso facto*, insufficient. No person was ever known to die because he had only a quarter pound of meat to dinner, but many die annually from eating *bad sausages*; at least this is notorious enough in Germany: and it was but the other day that a whole family perished in London from the effects of eating bad cheese.

Food, whether fluid or solid, and in particular the latter, may be rendered unfit for nutrition, either from certain organic changes occurring throughout its whole mass, in obedience to the laws of decomposition, to which all organic bodies are naturally exposed, or it may equally be impaired in its nutritious properties owing to admixture with other ingredients, which may be either of an organic (eatable) or inorganic nature. If the admixture be with organic substances, the nutritive properties of the whole mass will be impaired in proportion to the scale which the sophistication holds in the rank of nutritious bodies; but if it be of an *inorganic* character, that kind of matter being absolutely innutritious, then the diminished nutritive property will be in the ratio of the amount of that inorganic

matter, probably somewhat augmented by portions of the organic matter being entangled mechanically in the mass.

Coffee, which forms so extensive an article of consumption among the people, yielding only to the beverage of tea, is, it would appear, adulterated to an extent that we had scarcely any idea of, until we perused the observations in the *Times* of the 17th ultimo. That there was adulteration, only however to a limited degree, had been long matter of general observation; and probably from the innocuous nature of the herb, or rather root, (chicory,) used in the adulteration, comparatively little interest was excited on the subject. The notoriety, however, given to the subject by the observations just alluded to, renders it imperative that, in our capacity of public journalists, we should notice, and brand with its proper mark, a fraud almost universally and unblushingly practised, and which, independent of the good coin in which the lieges are mulcted for an inferior article, is further to be condemned for the loose morality it indirectly sanctions. The beneficial and cheering effects of coffee are so well known as not to require description, though we fear, if the sophistication be carried on to the extent alleged, nearly 50 per cent., (and from various samples we have examined we do not believe that statement overcharged,) we shall require a *standard* description of what coffee *was*, in order to obtain some approximation to the actual amount of adulteration.

The sophistication of coffee with chicory, provided the chicory be absolutely pure, (and it is not always so, for it is often mixed up with roasted beans, corn, &c.,) is not attended with any bad effects on the animal economy. We think that we have found that *hybrid coffee* to have a tendency to maintain a lax state of the bowels; but others remark, that they have witnessed the same occasionally from the pure coffee. However, the use of coffee is generally considered to have a constipating effect on the *prime via*. But, admitting the chicory to be devoid of all noxious agency, it does not necessarily follow that it may not negatively be injurious to the animal frame, especially when taken in equal proportions with the pure berry of the coffee, by withdrawing a proportionate amount of the active principle of the coffee (caffeïn), which otherwise would have been furnished to the system. It has been satisfactorily proved, by recent chemical analysis, that the three great vegetable matters which are extensively used by mankind as a beverage, either in the form of infusion or decoction, contain severally a peculiar proximate element, on the agency of which the virtues of these plants respectively depend. The matter, or proximate element, contains a suitable quantity of nitrogen, and it is in this manner supposed to exert its peculiar action on the animal economy. Liebig has been led, from theoretical considerations, to infer that the caffeïn, or theïn, contributes to the generation of bile; but this is at present only matter of hypothesis.

Resembling tea in many points, the action of the *pure* coffee is decisive and marked on the nervous system. It excites the whole frame, and displays its power chiefly on the brain. The senses feel more lively, and the action of the brain is more vigorous and clear under its influence; weariness subsides and watchfulness succeeds, which is often protracted till dawn. It promotes digestion, and seems to counteract the uneasiness experienced from excess of wine. Nor is its agency less marked in the powerful stimulus it supplies to the system when under the influence of narcotic poisons, especially opium, being not unfrequently the mean through which valuable lives have been saved.

When taken in immoderate quantity, it is apt to induce internal congestions, and not unfrequently various nervous symptoms arise, such as tremors, a peculiar feeling of anxiety in the region of the heart—sometimes with, sometimes without palpitation, dimness and confusion of sight, and some fever. It is not, therefore, well adapted to the young, muscular, and sanguineous, but rather suited to those of a cold, lax, phlegmatic habit. It has been used for various indications in medicine, and is proverbially beneficial in asthma.

The herb chicory has none of these specific and well-marked effects on the animal body; it may, indeed, placed in contrast with the berry of the coffee plant, be considered as nearly *inert*. The root, when fresh, is tonic, and in large doses it acts on the bowels. It is alleged to be useful in certain visceral diseases of a chronic character, but in these we think *time* is fully as efficient an agent. It has some slight claims to the action of a diuretic, and its action as a tonic is but trivial.

We may further subjoin, that the presence of an azotised principle in its chemical constitution (which some of the first authorities consider as a positive criterion of the nutritious properties of *vegetable* matter), has not been detected.

Hence, we should feel disposed to consider the action of the chicorium intybus, mixed up, as it is, so extensively with coffee, as almost nearly negative, inasmuch as the root itself has little more medicinal virtues than saw-dust.

We are indebted to Mr. Cook for a very clear statement of this matter in a Memorial, at this moment lying before the Lords of the Treasury and the Board of Trade. When the reduction in the price of sugar was made, equal to 26 per cent., an increase in the consumption followed equivalent to 46 per cent. Coffee, however, which suffered a reduction of price, in 1846, of 22 per cent., has remained almost stationary; while the increase in the consumption of tea, even with stationary prices, has been 1½ per cent., within the last two years, over that of 1846, but obviously not so great as to affect the great falling off in the *apparent* consumption of coffee. The history of coffee has always been appealed to, since 1784, as a striking instance of the increased consumption that generally attends judicious reductions in the import duty. This anomaly receives the following correct explanation from Mr. Cook. The root of the *Chicorium Intybus*, Nat. Fam. Compositæ, has been long known as a substitute for coffee in Germany, where it has been cultivated extensively for that purpose. Imported to Great Britain, a duty was levied on it equal to that paid on coffee. As the herb is indigenous to our island, it was subsequently grown at home, so that the consumer might have it duty free; and in 1840 a Treasury Order was obtained "authorising the Excise for the future not to object to grocers selling chicory, or MIXING IT WITH COFFEE." The effect of this was speedily felt, and induced the importers of coffee, in 1842, to complain of it to the Chancellor of the Exchequer, but without effect. Chicory rapidly was in great demand, and the consumption of it, which was estimated by Mr. M'Culloch at 6·72 million lbs. in 1842, has at least doubled, and is, to that extent, now encroaching on the use of coffee.

"And this is only what might have been expected, for while home-grown, kiln-dried chicory can be delivered at 2½d. per lb. to the wholesale dealers, (retailed at 8d. per lb.,) the average price of duty-paid coffee is from 7d. to 9½d. per lb. *Accordingly, even respectable grocers add, at least*, 2 *ounces of chicory to* 14 *of coffee*, WHILE OTHERS MAKE THE MIXTURE HALF AND HALF. The most experienced officers of the Excise estimate the average proportion of *chicory* to what is sold in the London shops for coffee *at one-third*; in the manufacturing towns in the country, it is said to be *fully one half*. What further portion of pure *chicory* is elsewhere added to this mixture it is impossible to say; but it is a fact, that those descriptions of coffee which will bear the greatest admixture of chicory, such as Costa Rica and Java, enjoy, on that account, a marked preference in the market, greatly to the detriment of the more delicately-flavoured Ceylon coffee."

Besides the primary sophistications which the coffee submits to from *chicory*, the chicory itself also is adulterated; and this was carried to such an extent, that the wholesale houses were induced to take into their own hands the manufacture of the chicory which they sell, purchasing themselves the root, and kiln-drying it on their own premises.

It is, therefore, urged, alike for the interest of the colonists, the revenue, and the public, that the duty charged on chicory should be renewed. It is, indeed, but even-handed justice to our fellow-subjects in the colonies, unless our home-growers of chicory can establish that that substance has claims on the public from properties totally dissimilar to those of coffee; and we think that they might do so with some appearance of plausibility. But then the chicory would still be used as an adulterater of coffee, on which ground alone it is most exceptionable.

"Estimating the proportion in which *chicory* at present enters into what is sold as coffee at the low rate of one-third, it follows that, along with the 36·85,000,000 lbs. of coffee consumed last year, 12·28,000,000 lbs. of chicory have been sold. If the sale of chicory should again, in conformity with with 3 George IV., c. liii., be restricted to persons not being vendors of coffee, and taking out an annual license for that purpose, the consumers would be again left to make their own mixture of those two ingredients. In that case, it is believed, they would, at most, mix only half as much *chicory* with their coffee as the grocers do at present. The effect would be, that about six million pounds less of *chicory*, but the same quantity more of coffee would be consumed; consequently, our coffee-growers would find a vent for six million pounds more of their produce here, and that an additional annual revenue of, at least, 100,000*l*. would flow into the Exchequer."

Agreeing with the above statement, we are even disposed to think that the anticipated consumption of coffee is underrated; for the inferior character of the article vended under that name, at present, prevents parties more extensively employing it, and even many are forced to give up the use of coffee, as it is so totally different from the article that was wont to be purchased in the market as such but a few years since.

In additional remarks on this highly interesting question, the judicious writer, in the *Times* of the 28th ultimo, observes:—

"That legislation on such a matter might, as is usually the case, lead only to intolerable vexations, is very probable; but a remedy is nevertheless necessary; and, if there be no other means, the consumers should adopt it for themselves, by *purchasing all coffee in an* UNGROUND STATE—a plan which would be altogether effectual, were it not impracticable in the case of the very poor. Even, however, if chicory were proved to be the most wholesome and agreeable article in existence, it would still seem hard, that it should be in the power of any dealer *legally* to foist it upon those who do not ask for chicory, but for coffee, and who part with their money in the full belief that coffee has been served to them."

In conclusion, we would observe, that amid the

praiseworthy efforts making in all quarters to foster a more elevated standard of public morals, the substitution of coffee instead of *alcoholic fluids*, whether in the form of *ardent spirits*, or our diurnal *beer*, has been attended with decidedly good effects. But we must not blink the matter, when we say that the wretched, warm, dirty-coloured *water* (for it scarcely deserves any other term) doled out in numerous coffee-houses, under the name of coffee, cannot but materially injure the cause; and the pledge-taker (for he evidently proclaims by his former propensities that he was sensible to the delights of a stimulant) revokes his oath in a moody fit, and returns to his old habits. We say this from melancholy experience in not a few instances; and we trust that some means will, ere long, be devised by the Legislature to secure the berry in its original purity for the consumer, and guard its own exchequer against the frauds of the unprincipled dealer.

THE CELT IN FRANCE.

[To the Editor of the Medical Times.]

SIR,—Since the appearance of Dr. R. Tuthill Massy's papers upon the Celtic and Saxon Races, I have taken particular pains to test the justice of his views relative to the former; and, from all I can discover in this eminently Celtic country, I am compelled to believe, that Dr. Massy either writes under the influence of prejudice, or that he has based his general observations of the Celtic race upon insufficient and erroneous data.

Dr. Massy says, that all Celtic people—and he particularly indicates the French—have one characteristic,—poverty, dirt, and immorality. Now, surely, any impartial Englishman who has spent a month in France, and has taken the trouble to examine fairly for himself the character, habits, and tastes of the French people, must admit, that such attributes are by no means applicable. First, with regard to poverty. The subdivision of property in France prevents the accumulation of wealth and power in the hands of a few, and thus secures a wider range of comforts and independence. That institution alone is a fertile source of general riches, industry, and employment. It prevents absenteeism, the curse of the Irish Celt, —multiplies the guardians of the poor,—and protects the many from that individual superfluity which never fails to engender general misery wherever it exists. There are no poor-houses in France; yet the destitute are taken care of, their wants are always made known without difficulty, and promptly relieved, in consequence of the easy access which is permitted between all members of society, rich and poor,—for the Celt has one noble characteristic, which nobody can deny,—charity. There are no poor-houses, because there are few poor; and poverty, in France, is not considered a crime deserving imprisonment. France, by her intelligence, high tone of civilization, by her naturally refined and varied knowledge of the elegancies and *agrémens* of life, is a centre of attraction for the *élite* of Europe. She is inundated by strangers from every part of the world, particularly England; and this accession of foreigners is another extensive source of profitable consumption for her productions and of employment for her artists. From one end of the kingdom to the other, the people are light-hearted and look happy, —an appearance never worn by a nation stricken down by poverty. This may be thought extraordinary, considering the effects of political disturbances upon her resources; but we must recollect, that the Celts are an elastic people, whose natural buoyancy no disasters can subdue, the same people who amused themselves by comic performances amidst the ruins of Moscow.

The proofs of their love of cleanliness and salubrity are numerous. There is permanently established in each town a Sanitary Commission presiding over the hygienic condition of the place. That Commission immediately interferes when any nuisance presents itself. There is certainly little or no under-ground drainage in towns. The streets are paved, and every negligence, from appearing upon the surface, attracts immediate attention, and is speedily cleared away. All the bad consequences of imperfect, choked-up sewerage are avoided. Look at their church-yards, invariably isolated from the living community, and situated upon an exposed hill, where a fresh breeze quickly sweeps away all unhealthy emanations of the soil. Look at the number of their public baths, and their cheapness.(a) Every well-regulated ladies'-school has its bathing apartment. The use of the warm-bath is very general, even among servants. Look, above all, at the beds of the poorest peasantry. You will always find them hung with neat curtains, and furnished with white good linen sheets. I have seen the bed of beggars clean and comfortable. The number of chemises usually possessed by the peasantry, men and women, is surprisingly large. The comfortable farmers and their wives are supplied each with from one hundred to a hundred and fifty, often more, and over twenty pair of sheets. A farmer's servant-maid, at the time of marriage, has in her trousseau three dozen chemises, and six pairs of sheets. Dr. Massy must have been labouring under some imperfection of vision, when he thought he saw ungartered stockings in France hanging over dirty shoes. The fact is, that no people in the world are more particular about their shoes and stockings, and every other part of dress. All are coquettish, old and young, of every degree of fortune; and this coquetry is constantly brought into requisition by numberless *fêtes*, and their social manner of living. One instance of good taste and cleanliness among the humbler classes of women is, their reluctance to wear any article of dress unsuited to their condition. They never put on the thrown-away finery of their superiors. If you make a servant a present of dress, it must be something new, and in harmony with the rest of her costume.

With regard to immorality, really, after the accounts of prostitution and education in Berlin given by Dr. Bushnan, in the *Medical Times*, of Jan. 27th, —after such accounts of the moral degradation of a Saxon city, I think Dr. Massy would do well to leave the Celt to work out his own salvation. Since the time of St. Louis, no country has made more praiseworthy, enlightened efforts to mitigate the physical and moral evils of prostitution than France. Compare the streets of an English town at night with a French town. The moral filth which is permitted to pollute every thoroughfare of an English town the moment the sun sets, strikes every foreigner with horror.

Dr. Massy informs us that he will examine man's mental nature through his physical structure. He is equally justified in examining man's physical structure through his mental qualities; and, as he considered the Celt miserable, filthy, and depraved, I am not at all surprised by his putting a monkey's skull upon his shoulders. Lavater gives him the hint—

"Plus il ya de perfection morale,
Plus il ya de beauté,
Plus il ya de corruption morale,
Plus il ya de laideur."

"Le verteuse est beau le vicieuse physiquement laid."

The Doctor unites to the ugly head of the Celt a beautiful foot, unequalled for lightness and grace. This combination is impossible; and the foot ought to suggest to him the propriety of examining the former again, for certainly he, not nature, has committed a blunder. She is always harmonious, and never commits such absurdities. Nature has endowed all organic bodies with a principle of homogeneity, by which every part becomes the image of the whole, and means the character of the whole. Look at the hand or foot of an idiot. You will find imbecility there as well as in his countenance. There is majesty in the face of the lion, in his mane, in his paw. It was this principle of organic similitude which enabled the immortal Cuvier to construct, by means of a single bone, the *ensemble* of beings which existed long anterior to man, and to deduce from thence their primitive abode and habits.

Dr. Massy neglects everything in the shape of evidence to sustain the validity of his contrasts. He gives no proof that the skull he examined is a *bonâ fide* Celtic skull. Is he sure that it is not the skull of an idiot? Does he know anything of the history of the original proprietor? Were Dr. Massy to come to this part of France, and take home to his cabinet one or two skulls, for the purposes of examination, in order to obtain a knowledge of the moral and intellectual character of the Normans, he would run the risk of entertaining the most egregiously false opinion of that shrewd people. There is a general custom prevailing here amongst the humbler classes, of binding, as tightly as possible, the heads of young children with a fillet or band. The object is to diminish, by pressure, the naturally elongated cranium of the child in the antero-posterior direction. This pressure is carried to such an extent as to produce profound indentations round the head, deforms a vast number of skulls permanently, and is a frequent cause of madness and imbecility. Now, the crania of such people would be quite calculated to lead the organologist into extravagantly false ideas of French character, were he not to extend the sphere of his investigation, and guard himself cautiously against those modifications of organisation produced by art or disease. A large number,—whole regiments of skulls, must be examined before any abstract and general notion of a people's character can be acquired. We have no skulls of the Celts remaining since the time the race was pure and unmixed. They, like the Romans, burned their dead.

To take up a skull in France, or Ireland, or England, and then preach about the psychological degradation of the people of the former countries, and the great moral perfection of the latter, is not the way to treat the abstruse, I might say, almost mysterious subject of race, a subject which baffled the descriptive powers of Camper, who says:—"Cent fois, Fai su distinguer, dans les hôpitaux l'Ecossais, l'Irlandais et l'habitant de Londre mais sans avoir jamais été capable de dessiuen leuns traits distinctifs.

Dr. Massy discovers many tribes of mankind in Ireland. He discovers, with a glance of the eye, a Phœnician maid, drawing water from a brook in Rostrevor. The descent of Mars is only required to complete the picture. Gall, Sur les Functions du Cerveau, satisfactorily accounts for such wonders,—"Je vois les mêmes formes chez les individus de différentes nations, de manière qu'il serait impossible de distinguer, par cela seul, si un homme est Français, Allemand, Italien, Espagnol, ou Anglais. C'est précisement par cette raison que bon 'traune des individus de tantes les nations qui ont le même caractere ou intellectuel.

Knowing, Mr. Editor, your unwillingness to allow any ignoble reputation to rest upon any race of men, under the cloak of science, unless substantiated by clear and incontrovertible evidence,

I have the honour to remain,
Your obedient servant,
S. S. MORIARTY, M.D.

Dieppe, Grand Rue 168,
February 19, 1849.

(a) Dr. Armstrong, in lectures, gives a statistical account of them in Paris, and contrasts them with the small number in London and Dublin.

TO THE POOR-LAW SURGEONS OF ENGLAND AND WALES.

GENTLEMEN,—I beg permission to address a few words, and to observe to you, that many of the circumstances stated at the meeting of the Poor-law Medical Officers on Monday last gave me great concern. Not only that they did occur, but that, under the present state of medical affairs, there was a presumed necessity for submitting to them until Parliament and the Government would cause them to be corrected.

Expressing my own individual feelings and sentiments merely, I would never submit to the humiliations and indignities which, in many cases, are inflicted on Medical Men in relation to pauper practice, but would be content with a private practice, however small, if it would afford me and my family a maintenance in decent comfort; and, if it were insufficient for that purpose, I would flee away and take refuge in some Australasian region, where, taking spade in hand, or applying it to the plough, I would raise wherewith to subsist in the enjoyment of tranquillity of mind and health of body, in an independence, rude though it might be.

In my humble opinion, however, there is no necessity for such an alternative, if the Poor-law Surgeons would take a wide and comprehensive, instead of a narrow view of their position. For I feel thoroughly assured, that the Poor-law Medical Officers are not sufficiently aware of the fact, that the real and ultimate cause, the fountain-head of all their grievances, is the disorganized state of the public affairs of the Medical Profession itself, which is almost a chaos, becoming daily worse and worse, if possible, from the intruding of ignorant, incompetent, and unauthorised men into medical practice.

The attention of the Poor-law surgeons is too exclusively absorbed in the contemplation of those grievances which more immediately beset them, and they do not, in my humble opinion, look sufficiently beyond them to the original cause.

At the same time, therefore, that they ask to be relieved of the evils which more especially oppress them, they should seek medical reform as a whole, and should earnestly pray for it in the spirit, at least, of the resolution which was proposed, and was not submitted to the meeting on Monday, but is subjoined to this communication.

If the parties more immediately concerned should fear that the especial cause of the Poor-law surgeons

would be damaged, or at least endangered by praying for the reform of the whole Profession, I would say that our great fault all along has been, the manifestation of a timid spirit. Why, otherwise, occur many of those things of which we heard at the meeting, and which, with the pleadings *ad misericordiam*, disgrace us amongst ourselves, and lower us in the estimation of the public and of the Parliament.

At the same time, therefore, that we seek redress for the grievances of which we so loudly complain, let us exert ourselves, by all the means in our power, to obtain the reform of the whole Profession, by some legislative measure, grounded on the evidence taken before the Parliamentary Committee of the last session, as the only effectual cure for the social, as well as professional, evils which afflict all branches of the Profession, the Poor-law surgeons more especially.

I have the honour to remain,
Gentlemen,
Your very faithful servant,
THOMAS MARTIN.

Reigate, 24th February, 1849.

Resolution suggested by James Wyld, Esq., M.P.:—

"That this meeting, while especially advocating the claims of the Poor-law Medical Officers to relief, as far as practicable, from the numerous and oppressive grievances which peculiarly afflict themselves, is fully aware of the fact, that manifold dangerous and daily-increasing evils are entailed upon the community by the anomalous state of the laws affecting the Medical Profession generally.

"That the evidence taken before the Parliamentary Committee bears ample testimony to the correctness of the above declaration, all the witnesses coinciding in the opinion that a revision of those laws is absolutely necessary, as much for the advantage of the public interests as for the peace and tranquillity of the Medical Profession.

"That this meeting, therefore, expresses an anxious desire that the Government will cause a Bill for the amendment of the laws affecting the Medical Profession, and for regulating medical practice in the United Kingdom, to be laid before Parliament with as little delay as possible, and that it be based upon the evidence taken before the Parliamentary Committee.

"And this meeting ventures still further to express a hope, that the Government and the Legislature, in consideration of the important interests involved in the matter, may be induced to legislate forthwith upon the subject, so that an effective law may be enacted during the present session of Parliament."

IRISH LUNATIC ASYLUMS.

[To the Editor of the Medical Times.]

SIR,—Allow me, in a few lines, to correct two or three inaccuracies which appear in Dr. Mollan's last and concluding letter.

I did not state that the Richmond Lunatic Asylum possessed the power of drafting its incurables to the House of Industry; but I took up the period where (1845) the Society for the Diffusion of Useful Knowledge ceased, and up to which, for ten previous years, they gave the average of cures; and I continued the return down on official data to Dec., 1848, showing that, with the advantage of drafting, within the latter three years, 115 incurable patients from the Richmond Asylum, the average of cures did not increase.

The long explanation as to reasons why, or places whither, they had been so drafted, within the aforesaid three years, is totally foreign to the subject, and only by its introduction tends to confuse or mystify the original argument.

The difference in Dr. Mollan's statement and in my fact is a serious one, and so adroitly used, as it has been by that gentleman, tends to far different results than those I point to.

I did not state that "a medical assistant" performed medical duties as a resident medical officer; but I did state that a *medical pupil*, or clinical clerk, performed such duties, and I made that extraordinary statement on the authority of the inspector's last report, p. 21.

The terms are mystified, and Dr. Mollan has made a very dexterous use of them in drawing his inferences and in quoting his illustration.

It is to such misapplication of terms, in legitimate disputations, that the apostle of British metaphysics attributes all the errors and much of the miseries of mankind.

Dr. Mollan says that he has forwarded to you the Government regulations for the Lunatic Asylums of Ireland. Now, Mr. Editor, will you, as umpire, point out a single line in those Rules authorising such an officer as a *medical resident pupil*, even by implication; and, if not, under what authority can such an unacknowledged person act?

Dr. Mollan introduces the name of Dr. Tuomy, the visiting physician of Carlow. Now, Dr. Tuomy is a gentleman of high character and honourable standing. The name is honourable "in the olden time" among the medical men of Ireland; but surely, Mr. Editor, no matter how high that name stands, it cannot supersede the solemn Rules and Regulations of the Privy Council, which in No. 50 state, "that if the medical attendant of any Lunatic Asylum be absent for a period less than fifteen days, he is to take care that his place is supplied by a duly qualified *practitioner*. Managers of Irish Lunatic Asylums are *in no instance practitioners*, even if they happen to be medical men, and for very wise and very obvious reasons.

It may be very desirable just now to crush or mystify all inquiry into the medical condition of the Irish Lunatic Asylums. It cannot be done, and for the following very powerful reason:—The condition of Ireland—its charities now dying out or crippled, (a copy of a printed Petition sent out from Dublin, and which I beg to enclose to you, Mr. Editor, fully bears out the term)—will force on the public mind a full and searching inquiry into the subject, and forbid the success of the present selfish and dexterous movement.

For Dr. Mollan's satisfaction, I assure him that I am not ignorant of the subject on which I write, and some of the leading and distinguished men who adorn science and literature at home and abroad, were I vain enough to mention them, might satisfy *even him* on the matter. I will conclude by simply stating, that I do not write to embarrass but to enlighten the public mind.

I am, Mr. Editor, your obedient servant,
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LIFE ASSURANCE OFFICES AND MEDICAL MEN.

[To the Editor of the Medical Times.]

SIR,—In your Journal of this day's date you have a paragraph stating, that the Commercial Assurance Society, and the Sovereign Life, have resolved to allow medical referees the fee, when their advice is required, in reference to parties who wish to assure their lives.

The Sovereign Society does not allow a fee, but the following note is printed at the bottom of their circular letter to the Medical Referee, soliciting his answer to their queries:—"The Company feel, that for the opinion of every professional gentleman, he is entitled to his fee; and, with this view, a note is appended to the proposal for the assurance of the above life, directing the attention of the proposer to the subject, and requesting that this matter may be arranged, in the first instance, with the medical attendant."

This is not quite equivalent to a Post-office order for the fee.

Your obedient Servant,
JOHN ALLAN, Surgeon R. N.

Epsom, 24th Feb. 1849.

SUDDEN DEATH AFTER DELIVERY.

[To the Editor of the Medical Times.]

SIR,—Having read with interest several cases of sudden death during labour in your Journal of last week, and having had a case of a similar nature in my practice, I shall feel obliged by your recording it, if you consider it of sufficient interest.

July 29th, 1847, I was summoned at five o'clock in the morning to attend Mrs. Brooks in her first labour; she was twenty-seven years of age. All went on regularly, until I was certain that only one or two pains were necessary for the expulsion of the head of the child. When, to my great surprise, at the time, I expected a pain, I turned my head, and found she was in a convulsion. I immediately opened a vein in the arm, sent a messenger to a medical gentleman who resided in the immediate neighbourhood, with instructions to bring with him a pair of forceps. In a few minutes he was in the room. We immediately delivered the child and placenta, and in from fifteen to twenty minutes she was dead, two hours and a half from my first arrival. For some time before labour she had observed that her legs and feet were œdematous.

I remain, my dear Sir, yours very faithfully,
WM. HEN. BOOTH.

Sheffield, Feb. 26, 1849.

MEDICAL EDUCATION.

[To the Editor of the Medical Times.]

SIR,—Your able and logical disproof of the slight and even ignominy (for the pleasant sallies of fancy, or of a lively humour, would be of no avail with the class of opponents we have to deal with, and, therefore, in true business style, you serve them out the hard shot and irresistible arguments of plain common-sense) which a class has endeavoured to fix on the whole body of general practitioners, has been no small boon to us in the present very ambiguous position in which we are now placed, and for which we offer you our most heartfelt thanks. Without any invidious feeling whatever, and eschewing everything that can be construed into personality, we would like to see your course of argument extended a little further, and, in particular, to that part of the disquisition which affects the *real* medical qualifications of those who seem so disposed to ride rough-shod over men as good as themselves and as true. They repose, with much complacent confidence, on their high literary attainments, the polish of their style, the refinement of their language, and the grace of their periods as a ground for precedence, if not of superiority. This we accord them most freely; but then it is only a precedence. Ask the veteran practitioner, if the short span of existence is adequate to complete the medical knowledge of the most acute mind? Does he not expire in the midst of his studies? What says old Hippocrates, the venerable man of Cos? (for we still recollect a wrinkle of him, though we have not enjoyed the aristocratic pleasure of perusing his pages by the Cam or the Isis:)—ΒΙΟΣ ΜΑΚΡΟΣ; ΚΑΙΡΟΣ ΟΞΥΣ. If this be true,—and every day only adds strength to the proposition,—how preposterous is it in any one, or any class of men, to lay claim to superiority chiefly on the score of their secular education, seeing the widely expansive character of medicine, and the obscure nature of the science at best. The man who grapples with scientific facts is the true doctor; and all others must rank far below him.

Your obedient Servant,
R. W.

Monday, February 26, 1849.

LIST OF BOOKS RECEIVED DURING THE MONTH.

The Brain the Sole Centre of the Human Nervous System. By Edwin Lee, &c. (Read before the Royal Society, May, 1848.)

On Perforating Ulcer of the Stomach. By Edward Young, M.D., &c. London: Simpkin, Marshall, and Co. Pp. 15.

General Rules for the Government of all the District Lunatic Asylums in Ireland, made, framed, and established by the Lord Lieutenant-General of Ireland. Dublin: Alexander Thom.

The Ninth Annual Report of the Crichton Royal Institution for Lunatics, Dumfries.

The Nemesis of Faith. By J. A. Fronde, M.A., &c. London: John Chapman. 1849. Pp. 227.

Thoughts on Pulmonary Consumption; with an Appendix on the Climate of Torquay. By William Herries Madden, M.D. London: John Churchill. 1849. Small 8vo. Pp. 219.

A Manual of the Dissection of the Human Body. By Luther Holden, F.R.C.S. London: Highley. Part I. 8vo. Pp. 105.

Cholera Gleanings; a Family Handbook. By D. J. Gillkrest, Inspector-General of Army Hospitals. Gibraltar, 1848. 8vo. Pp. 86.

Report of the General Committee for the Promotion of Colonization. London: Richards, St. Martin's-lane. 1849. Pamphlet.

Financial Reform: a New Budget for Lord John Russell. By John Matson. London: Effingham Wilson. Pamphlet.

Chart of Sowerby's System of Purifying and Ventilating Sewers. Sowerby, Parliament-street.

A Synopsis of Percussion, Auscultation, and other Methods of Physical Diagnosis. By Ray Charles Golding, M.D. London: Renshaw. 24mo. Pp. 62.

On the Nature of Limbs: a Discourse delivered at the Royal Institution of Great Britain. By Richard Owen, F.R.S. With Plates and Descriptions. London: Van Voorst. 8vo, bound in cloth. Pp. 119.

The Undercliff, Isle of Wight; its Climate, History, and Natual Productions. By G. A. Martin, M.D. London: John Churchill, 1849.

The Calling of a Medical Student: Four Sermons Preached in the Chapel of King's College. By Edward Hayes Plumptre, M.A., &c. London: J. W. Parker.

Chart of the Sanitary State of Birkenhead. For 1848. By Dr. J. H. Robertson.

Lameness in the Horse; with coloured lithographic plates, illustrative of the Different Species of Lameness. By William Percivall, M.R.C.S., &c. London: Longman and Co. 1849.

The Closing Years of Dean Swift's Life, with an Appendix, containing some of his Poems hitherto unpublished, and

some remarks on Stella. By W. R. Wilde, M.R.I.A., F.R.C.S. Dublin: Hodges and Smith. 1849.
Journal of Public Health.
The British Record of Obstetric Medicine and Surgery.
The Dublin Quarterly Journal of Medical Sciences.
La Presse Médicale. Weekly Journal. Brussels. Nos. I. to VI. Dec., 1848 to Feb., 1849.
Il Progresso. (Italian Medical Journal.) Florence: Cecchi.
The Pharmaceutical Journal.
Monthly Journal of Medical Sciences.

GOSSIP OF THE WEEK.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, 22nd February, 1849:—James Williams, Holywell, Flintshire; Richard Wilson, Paulton le Fylde; Thomas Henry Newsam, Leeds.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 23rd instant:—Messrs. Henry Chawner, Ware-hill, Herts; Joseph Nash, Roadside, Whitechapel-road; Samuel John Adams Palmer, Calcutta; George Frederick Ree, Ware, Herts; Thomas Mather, Manchester; Joseph William Wilmot James, Bristol; Edmund Grosvenor Goulden, Hazel-grove, Cheshire; Charles James Bennetts, Mylor, Cornwall; Frederick Henry Orris, Norwich; and George Betts, Southampton. At the same meeting of the Court, Mr. Stephen Bowden passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College, his diploma bearing date the 28th of April, 1843.

THE COLLEGE LECTURES.—These lectures, annually given in the theatre of the Royal College of Surgeons, will be commenced on Tuesday, the 13th inst, by Professor Owen delivering twenty-four lectures on the Generation and Development of Animals; the second part of the course will be commenced by Professor Paget, on Tuesday, the 8th of May, who will deliver six lectures, on the Processes of Repair and Reproduction after Injuries. The lectures will be delivered on Tuesdays, Thursdays, and Saturdays, at four o'clock.

THE LATE DR. GEORGE WATSON, OF GLASGOW.—The death of this surgeon occurred a few days since. He has been in practice above thirty years, and enjoyed, most deservedly, the confidence and esteem of a large circle of patients and friends. He has been surgeon to the Night Asylum since its institution; was a Director of the Royal Infirmary, and of various other useful Societies. He was highly esteemed by his medical brethren for his urbanity, skill in his profession, and general business habits, and was placed by them, last year, in the chair as President of the Faculty of Physicians and Surgeons.

HEALTH OF LONDON DURING THE WEEK.—The 1,191 deaths in London are 22 above the average, and show a small decrease on the previous week. The rate of mortality from diseases of the respiratory organs is the same as on the average has prevailed in five previous winters; for though, as was observed last week, the deaths from bronchitis are 118, or 40 above the average, those from pneumonia are 88, or 15 below it. But zymotic diseases continue to show a great excess; they were fatal to 100 persons more than died weekly in the previous years, the prevailing epidemics being hooping cough, scarlatina, diarrhœa, and cholera. Hooping cough, which carries off the young, as bronchitis the old, caused 76 deaths, or 34 more than the average; scarlatina 50, or 18 above the average. It is remarked, that the cases in which death followed from effusion consequent on scarlatina are considerably fewer, relatively, than when the epidemic was at its height. The mortality from measles is at present low; that from small-pox is near the average. A woman died from "variola and disease of the heart" at the age of 68. Four persons died of intemperance, on one of whom an inquest was held; 6 died of delirium tremens, which is in many cases the result of intemperance. A boy of 16 is certified to have died of "starvation after an attack of small pox" (no inquest). A woman died in Lambeth at the advanced age of 100 years, from ulceration of the throat, after an illness of two months. Of the 40 deaths from cholera, 10 occurred at the Female Refuge for the Destitute in Shoreditch, and 16 at Warburton's Lunatic Asylum in Bethnal-green. The barometer was highest on Sunday, having been 30·333, and lowest on Saturday, when it fell to 29·520. The mean temperature of the week was 45·4 deg.

BY ORDERS of the General Board of Health, dated November 17, 1848, and January 15, 1849, the parochial Boards of the city of Glasgow, and certain parishes annexed, are directed to execute the directions set forth for providing dispensaries and medical aid and medicines to prevent and resist attacks of cholera. And by an order of the 23rd of February, 1849, stating the disease to have decreased in those localities, the medical staff is ordered to be reduced to one assistant for each district. It further appears that the cholera has disappeared in Dumfries.

CHOLERA AT HEXHAM.—Four cases of Asiatic cholera broke out on Friday, the 16th inst., at a common lodging-house. The parties left Belfast nine days previous, and had not, to their knowledge, been near any cases of sickness. They arrived in Hexham on Thursday evening, the 15th inst., all well. On the following morning, two were attacked, and the same evening two more. The family consisted of eight persons. On Saturday afternoon, the keeper of the lodging-house, governed only by his fears, inhumanly turned the poor sufferers into the street; and before they had travelled two hundred yards, one of them fell from the severity of the disease. The attention of the relieving officer was directed to the case, when he immediately sent them to the fever wards of the workhouse, where one died in 24 hours, and another in 27½ hours, and a third on Wednesday evening, after suffering 120 hours. The fourth case is recovering. A case occurred on Thursday week to one of the inhabitants of Hexham, the wife of a tanner, living in Tyne-green, which proved fatal in 16 or 17 hours.

CHOLERA IN MONEGHAN.—This town has been severely visited by cholera; fourteen cases have already occurred, five of which proved fatal. However, the disease has been as yet confined to the most wretched part of the population, who live in miserable hovels, at a place called Pound-hill. The Board of Guardians have agreed to supply those attacked with physic and coffins, but they could not agree to furnish the patients with what they equally require—a little nutriment during their "battle of life." The principal food of the suffering class is turnips; and in the cases under treatment, they have nothing but water, or, mayhap, a little buttermilk. Physic is a good thing in its way, but it will not of itself cure a patient. As yet, there has been no hospital accommodation procured.—*Northern Standard.*

COLD WATER AS A REMEDY FOR CHOLERA.—Mr. Samuel Reynolds, a surgeon attached to the London Hospital, who had been called in to succeed Mr. Ball, the medical attendant of the establishment, rendered incapable of further exertion by indisposition, stated, that in the case of a young woman of the Hackney Female Refuge, whom, when called to attend, he found in an extreme state of collapse, though the saline treatment recommended by Dr. Billing, under the authorization of the College of Physicians, had been had recourse to, together with liquid chloroform and opium, to stay the cramps and sickness, and, as a last resource, he had administered copious draughts of cold water solely, which produced perspiration, and the deceased rallied, but she was too far gone to obtain any permanent advantage, and sank under the disease. This novel treatment, however, of exhibiting as much cold water as the patient chose to take, and nothing else, he stated he had found peculiarly efficacious, and in three of the worst cases now in the Institution he had so far by that means checked the disorder that he was confident of the patients' recovery. The disease breaking out there was undoubtedly owing, in his opinion, to the attendance of the young women at the chapel, which he understood to have been built over two cesspools since filled up, and from there being no fires in the place, which was simply warmed by what heat arose from the gaslights. He considered it highly injurious for the inmates to go direct to the chapel, across the yard, at so early an hour in the morning, and immediately after they had left their beds.

THE PLAGUE IN 1665.—In the plague of 1665, Oxford was the only large town in England that escaped its ravages. Some years previous to the breaking out of the plague in this country, the Bishop of Oxford had caused the streets of that city to be cleansed, the bed of the river Isis to be cleared, and the common sanitary precautions of modern times to be adopted. The corporation were so well satisfied with the worthy Bishop's measures, that they undertook to continue them at the public charge. Its freedom from disease was the consequence.

FARRINGDON DISPENSARY.—On Sunday morning, before the Right Hon. the Lord Mayor and Sheriffs, a sermon on behalf of this charity was preached by the Rev. R. Bickersteth, M.A., at the church of St. Andrew's, Holborn. At the conclusion of divine service a collection was made, amounting to 36*l.* 3s. 6d.

ORTHOPÆDIC HOSPITAL.—The annual general court of the Governors of this Hospital was held on Friday week in Bloomsbury-square. The report stated that the total number of patients during the year was 1,130, the greater part of whom were cured or relieved. Many patients remain now in the Hospital, two of whom had been sent by Her Majesty's command. They are two children afflicted with double club feet, and who belong to a poor family, four of whom are similarly deformed. There were 270 patients waiting for admission, for, although several additional beds had been set up during the year, the funds of the Hospital were quite inadequate to the demands upon them. The income for the year amounted to 1,636*l.* 12s., and the expenditure to 1,569*l.*, leaving a balance of 66*l.* 13s. 3d.

EASTERN DISPENSARY.—A dinner in aid of the funds of this Society took place yesterday at the London Tavern, being the first for fifteen years held for that purpose. 130 sat down to dinner, and in the course of the evening subscriptions were announced to the amount of 1,200*l.*; to this the Chairman's list contributed the sum of 390*l.* For some time past the financial condition of the Dispensary has not been so flourishing as its friends could have wished. But brighter prospects now appear to be opening upon it, and the erection of a new building in a more conspicuous position than that occupied by the old one is contemplated.

MANCHESTER ROYAL INFIRMARY.—A DISPENSING SURGEON.—Under the recent re-organization and classification of the medical staff of this Institution, there are two classes of surgeons, the senior, or hospital, and the junior, or dispensing surgeons. Every future medical officer must become a junior, before he can enter the senior class. Mr. Thorpe having resigned his office as hospital surgeon, Mr. W. Smith, one of the dispensing surgeons, has been promoted, leaving a vacancy for a dispensing surgeon. The election is fixed for Thursday, the 15th March, when there is no doubt Mr. Edward Tomlinson will be elected.

HOSPITAL FOR CONSUMPTION.—A numerous meeting of Governors was held in the board-room of this charity on Thursday week, Captain William Lyon in the chair. It was stated in the report, that a most liberal offer had been made, on the part of the Rev. Sir Henry Foulis, Bart., to build a chapel for the use of the Hospital at his own expense. The rev. Baronet's offer was of course accepted with a vote of thanks, and a Sub-committee appointed to make the necessary arrangements. The report further stated, that a residuary bequest had been made to the Hospital by the late Mr. William Sawyer, of York, of the value of about 2,500*l.*; and that the Bill for incorporating the charity was in progress, and had passed standing orders. The anniversary dinner, to be held on the

2nd of May, at which Mr. Disraeli takes the chair, was warmly spoken of, and the report of the large number of gentlemen who had already sent in their names as stewards was considered a very encouraging indication. Thanks being voted to the Chairman, the meeting separated.

CHINESE HOSPITALS.—The Chinese Association, having for its object the support of hospitals and dispensaries in China, as a means of facilitating the introduction of the Gospel, have just published some interesting letters from their agent, Dr. Hobson, who has, for the first time in the history of European connexion with China, established a hospital *within the walls of the great city of Canton*, where the natives had lately entertained such violent antipathies to the English, and to which purpose the worthy Doctor has contributed 100*l*. In his letter he states "the number that apply for relief are almost more than I can get through in a single day," working six hours at a time at his dispensary table, where, on an average, he has from 180 *per diem* for some time past, and has, on an average, twenty cases for operation weekly.

STATISTICS OF THE MEDICAL COLLEGES OF THE UNITED STATES FOR THE SESSION OF 1847 8.—The following table is incomplete, but it is as perfect as the materials furnished enable us to make it:—

	No. of Students.	No. of Graduates.
University of Pennsylvania	508	174
Medical College of Harvard University (Boston)	—	—
College of Physic and Surgery (New York)	193	52
Medical Institute of Yale College	—	12
Medical School of Maine (Brunswick)	—	16
Vermont Medical College (Woodstock)	—	—
Medical College of Castleton (Vermont)	—	—
Dartmouth Medical College	52	—
Berkshire Medical Institution	—	—
Medical Department University of City of New York	421	133
Albany Medical College	88	21
Geneva Medical College	—	—
Medical Department University of Buffalo	93	31
Jefferson Medical College	480	178
Pennsylvania College Medical Department	90	40
Franklin Medical College	—	—
Philadelphia College of Medicine	—	—
University of Maryland	—	—
Washington University of Baltimore	—	—
Medical Department of Columbian College	—	—
University of Virginia	67	—
Winchester Medical College	—	—
Medical Department of Hampden Sidney College (Richmond)	—	—
Medical College State of South Carolina	192	78
Medical College of Georgia	151	52
Medical Department University of Louisiana	160	28
Memphis Medical College (Tennessee)	104	22
Medical Department Transylvania University	167	50
Medical Department University of Louisville	406	94
Medical College of Ohio	—	—
Starling Medical College (Columbus)	138	—
Medical Department Western Reserve College (Cleveland)	240	—
Indiana Medical College (Laporte)	117	27
Medical Department Illinois College	—	—
Rush Medical College (Chicago)	140	31
Medical Department St. Louis University	80	18
Medical Department University of Missouri (St. Louis)	146	39

THE UNITED KINGDOM TEMPERANCE AND GENERAL PROVIDENT INSTITUTION.—A meeting of members and friends of this Institution was held at Radley's Hotel, on Friday, Feb. 16, when a large number of ladies and gentlemen attended. The Secretary, in an interesting address, said there was a case which showed the great privileges granted by the Act of Parliament, under which this Institution is enrolled, in enabling the members to secure the sums assured to any other persons, by simply appointing their nominees to receive the money when due. By this means, probate, legacy-duty, and all expenses are avoided. The Institution is one well worthy of support.

EXTRAORDINARY VOCAL PHENOMENON.—At a lecture delivered in the ordinary course of Physiology at the School of Medicine, adjoining St. George's Hospital, on Thursday afternoon, by Dr. W. Vesalius Pettigrew, the subject of which was "the voice," the lecturer took the opportunity of introducing Mr. Richmond, who possesses the wonderful power of producing two vocal sounds at a time, and these in harmony. Mr. Richmond commenced by producing a modulated bass tone, according to Dr. Pettigrew's opinion, in the upper part of the pharyngeal and nasal cavities, and, almost instantly, a treble accompaniment, which the lecturer had no doubt was produced by the vibration of air over the thin and expanded edges of the tongue, the vibrations being manipulated by the most adroit management of the muscles of that organ. The treble tones cannot be produced unless the tongue be fixed at its base to the hyoid bone, and by its apex to the roof of the palate. The treble tones produced were of the sweetest and most melodious character, far surpassing in softness any known musical instrument, or even vocal organ of the bird, and elicited the most enthusiastic applause from a most crowded theatre, consisting of students, many of the most eminent physicians and surgeons, and numerous scientific gentlemen who had assembled to witness the performance.

MORTALITY TABLE.

For the Week ending Saturday, Feb. 24, 1848.

CAUSES OF DEATH.	Total.	Average of Five Winters.
ALL CAUSES	1,191	1,169
SPECIFIED CAUSES	1,176	1,164
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	318	221
SPORADIC DISEASES:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	53	54
Tubercular Diseases	174	203
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	132	141
Diseases of the Heart and Blood-vessels	39	40
Diseases of the Lungs, and of the other Organs of Respiration	239	243
Diseases of the Stomach, Liver, and other Organs of Digestion	53	67
Diseases of the Kidneys, &c.	10	13
Childbirth, Diseases of the Uterus, &c.	7	9
Rheumatism, Diseases of the Bones, Joints, &c.	10	7
Diseases of the Skin, Cellular Tissue, &c.	..	1
Malformations	3	3
Premature Birth	23	23
Atrophy	13	15
Age	46	73
Sudden	9	14
Violence, Privation, Cold, and Intemperance	47	37
Causes not Specified	15	5

OBITUARY.—On the 26th inst., at his house in Keppel-street, Russell-square, Dr. Leonard Stewart, aged 51.

TO CORRESPONDENTS.

"B."—Dr. Day's Work, "On the Diseases of Advanced Life," will be noticed next week.

Mr. Tuson's valuable paper "On Electro-Galvanism for the Cure of Neuralgic Affections," will be continued in the next Number.

"A. S. B."—There is no book that we can "strongly recommend" on the subject.

"Spes" asks a question which it would be an infraction of professional etiquette to answer.

"A Reader of the *Medical Times*."—We believe the diploma of the Glasgow Faculty will authorize the possessor to practice medicine in most, if not all, our colonies.

"W. S."—The Report would occupy too large a space in our columns, and we must therefore decline its insertion.

"A Provincial."—The qualification will do.

"Justitia."—We can give no opinion in reference to the intentions of the Apothecaries' Company and its Licentiates.

"Mr. Renton."—It shall be published at an early opportunity

"A Constant Reader."—The names of the subscribers shall be published if sent as promised.

"Mr. Wells."—We have no leisure to examine the value of the suggestion.

"Truth-seeker."—An appointed vaccinator cannot receive the Union payment, in addition to private remuneration.

"B.D."—Such persons would be able to register, if any such Bill were passed.

"Ireland."—We cannot answer the questions.

"Par Vagum"'s strictures are severe, but not new.

"A Licentiate."—We cannot pretend to say how long the Apothecaries' Company will continue a licensing Medical Corporation.

"An Old Subscriber."—Yes: as a Surgeon, but not as an Apothecary.

"Medicus."—The usual fee is One Guinea for every three miles.

"Galen."—We know of no such physiological miracle.

"A Navy-Surgeon" will oblige us by sending the promised information.

"Philos" has our best thanks.

"X. Y. Z."—We know of no Act of Parliament on the matter.

"Juvenis."—There is no such formula in the Edinburgh Pharmacopœia.

"Rusticus" may use the article in question in any way he pleases.

"Mr. B. Johnson."—The five years' apprenticeship cannot be dispensed with.

"Paul Pry," on "Diploma-Mongering," received.

"Viator."—The American Colleges will admit English medical men to examination, on showing their diploma or license.

"J. D."—Not without rendering himself liable to a prosecution.

"M. N., Brighton."—We are sorry for the delay, but it is not our practice to return communications which we decline publishing. We will, however, forward the one referred to in the course of a day or two.

"A Constant Subscriber, Uttoxeter," wishes to be informed, where he must apply to obtain information respecting a charity for old blind persons, from which, under certain regulations, an annual sum is granted.

"Dr. Turley, Worcester."—Communication received.

"Dr. Kidd"'s communication will appear next week.

"An Aggrieved Manx" shall have a letter forwarded to him in a few days.

Errata in No. 490, page 322, vol. 1, ninth line from the top, for "Emphysems," read "Empyema;" and so throughout.

"Dr. Williamson, Brighton," "On Poisoning by Alcohol," received.

"C. D."—We are sorry we cannot give the required information.

"Bishopwearmouth, Saturday, Feb. 24.

"SIR,—Will you be so good as to correct an error, in your paper of this day. Instead of Nov. 20, 1848, our Report is from Nov. 26, 1848, the date of my own and my colleague's appointment,—I am, Sir, yours faithfully,

"W. REID CLANNY, M.D."

"A Surgeon, of Newmarket," is very desirous to know the particulars of a recent death from Strangulated Hernia, which has occurred in that neighbourhood. The medical gentleman having seen the patient directly after the strangulation happened, and after fruitlessly attempting its reduction, our correspondent is not aware of any circumstances that could possibly occur to prevent the operation being at once performed.

"Medicus, prior to the Act of 1815, St. Alban's, Herts," hopes that, in the event of Medical Reform, the Apothecaries' monopoly will be *erased* from the *statute-book*, in this present Sessions of Parliament. He says:—"I perfectly coincide with Sir Benjamin Brodie; namely, I would legalise all persons who are now practising as surgeons, accoucheurs, or apothecaries; more especially, when it is well known, that the Apothecaries' Act was wholly and solely obtained from the British Parliament for the exclusive benefit of a trading company, the aim and end of which was to secure a flourishing certificate-trade in the shape of licenses: and to allow quackery to go on as in the days of yore. No medical reform can ever be realised without unity; and no medical reform can be of any avail without the annihilation of every known quack medicine."

ORIGINAL LECTURES.

THE GULSTONIAN LECTURES.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS.

By W. W. GULL, M.D.,

Fellow of the College, and Fullerian Professor of Physiology at the Royal Institution of Great Britain, &c.

[Reported expressly for the "Medical Times," and revised by the Lecturer.]

Lecture I.

ON THE NERVOUS SYSTEM.

Mr. President,—In appearing before the College to fulfil the duty which has devolved upon me by your appointment, I cannot but express the sense I have of the honour conferred upon me, and my regret at the small means at my disposal for the due performance of the task. My previous engagements have left me but little leisure for new investigations. I am, therefore, afraid I can bring before you little that is new. I have chosen out some points in the physiology of the nervous system, particularly in reference to an arrangement of paralytic and anæsthenic affections. In this first lecture, it will be my endeavour to set forth the present state of our knowledge in regard to physiology only; in the next lecture, to consider some facts relating to paraplegia; and, in the third lecture, the phenomena and law of hemiplegia, with the exceptions. Of the importance of the nervous system we may form a just estimate, when we remember, that in the development of the embryo of the higher animals, it is the first which appears. (The lecturer illustrated this by referring to a diagram of the embryo of the dog.) The first traces of the vertebrate form are in these simple lines of nervous substance; this is the centre in relation to which all the parts of the future animal are to be laid down. The nervous system has this priority, not only in fœtal development, but manifests it throughout the whole life of the individual. On reviewing the phenomena presented to us by the higher animals, we are led to the conclusion that their vertebrate organisation is an adaptation especially for action, being a co-ordinated system of nervous centres, nerves, muscles, and bones. The digestive system, corresponding to the mucous layer as the nervous does to the serous, is necessary for receiving the nutriment from without, and for elaborating it into the constituents of the blood, whilst the intermediate system of blood-vessels conveys the renovating and nutrient fluids to the first great system, and removes the worn-out tissues; but these two systems, the digestive and the vascular, are subordinate in the idea of the vertebrate type.

In each segment of this great system, we find several elements, each of which has its own function; although so great is the unity of the whole, that no part can suffer without affecting the rest.

The muscle represents many units of power, according to the number of its fibres, many muscular fibres being submitted to the influence of one nerve fibre, and many nervous trunks inserted into one common centre—*gradual concentration and subordination for the purposes of arrangement.*

The muscle has its own inherent and proper power of contraction in virtue of its organization, and nerve is the proper excitor of this power, in a manner not explained; all we yet know being this, that a nerve, when mechanically disturbed, or affected with an infinitesimal amount of electricity, brings out the function of the muscle. We can compare the phenomena to nothing so aptly as to a spring set free by the easy motion of its stop. On irritating the nervous centre, we no longer obtain the same simple results, but the phenomena give us the idea of SYSTEM,—not merely *sum of units*, but UNITY OF PLAN.

The function of each part is obviously distinct; yet, in the higher animals especially, there is a most intimate combination and dependence, from muscle to nerve and from nerve to centre.

The advances of anatomy have demonstrated this in respect of the three elements. It is more than conjecture, at least in many instances, that the grey caudate cells of the nervous centres are continuous with the nerve fibres, and the ganglionic masses on the posterior roots of the sensitive nerves in the lowest vertebrata, where the tissues were so loose as to permit a successful inquiry, have been shown to arise from a vesicular dilatation of the nerve tubules in their course.

Of the mode of termination of the nerves in the muscles and skin, facts of the greatest interest seem to have been fully ascertained. In respect of muscle the primitive nerve tubulus, after reaching its surface, has been found to divide into two, or often many branches, instead of forming loops with fibres returning into the trunks from which they were sent off, as described by Breschet. There is yet, however, uncertainty as to the precise manner in which these branchings of the nerve fibre end in the muscle; yet is there much probability of *direct continuity.*

In respect of the skin and the cellular parenchyma of organs, there is at least a very close intermingling of nerve fibre and tissue, if not absolute continuity of structure; so that it might not be too bold an expression, however illogical, to say, that they formed an extended peripheral centre.

Passing onwards from these established truths, we come to consider the central parts of the nervous system; and the first question for our consideration is their symmetry. Is there one general centre, or are there many,—and if many, what is their arrangement and mutual relation? The second question is,—Does the same law hold good in regard to centres as to nerves; namely, is there one collection of grey matter for sensation and another for motion?

In reference to the number of centres and their arrangement, the most striking theory is that proposed by Dr. Hall; namely, that there is a true spinal system, made up of many segments, and a distinct sensory and volitional one.

That the spinal cord is more than a collection of nerves running to or from the brain, has long been maintained. The movements of decapitated animals have led to many speculations; some of the older physiologists regarding them as the result of a residual irritability of the muscles, others thinking they arose from nervous sympathy: and Prochaska and Le Gallois, with others, regarded them as the result of a re-action on the spinal cord, in which the latter, at least, admitted sensation to exist. Dr. Hall has more fully than any one else investigated these movements, and explains them, and a series of others in our own bodies, by referring them to a simple physical re-action, from which sensation is excluded, as a necessary part, though often conjoined; whilst other movements, the results of volition and sensation, are carried on by quite a distinct system. However suitable such a supposition of two distinct sets of nerves might be to explain many phenomena of nervous action, yet are there many great objections to the hypothesis. In the first place, they must be equally extensively distributed in the skin and muscles. For as, in a decapitated animal, there is no part of the surface which cannot excite the spinal system, so is there no part, when the animal is entire, which, when injured, does not give rise to sensation. Again, the movements of the muscles are performed after the same manner, whether the muscles are acted upon by volition or by a physical re-action of the cord only. Hence, we cannot but infer, that the relation of the excitor and of the volitional fibres to the muscular tissues are the same. For instance, in a decapitated frog, the legs are drawn up when pinched; so are they when the animal uses them under volition. The extension of these two systems, therefore, must be equal, and their arrangement similar; but to what purpose is not evident, inasmuch as we shall see afterwards, that one set of fibres only, viz., the spinal set, would suffice. Another objection, which has seemed to me pressing against the theory of a volitional and an excito-motor set of fibres, arises from the power we have over these automatic movements. Take, for instance, the respiratory movements; we can arrest them at will; and in this we find a dilemma,—for, if we assume that the volition acts directly upon the muscles, the influence so sent to them *can be no other than a stimulus*; and if we cut off the stimulus of volition by a negation, we leave the muscles acted upon by the reflected irritation from the cord, which is powerful enough to excite them: hence they would continue to contract, and the volition would be powerless to stop them. But, if it be admitted, that the centre of volition can act directly upon the spinal centres, arresting the course of the impression from the incident to the motor nerves, then we can readily understand the manner in which we arrest the movements; but then the volitional fibres running from the brain to the muscles are *unnecessary*; for, if we can excite the muscles by acting directly upon the centres of the spinal cord with which they are connected, there can be no necessity for a double set.

Dr. Todd has well set forth, in his various writings, our ignorance of the exact arrangement of the nerves in the cord,—the improbability of the longitudinal fibres being continuous with the nerves; and, after a careful repetition of the dissections of Mr. Grainger, arrives at the conclusion, that considerably the greatest number of fibres pass in at right angles (to the segments of the cord,) whilst those which might be *supposed* to take an upward course are *few* and *indistinct*. The results of all this investigation being, that there is no satisfactory evidence of the cerebral fibres.

I have quoted the remarks of this excellent observer first, because his name is a great authority for their correctness; but will now add other evidence, which has been brought forward, and which tends to confirm this view.

As regards the tracing of fibres, a great source of fallacy arises from the softness of the tissue of the nervous centres, and from the lateral adhesion of the fibres themselves; so that, with these difficulties before us, nothing less than an actual tracing of primitive fibres by the aid of the microscope could be certain evidence; and this has never been done to any appreciable extent. We must, therefore, form our conclusions as to the general arrangement of the nervous structures from more obvious conditions.

Volkman adduces, as a proof that all the nerves do not arise in the brain, the instance of the crotalus mutus, in which he numbered 221 pairs of spinal nerves. He proceeded to a careful measurement of their united area, and found that it surpassed by eleven times the area of the cord at its superior part. Sir C. Bell admitted that the respiratory nerves arose from the cord, and we have in the musculus accessorius what Bacon would have styled a *glaring instance* of spinal origin; for we can give no account of the strange course it must take, if it has a cerebral one.

If we select any animal remarkable for the muscular power of any segment of its skeleton, we shall find, as has been commonly stated, a corresponding development of the cord; and, as two such examples, I show you the cord of the jerboa and turtle. The same exists in the cetaceans which use their tail as the chief propelling organ, although some, speaking from theory rather than observation, have said that it is absent when the members are absent. As further tending to illustrate the arrangement of the nervous centres, we may refer to the present prevailing views of the symmetry of the vertebrate skeleton.

If it be proved that the skeleton is developed according to a definite plan of longitudinal repetition of simple elements, every segment or group of segments being modified in relation to the whole, whereof the proof is given in the harder parts of the animal structure, and the law and idea of the archetype traced out therein, on a due consideration of these facts, it must seem obvious that what holds of them will hold of the nervous centres, of which they are the mere supports. So that if we may recognise in a vertebra of the back a unit of the whole skeleton, limited or extended in the development of its parts, according to particular wants of the whole animal, we may, *à fortiori*, admit the spinal segment of the cord corresponding thereto, to *form a unit in the nervous mass*; and the same segmental or zonal symmetry which has, in modern times, been so successfully made evident in regard to the bony frame-work, must be admitted to

obtain in the nervous centres, in relation and subordination to which all other parts are formed.

If we, therefore, reason from the known to the unknown, we shall be prepared to find in the nervous system the same kind of relations as in the vertebrate skeleton itself,—the same in kind, I say, but with a closer correlation than is even there apparent. There can be no more objection, *à priori*, to a mechanical arrangement of the nervous and muscular systems adapted for motion than to an optical apparatus for concentrating and absorbing the rays of light in seeing. This would, in fact, constitute the true spinal system of Hall; and, as Dr. Todd remarks, we must regard the decussating fibres of the anterior pyramids as commissural only.

We have, in the spinal cord, with its nerves and their conjoined muscles, a mechanism which, under ordinary conditions, is submitted to our volition, as in the segments corresponding to the arm and leg, or which can act automatically and yet be subject to volition, as the segments ministering to respiration, or which are mechanical only, as deglutition. And when we consider in detail the degree and kind of power we have over our muscular system, these views seem to me greatly confirmed. As an example, I may revert to the volitional power over respiration. How do we produce this complex movement? Not by our volition having any power to select out one or two individual muscles, nor even the muscles of one side,—but we produce the result *as a whole*. Nor is there any necessity for all these fibres to run to the brain, seeing that when they arrive there, as our common experience tells us, we have no power of selection over them, and particularly as one excitor fibre, or other equally simple means, from the brain, would suffice, as proved by the simple fact, that such an irritated fibre does suffice to set the whole respiratory system into consentaneous action, as in sneezing, which may be set up by an impression conveyed through one fibre. But if this example be objected to, we may instance those parts of the body which are most obviously under the influence of the will, say the arm or leg; the same inability of directing our volition upon any one muscle obtains also here. We will a particular movement, for example, flexion or extension of the arm, or adduction of the thigh, and we get the result without any obvious combination of elements. How numerous soever the muscular fibres of any one muscle, or of the muscles themselves, for a given result, we use them in sets. Nor can I see any obvious design in all the nervous fibres from the flexors or extensors, or from any one muscle going to the brain, seeing that one or two fibres, or any equally simple communication between the brain and the segment or segments of the cord with which they are connected would suffice.

All considerations of the mode in which we use the muscles, and the power we have over them, would lead to the conclusion that the nerves are arranged into centres, and that we act upon these by our volition rather than upon the muscles individually or directly. I believe this view of the subject will also be further strengthened if we consider the anatomy of a plexus and its probable uses.

It has commonly been said, that a plexus of nerves consists in an interchange of fibres of sensation and motion, for the purpose of transmitting the sensitive to the skin and the motor fibres to the muscles; and it is a curious anatomical fact, that the nerve which supplies the muscle, supplies, for the most part, the skin over the muscle, according to Mr. Hilton's dissections. Dr. Todd hints at the general use of a plexus for motion, but by no means developes his idea respecting it. Reverting again to the kind of power we have over the muscles, and the fact that plexuses are complicated in relation to the variety of movements of the parts supplied by the nerves subsequently sent off from them, it would seem that the use of a plexus is to bring the different segments of the cord into relation *with groups of muscles*. Thus, let A B C D represent so many segments of the cord, A being in connexion with one group of muscles, B with another, and the same with C and D; by acting upon the centre A we get a result corresponding to its connexions,—we can conjoin it with B, or C, or D, or with any one or all of these, and get so many and so varied movements, as, for example, flexion with supination, equable throughout the entire act of flexion, or supination first and then flexion, or flexion first and then supination, and so with every other possible muscular movement, by conjoining the various segments, and acting upon them in different times, as we should play on the keys of an instrument.

A plexus, therefore, must be regarded as a necessary part of the segmental symmetry of the cord,—a necessary condition for combination and arrangement, although, on the hypothesis of our acting directly upon the muscles, one can see no necessity for such an intercommunication of the roots.

As confirming this view of the use of a plexus, I may refer to the paralysing effects of injury of one of the roots of a plexus. If a nerve be divided before entering a plexus, we do not produce paralysis of any one muscle, but a general diminution of power in the whole.

As still accumulative evidence of this zonal symmetry of the nervous system, I would submit to your consideration the facts so notorious of the crossed action of the hemispheres on the cord.

It is well known that injury of one hemisphere paralyses the opposite side of the body; but there is at least one exception, and that is the third nerve, which is under the influence of the hemisphere of the same side. I shall give evidence of this in my remarks on hemiplegia. On considering this curious disposition of parts, the first question that forces itself upon the mind is, why is there a decussation at all; and, secondly, why is the third nerve an exception.

[To be Continued.]

THE CROONIAN LECTURES.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS.

By J. CONOLLY, M.D.,

Consulting Physician to the Hanwell Lunatic Asylum.

Lecture I.

ON INSANITY.

Mr. President,—In the present course of Lectures, I propose to offer some remarks connected with the subject of Insanity. Having always before me crowds of spoiled and ruined minds, my own mind is so engaged and occupied with it, that I should find it difficult to address you on another subject. But I think the interest attaching to the subject will alone excuse your attention being now directed to it. Few of you can have failed to hear of the affliction of insanity falling suddenly and fatally on those whom they have known. It is an ill that affects all classes—all conditions; the young and the lively become affected by it, and, after a few weeks of slight aberration, fall into helpless and hopeless imbecility; or sometimes, in men of intellect, the balance is lost, the character undergoes modifications for which no reason can be assigned, and the cause often shrouded in the profoundest obscurity. Those who have made extensive examinations of the brain, cannot but feel how little they know of mental disease, and least of all can they discover whether the state of the brain is such as to admit of recovery. It may be well, therefore, now to survey the signs of some of the most frequent forms of insanity; and I propose in these Lectures, after a general view of the malady, to show its modifications under association with other diseases, and generally with paralysis.

In some cases of insanity the body is scarcely less disturbed than the mind. Perhaps one of the first symptoms is absence or diminution of sleep; they are frequently up all night, making extensive preparations for some imaginary journey; but with this there is co-existent a peculiar state of mind. The friends then begin to recall a particular period, when a marked change of character was observable. Now, everything is hurried; a desire for stimulants is developed; the patient regards his family earnestly; suspects plots having reference to him alone; sermons are especially addressed to him; he is sure that the popular authors of the day know all about him. His senses are disturbed. What he touches is impure, what he eats or drinks is poison. There may be great vivacity; he spends his time in large purchases of books and clothes, in learning languages, and in making innumerable offers of marriage. But more commonly, less severe symptoms precede the general malady; and frequently, in these cases, there is so much acuteness and self-control, that the friends delay interfering; and this time, so precious for the cure, is thus lost. The whole nervous system is disturbed; the tongue pale; digestion deranged; the skin clammy, cold, dry, and hot by turns; the countenance haggard; the eyes unnaturally bright and prominent; the hair looks wild, gait awkward, and dress negligent or fantastic; muscular effort is in excess, and the patient utters wild and frantic cries; sometimes sleepy, or at others seldom so; taking scarcely any food, and yet not suffering from debility. In bad cases there is much violence, accompanied by a costive state of the bowels, and other symptoms premonitory of death. Now it appears to me that these symptoms suggest a careful avoidance of all violent methods, not only moral but physical; the best way is, if you can do your patient no good, to take care that you do him no harm; to endeavour to win his confidence and to soothe him. A desire to be entirely divested of dress is very peculiar to them; it probably arises from intense heat of the system, although the temperature of the surface may not be great. There is also an inclination to dirty habits, and in young persons it is surprising to see how they will resist all attempts to promote delicacy. It is also curious to contemplate the entire change which the character undergoes; men of diffident nature become full of rude and strong passions; the honest become avaricious; the industrious woman, full of mischievous tricks; the reserved lady assumes a lightness and even grace of deportment not known before; the young, lady-like, and modest girl, becomes vain and pretending, swears, and uses indelicate language; in a few instances, where you would have thought such words never could be uttered, they become inspired with a whole vocabulary of indecency; children revile parents; parents wrongly accuse children. We have a great number of cases at Hanwell, which, in the recurrent attacks, exhibit the peculiarity of looking ferocious at us, and then great precaution is required; in less violent cases, however, they merely become spiteful, entirely destroying the peace of the domestic circle. In one case, under my own observation, in a lady subject to violent mania, warning is given of an approaching paroxysm by her admiring all she sees instead of being discontented; and this is sure to precede a long and most violent attack. Human nature is seen to great disadvantage in mental disorders; and it is a cruel error to abandon the insane to evil influences. Kind feelings are in them obscure, indeed, but not lost, and they often evince much sympathy; and on these remains of feeling we rest our hopes. Nothing is more interesting than to watch the signs of recovery; to see rational conduct restored; and reason once more calmly exercised, constitutes a rich reward.

It would be vain to attempt a description of the various classes of this malady; but the chief forms are resolvable into about three.

1. Cases of continued excitement or depression.
2. Occasional excitement.
3. Strong delusions, remaining for a long period or for life.

Much difficulty exists in assigning a locality to various perceptions of sense. As regards this, the insane smell bad smells where there is nothing offensive, and speak to strangers as if they were their intimate friends. There are patients at Hanwell, some of whom we cannot approach, because they fancy that we are enemies from whom they have formerly experienced a wrong. In one instance, I was taken to be two people; the woman called me her husband, and then again somebody else, and in the former case she would express herself most kindly to me. These are curious cases, because, in the very same sentence in which they style you as some other person, they will begin by

calling you in your proper name. It is not easy to determine whether the nerves or the brain have most to do with this. Sometimes they imagine that they cannot speak or walk, and fancy that their bowels are hermetically closed. In the case of one woman, a nurse, without incoherence, she fancied that for her time was destroyed; she was afraid of her mind going; frequently sitting up all night; when walking, she fancied that some one was dragging her back; and she would continually cry, "All is agony!" Yet these are by no means the most hopeless cases, depending, as they do, perhaps on a temporary morbid condition of the brain. In the case of a female patient, who had been long afflicted and left well, there was a sensation in the bowels as if something turned round in them like a mill; a man referred a feeling of giddiness to the left side of the abdomen; some, that one side of the head had lost all feeling; an Irish patient described her head as boiling; some delighted in making every discordant noise of which the human voice is capable. But such cases as these, I am inclined to think, are greatly diminishing; and that a great many of them arose from the monotonous life to which they were subject in our asylums; and the same observation is applicable to other cases. Again, some patients will sit in one position, till they become deformed; clench their fists, till the nails pierce the skin; some repeat the same words all day long; others invent a combination of language, from French, Italian, Greek, and Latin. The proper use of words and the faculty of speech are much affected in the insane; sometimes the voice is like that of two persons; many take pleasure in talking with a foreign accent. In one case, I always knew when a fresh attack was coming on, by his beginning to talk Welch. Although, in Hanwell, we have several Queens, yet, strange to say, there are no Kings; and while the patients take upon themselves the names of nobles and princes, yet we have no bishop, admiral, or dean. They often detail the vast plans they were about to accomplish; their demands for writing materials are very formidable. One man at Hanwell has spent months in painting figures on the three walls of his room, which he designs to represent the deficient state of the social world; while the fourth wall is destined to contain a description of what it should be. These voluntary efforts are harmless; but I question the propriety of stimulating them; nor do I think the encouraging patients to talk on scientific or metaphysical subjects to be good for them; or to take parts in theatrical representations; our aim should be never to produce violent impressions or excitement. In acute cases, there seems no dread of pain; they are driven by mere impulse; the most terrible forms of death seem pleasant to them. Among these, as well as others, the hope of a patient's recovery is often the strongest. I have no doubt that many a physician to an asylum could furnish cases where the patient has been brought in wild, impulsive, and scarcely conscious; and yet, in a few weeks, he has been so transformed as scarcely to be recognisable. These recoveries (about 50 per cent.) afford great encouragement in a class of maladies in which death begins at the brain. There is one class of the disease in which the patient is tranquil (melancholia), in which the cure is hopeful; the disease departs slowly, and may suddenly supervene; but again it slowly disappears. This may be seen especially among young persons. They will exclaim: "For me there is no to-morrow—no sun—no moon. I am sent away destitute and naked; and for the unpardonable sin the stars are blotted out, and all things accursed;" and this combined with thoughts of self-destruction. In all my experience there are no more painful interviews than with such patients; their consciousness holds out long unshaken, and renders their distress the greater; except in the paroxysms they are mostly tranquil; the countenance is sad, the voice low, their attention absorbed in grief; the greater number of suicides in such cases occur in the morning; up to the middle of the day they are restless; at mid-day they improve, and at night are cheerful; but if they should happen to wake at night they cannot sleep again, and continue restless and uneasy. These are often cases of gastric disturbance, sometimes with pain and heat at the head and of the epigastrium; they scarcely take food or repose. The strong emotions of the mind are clothed in affecting exclamations:—"I'm miserable; let me die and give my life away; no one but God knows what I've had to suffer." A young woman who had been deserted by her lover, after repeated attacks, exclaimed:—"I saw nothing but misery, disgrace, or death before me, and choose the least evil of the three." Another:—"I've been pursued like a dog. I want peace and quiet. I cannot endure any further infliction." All this must show that, whatever in the treatment tends to excite the mind must aggravate the malady. A contemplation of the two chief forms in which the prospect of cure exists, makes the pathologist anxious as to the physical causes; but the difficulty in this inquiry is very great; the symptoms indicative are by no means well established, and in some cases I am convinced that there is no bodily function that can be said to be primarily disturbed. It is highly probable that, in many cases, variations take place in the blood, and disturb the nervous action. Remarkable changes in the skin, and those in the urine, all lead to some degree of conclusion; but who can build on these any safe theory? The appearances in the brain after death are too uniform to allow of our ascribing different mental phenomena to it. On looking over our *post mortem* examinations, all I can say is, that in acute cases, the brain and the membranes have marks of great vascularity, but these occur also in chronic cases; in recent and acute mania in feeble patients these appearances are less marked. In several cases we may have softening or hardening of the brain, or patches of effused blood on the membranes. The general form of the head is defective; sometimes the top of the head is flat or the back pependicular; one of the two sides of the head less symmetrical; in one case, the left cerebral lobe was much larger than the right. Yet, all these general facts, though indicative of damage to the brain, do not throw fresh light on the various forms of the malady. Philosophers must yet inquire how, and in what measure, the powers of the intellect are associated with the brain, and how, this measure exceeded, it alters all man's associations with the external world. There are certain cases which are modified by physical agents; but, though their action might be ascribed to their mixing with the blood, still this does not explain the nature or the origin of the malady. The future scope of the psychological physician must be increased. The yet unsatisfactory state of many questions relating to the nervous system, should at least tend to make us cautious in the theories we adopt; for those now of middle age find the whole phase of physiological science to have changed since they were students; and be sure of this, that it is neither useful nor wise to hasten to conclusions on matters which perhaps only long and patient research shall satisfactorily explain in the yet distant future.

A LECTURE,

DELIVERED AT

THE ROYAL INSTITUTION OF GREAT BRITAIN,

ON FRIDAY, MARCH 2, 1849,

BY PROFESSOR E. FORBES.

"HAVE NEW SPECIES OF ORGANIZED BEINGS APPEARED SINCE THE CREATION OF MAN?"

Mr. President,—On the last occasion on which I had the honour of lecturing in this place, I endeavoured to show how there are evidences of a plan which leads us to recognise, in the association of species of animals, ideas of the Creating Mind, manifested by analogous laws in space and time. The subject then seemed so speculative, that several of my scientific friends questioned the possibility of treating of it in the short space of one hour; and to-night our inquiry is regarded as still more questionable; yet I think I shall be able to show some points of sufficient weight to give a bias to our answer to the question, whether that answer be negative or affirmative. Natural history consists in the discovery of laws through research. With men in general, the interest of science will rest on its philosophy, and on the relations of man in space and time with other organised beings; and I would urge upon naturalists, that it is their duty to take up such questions as this; for if they do not, others will, nay, do, and thus fill the public mind with baseless theories. This is my apology for now introducing the question,—"Have New Species of Organized Beings appeared since the Creation of man?" In discussing it, I shall have occasion to use expressions which are not familiar to some of my hearers, and phrases which will be novel to those who have not before heard such lectures; and therefore I think it best to explain the senses in which some of these terms are used.

1. I use the term "species" in the sense admitting no transmutation of one species into another.

2. "Generic centres,"—of plants and animals in space and time, grouped together, wherever those genera were natural.

3. I shall take for granted, throughout, the creation of various assemblages of plants and animals, at different points of time, marking several epochs.

4. "*Geological epoch*,"—contrasting it with the *human* or historical epoch.

In this inquiry, the first question is, whether natural history can give us any evidence of the appearance of new species of animals since the advent of man, or to the contrary. All who are familiar with these subjects are aware, that in the last hundred years the lists of animals in various countries have enormously increased, and some may have thought that this has been owing to an increase of the number of species in the area. But we have no right to come to any such conclusion; the fact is to be accounted for solely by a closer observation being brought to bear upon natural history. Another point connected with pure natural history is, that, within the last few years, it has been asserted that persons have called forth new animals by means of electricity. I merely express my belief, confirmed by the inquiries of others, that such an idea is fallacious and unwarranted, and has arisen from carelessness of observation. On the former point, I refer my hearer to Sir Charles Lyell's "Principles of Geology," 44th chapter. In that chapter, also, is a line of inquiry of a different kind, viz., that by geological monuments we can ascertain whether man is as ancient as any other animal; and on this my argument will turn. The argument, then, is this: There are certain areas on the surface of the earth of much more recent origin than other areas; certain tracts of land much more recent than other tracts; and certain tracts of sea also. Many of these lands have appeared since the last tertiary epoch. Now, do we find that the inhabitants of these lands are entirely derived from older centres?

1st. Let us consider the aquatic regions. There is a great advantage in dealing with an aquatic area, because the sea is peopled, in great part, by assemblages of animals which are very observable; for instance, molluscous animals; these shells present very distinct characters and are very preservable, and thus we can compare the contents of an ancient sea bed with the existing inhabitants of modern sea bottoms. Now, an instance of aquatic area coming under this observation is the Baltic Sea. This sea is an example of a region which we believe not to have existed during the geological epochs preceding man; for it appears to have been hollowed out of the land after the glacial epoch, and therefore we might expect it to present us with more than one generic centre, on account of its varied climatology. But, what is the real state of the case? Why, this—that the Baltic is not peopled by any special animals, but entirely by a colony out of the sea from which the Baltic runs. There is no evidence of any centre of creation existing within its area; and the fact, that these animals are identical with those of the Celtic seas, is well known. Now, it might be objected to this, that a part of the Baltic is in the condition of brackish

water. But, then, the history of tracts of brackish water is similar to that of the salt lakes. In the case of the Caspian Sea, we find that its being a salt lake was no impediment to its becoming a centre of creation; and, therefore, I consider this objection as answered. Another aquatic area is the Mediterranean. This may not be so clear as in the instance of the Baltic; but still I believe the Mediterranean to be a series of marine area of post-pliocene origin; for we find that the differences of the contents of other periods, and of the present Mediterranean, are too great to allow of that sea being now regarded as identical with former epochs. This is seen by the following Table:—

MEDITERRANEAN REGION.

A Miocene Fossils of North Italy. (Michellotti.)

	Miocene.	Identical with Eocene.	Identical with Pliocene.	Identical with Living.
Cephalopoda..	6	0	0	0
Gasteropoda..	469	7	74	43
Acephala	103	6	33	28
Brachiopoda..	9	0	2	2
Echini	23	1	2	3
Corals	103	8	18	13

B Shells of Newer Pliocene of Sicily. (Phillippi.)

376 Species, of which { 193 are extinct. 20 live elsewhere. — 213 not now in the Sicilian Sea.

C No. of Living Species Diminishing Eastward in the Mediterranean. (Forbes.)

	Medit.	Ægean.	Black Sea.	Ægean Shells identical with Med. Newer Pliocene Fossils.
Cephalopoda..	1	1	...	0
Gasteropoda..	330	200	...	112
Acephala	198	155	...	103
Brachiopoda..	10	9	...	5

Everything, in fact, goes to show, that the Mediterranean, during the Pliocene period, was the remains of the great Indian Ocean. When we take the newer Miocene epoch, as in the Mollusca, we see there that the number of species found fossil within that area, are not now living, so that we can hardly regard the sea as it is now the same then. In what light, then, are we to regard the Black and the Mediterranean Seas? My answer is, that the whole population of the Mediterranean Sea is a migration of creatures from the Lousitanean Sea.

Then we may adduce the same terrestrial example. And the first I call attention to is the area of the British islands. They consist of tracts post-glacian; we find that the British islands are peopled by colonies from other countries, both plants and animals, and that there is no evidence within these islands of any special centre of creation. The smallness of the islands is no objection to their being such a centre; there are others smaller still that are, as in the Galipergus islands. But I speak now with respect to a particular set of animals, and these are very important, viz., terrestrial mollusca, or snails. We find there are certain points in which we find a mass of snails that are not found elsewhere, mingled with others that are, and these points all fall within a limited portion of area. In Spain, there is one assemblage of peculiar snails, mixed with others common to the whole of Europe. Go to the Alps, and there you will find another assemblage, mingled with the whole of the known snails of Germany. So in the Carpathian, the Caucasus, Dalmatia, and the neighbourhood of Greece, the south of Italy and Sicily, and the Canaries. Now, it is a very curious fact, that these centres are, on the map, all confined within a certain portion of it—the south; for, if we go north, we there find all the snails belonging to the species of the south. This is very curious, because there is no reason why Sweden should not be as good for a centre as the Alps, or the Scottish mountains as the Pyrenees. What, then, is the meaning of it. It is this: that we find all the centres distributed over a country which was land anterior to the glacial epoch. Thus: in the post-glacial area there are no special assemblages of animals, and, by analogy, of plants. The inference, then, is, that in the post-glacial area there were no points at which creative energy was exerted—that, in fact, those points were all pre-Adamite. I beg to direct your attention to this Table:—

TABLE of QUARTERNARY and TERTIARY EPOCHS.

1	Historial Epoch.	Man. Peat Bogs.
2	Post Pliocene.	Freshwater Marl with Irish Elk.
3	? {Pleistocene. Newer Pliocene.	? {Glacial Period. Sicilian Tertiaries.
4	Older Pliocene.	Sub-Appennine Tertiaries. Crag?
5	Miocene.	Crag? Bordeaux and Malta Tertiaries.
6	Eocene.	London Clay and Paris Basin.

This is a Table of the late geological periods, beginning with the Eocene or epoch of the London clay, in which the remains of plants and animals found cannot be identified with those now living; then the Miocene; then the older Pliocene; next the Newer; and then we observe, that between the latter and the human epoch we have the animal epoch, in which period a great many species of animals came into existence. Now, the advent of man is regarded as taking place when the earth assumed its present condition; but between the glacial epoch and man, a considerable period elapsed; and during that time it was that the majority of the existing species of animals came into existence. What is the relation, then, of the advent of man to the natural history of province and time. Here we go into hypothesis. Was man the last and finishing stroke? This is my own opinion; and, in offering these inferences, I must be understood as maintaining them on scientific grounds only; and hereby we gain in our notion of the purposes of the world and the glory of our position here. Minute researches among animals and plants, observations of the wondrous instincts of some animals, and other studies, have inclined naturalists to link man too closely with other beings. But, whether I have succeeded in making my argument clear or not, there is one feature to which I would urge attention. However trifling a research may appear into the locality of primroses, the migration of snails, or the wanderings of elephants, these yet may be among the things by which we may obtain a glimpse of man's real position here; and the naturalist will do well to bear in mind, that what it was worth God's while to do, is certainly worth man's while to study.

MEDICAL SCHOOLS AND UNIVERSITY TOWNS OF GERMANY.

By DR. BUSHNAN.

(Continued from Vol. XIX. page 321.)

BERLIN.

It was my intention to have prefaced my account of the medical schools of Berlin with a notice upon Prussian medical polity; but, as this will probably form the subject of a more lengthened discussion, and that in connexion with English medical reform, I shall only now allude to it as casually as the nature of the present paper will permit.

Berlin, then, the metropolis of German intelligence, as its more ardent admirers are pleased to term it, became, when compared with other German capitals, at a very recent period, a University town. But this will cease to be a matter of wonder when we reflect upon the many difficulties and the great discouragement Prussia itself encountered in developing its political and administrative existance. It was only in 1700 that Frederick I. founded, upon the plan of Liebnitz, the "*Societas Berolinensis Scientiarum*;" and this did not receive the more dignified appellation of "Academy" until its reconstruction in 1743. Attached to it, the first school of medicine was founded by the King in 1724, under the name of "*Collegium Medico-Chirurgicum*," and here anatomical lectures were delivered in the winter, and surgical lectures in the summer. By degrees, however, medical and other professorships were founded; and towards the end of the last century it began to assume the character of a University by the addition of a library, botanical garden, and museum, in which, by Royal command, all singularities of structure, specimens of abnormal conditions, and pathology were to be deposited. Among the earliest Professors were Mursinna, of Surgery; Klaproth, of Chemistry; Hermanstaedt, of Pharmacy; and Wildenow, of Botany. In 1789 the Hospital of "La Charité" was founded. In 1795 the Frederick-William Institution was opened, and set apart, exclusively, for the education of military surgeons; and, although medical lectures were given, midwifery taught, and a Maternité established, it was not until 1810 that these several schools were united into a regular university, and one of the Royal palaces, a magnificent building in the Place de l'Opera, appropriated for its seat. This was opened, with much ceremony, on the 15th October of that year. It contains twenty-one lecture-rooms, of different dimensions, a large hall, (*aula*,) several collections, and some official residences.

As regards the internal government of the Berlin University, all matters that do not come within the jurisdiction of the proper Minister of State are referred to the decision of eleven ordinary professors, who form the Senate, or Council, in which the extraordinary professors and private teachers—*privat docenten*—have no voice. The President, who is officially addressed by the title of "Your Magnificence," is the Professor of Theology,—at present, Dr. Nitzsch. The Senators are:—Müller, Professor of Physiology; the Dean of the Four Faculties; Hengstenberg, Professor of Theology; Keller, Professor of Jurisprudence; Erenberg, Professor of Medicine; Frendelenberg, Professor of Philosophy; and five others; among whom, the most distinguished are Boeckh and Lachmanns, Professors of Philology. Since the year 1831, when several members of the senate took an active part in the Republican discussions of the day, a Government Commissioner has been added to their number, to watch over and report their proceedings. At present, there are belonging to the Theological Faculty five ordinary, five extraordinary professors, and five private teachers; the Faculty of Jurisprudence has nine ordinary, four extraordinary professors, and four private teachers; the Faculty of Medicine has thirteen ordinary, five extraordinary professors, and eighteen private teachers; while, for the other branches of education, including philosophy, history, mathematics, husbandry, &c., there are thirty-three ordinary, twenty-nine extraordinary professors, and thirty-four private teachers. Besides these, there are also five members of the University who deliver lectures, among whom are Schilling, Grimm, and Jacobi; and also four teachers of modern languages. The private teachers receive no regular salary, but found their claims to promotion on the services they render to education by their private and gratuitous lectures; they receive, however, pupils, who pay them a small and undetermined sum. The extraordinary professors are seldom paid more than 600 dollars yearly, equal to 90*l.*; the ordinary professors generally receive about 1,500 dollars, or 225*l.* a-year,—a German dollar or thaler being 3*s.* English. They are allowed, however, to lecture and to receive pupils privately, and thus add to their hard-earned emoluments. The nomination to professorships is entirely in the hands of Government, which, generally, however, but not always, listens to the recommendation of the senate. The treasurer of the University is called "Questor;" and the students, in official language, "academical citizens." At present, the lectures are attended

by 1,637 pupils, of whom 1,183 are matriculated, a less number than in ordinary sessions; and of these 190, among whom are thirty-six foreigners, that is to say, not Prussians, belong to the faculty of theology; 456, of whom 67 are foreigners, to that of jurisprudence; 192, of whom 41 are foreigners, to the medical; and 314, of whom 89 are foreigners, to that of philosophy. The right of matriculation is accorded to any one who, after having completed his studies in the gymnasium, or preparatory school, has passed his examination and received the "*testimonium maturitatis.*" Those who enter the University without this certificate, and, consequently, unmatriculated, are in after life excluded from Government employment, nor can they practise law or physic. Foreigners are admitted to any faculty without this certificate, but Prussians only to that of philosophy. The ceremony of matriculation consists in the payment of six dollars, and a pledge on the honour of the student to the rector that he will never join a secret society. Students are placed under the jurisdiction of the University, and each receives a card, which he generally always carries, which on being produced prevents his arrest either by soldiers or by the police. In all civil complaints against students for violation of the police regulations and other petty offences, a magistrate attached to the senate is the judge; in misdemeanours of graver character he is assisted by the senators. For a capital crime the delinquent is brought before the ordinary tribunal; but he then forfeits his matriculation rights. To prevent a student incurring debt, there is a law which prescribes to tavern-keepers and tradespeople the extent of credit they may give, and beyond this sum they cannot recover. The punishments inflicted by the University are imprisonment and banishment (*relegation*). In the latter case a printed notice in Latin, containing the name and crime of the offender, is exhibited in the great hall of the University, and a copy sent to the other Universities who have agreed with Prussia not to receive those so situated. The last sentences of banishment were pronounced on account of political offences. In November, 1848, two young men were obliged to leave the University for having induced their comrades to present a Petition to the National Assembly under some aggravated circumstances; and still later, a third, for not having delivered up his gun according to orders,—the city having been declared in a state of siege.

The characteristic marks of the genuine German student, such as the laced velvet coat, the little coloured cap, the long and floating hair, and bare neck, scarcely exist in Berlin; and altogether there is less *esprit de corps* than is found in the smaller Universities of Germany. In the latter, the students always address each other in the second person singular, *thee* and *thou*; and the neglect of this mode of expression would be considered an insult, sufficient to cause a duel. In Berlin there is more formal ceremony; and the terms *Mein Herr* and *you* are generally adopted. Secret Societies, —the names of which recall to mind the famous *Burschenschaften* of former days,—still exist in Berlin; but instead of having for their object political discussion, they seem to have degenerated into smoking, beer drinking, and fencing clubs. The revolution, however, has not been without considerable influence on these societies; and although the Berlin students have not played so conspicuous a part in the political affairs of their country as their fellows of Vienna, nevertheless, towards the end of last year, they formed themselves into a volunteer body, distinguished by its zeal and the good order that reigned among its members.

Students generally live, two together, in furnished rooms, which are cheaper, more convenient, and cleaner than those of Paris. A room, on an average, costs from 5 to 6 dollars per month, inclusive of the servant, a good dinner the same, and supper 3 dollars a month. A young man with 50*l.* to 60*l.* a year may live most comfortably in Berlin, and pursue his studies, while a much greater allowance than this would be injurious to him.

The most diligent students are unquestionably the philologists; the poorest, the theologians; the richest, and, at the same time, the idlest, are the jurists. Those who study medicine have the most work, at least if they follow up the course of study prescribed to them at their matriculation. The lectures are either private or public, and the former cost from one to two dollars half-yearly; while poor students are admitted to attend their professors gratis, on a promise to pay their fees, when, in after life, they find themselves in a condition to do so. This custom, however, does not prevail so much in the medical as in the other faculties. Every student must attend, at least, one private teacher in the half year,—or rather, to tell the truth, to pay the fee to one; and the medical student must prove before examination that he has attended the prescribed number. The first medical examination takes place in the second year's study; it is called the "*examen philosophicum*," and comprises logic and natural history. At the end of the fourth year's study, a student is allowed to become a candidate for the doctor's degree, having previously deposited about £26 English. The examination—to have passed which does not permit a man to practice his profession—is very slight, the only matter vigorously enforced being, that it is conducted in the Latin language. Then comes the grand and public ceremony in the great aula of the University, at which a dissertation and theses are delivered and defended—the latter being always privately rehearsed beforehand with a friend, and the play acted in public as a species of genteel comedy, the "*concedo*" and "*gratulor*" following a desultory altercation of about ten minutes, the insignificance of which is concealed under the veil of a dead language. The candidate then challenges any one present—*à corona*—to break a lance with him; and the comedy is terminated by the Dean, generally the only member of the faculty present, putting the oath that he shall do nothing unworthy his art and calling, and presenting the candidate with his diploma. I will drop the curtain upon the grand banquet generally given by the Laureatus to his friends to celebrate the great event of the day.

And now, having obtained the Doctor's diploma, as I have said, the Physician is not permitted to practice until he has undergone the Government examination before a Commission named for that purpose,—a very different affair from the almost merely formal one that gave him his academical degree of Doctor of Medicine. This Commission sits at Berlin, and the rules for its guidance were fixed in 1825. It examines, for the purpose of granting a licence, those who propose to practise as Physicians, Surgeons, or Apothecaries,—the three grades being, in Germany, distinctly marked and separate. Those who have obtained their academical degree, may restrict themselves to the practice of Medicine, or they may join Surgery to it, and the examinations differ accordingly. Those who propose to follow both branches of the Profession, are examined in anatomy, and all the branches of the healing art. Those, again, who would confine their attention to Medicine, properly so called,—that is, to the treatment of internal diseases,—are equally examined on the practical points of Surgery, as well as those of Medicine.

Of the searching nature of these State-examinations,—*Staat-examen*,—it is sufficient in this place to observe,—on a future occasion, I will enter more fully into the subject,—that they are of a most precise and truly efficient character. Fourteen days, —and this often extends to three weeks, and in some cases to a considerably longer period,—is the period usually allotted for the examination of a Physician.

Foreigners obtain the Doctor's degree in the same way as Prussians, excepting, if they do not propose to practise in the country, that their *testimonium maturitatis* is dispensed with.

But still, medical instruction in Berlin is not altogether what it ought to be, especially as regards the training of the practical Physician; and this, although there is no want of celebrated and excellent Professors in the Faculty. The Anatomical Theatre is under the superintendence of Müller and Schlemm. About 300 bodies are dissected every winter. These are furnished by the Hospital, Orphan Establishment, and by the town, when the friends of the deceased cannot afford to pay the interment-fees. Every student pays about 4*l.* for the right of dissecting.

Physiology is taught by Johannes Müller and Schultz. The former, one of the greatest ornaments of the University of Berlin, is about to leave it for that of Bonn. It is said he will be succeeded by Valletin, from Berne, or Henlé, from Heidelberg. His auditors are generally from seventy to eighty, his appearance is imposing, and his delivery good; in politics he is a conservative. Professor Schultz is a very talented man; but he has placed himself in an isolated position by the singularity of his physiological views, of which I shall have occasion to speak hereafter.

Materia Medica is treated by Mitscherlick, who has undertaken to show, as much as possible, the action of medicine on animals. He has published observations on this subject in a work commenced long since, but not yet finished.

Pathology and therapeutics are taught by Schönlein; general pathology by Hecker; whose lectures are always diligently attended on account of his interesting expositions of the history of medicine.

Surgery and diseases of the eye have several teachers,—Jungken among them; and the klinics offer great scope for obtaining practical information. The most interesting, perhaps, since the irreparable loss of Dieffenbach, is that belonging to the University, and under the direction of Blomberg, a man of great science and experience. His work on nervous complaints is well known. He is, besides, the only lecturer in Berlin who makes his pupils acquainted with modern pathology, and the therapeutics of other countries. His delivery is but indifferent; but the defect is amply compensated by his constant endeavours to benefit his hearers, the precision of his examinations, and his rational treatment.

[To be Continued.]

OBSERVATIONS IN THE HOSPITALS AND MEDICAL INSTITUTIONS OF THE CONTINENT, AFTER THE REVOLUTIONS OF 1848.

By Dr. KIDD, of Limerick.

[Continued from page 337.]

AMPUTATIONS.

Our old methods of amputation were, I need hardly say, in the last degree barbarous. Red-hot knives and red-hot irons, and boiling oils, and large granulating stumps, and mortifying bones, making up a catalogue of horrid things, that one shudders now to think of; the operation even itself, too, looked on as a proceeding contrary to nature, and not to be undertaken, by any means, till the last moment!

Matters, however, now are changed—*every advance in practical medicine must needs lessen the necessity for the knife*, and the operation, curiously enough, copied at first from what nature brought about herself in gangrenous limbs, is likely to be, in a great measure, laid aside, from studying what nature may, in the same way, unaided, effect, even under the most adverse circumstances, in the great work of restoration.

In the separation of gangrenous limbs, the ancients, as if intent on the wrong method, never cut into the sound parts at all, thereby assisting nature in the business of detaching large mortified parts. We have lived, of course, to see the error of such things.

Celsus, as an improvement, cut down into healthy parts, right through to the bone, covering it over, he tells us, with skin. In an old French edition of his works, I find his directions. Speaking of amputation,—"Mais ce ne se fait qu'avec un peril extreme; car il arrive souvent que l'hemorrhagie, ou une syncope, fait périr le malade dans l'opération même." *What a fearful picture!* "Il faut donc, avec le bistouri, couper jusqu'a l'os, entre le mort et le vif, la chair du membre malade; Lorsqu' on est parvenu á l'os, il faut en séparer, tout du

tour, les chairs sains et les repousser en dessus, afin de le mettre à nu; on le coupe ensuite avec un petite scie. . . . L'amputation faite, on emporte toutes les aspérités que les dents de la scie peuvent avoir faites autour de l'os, sur lequel on ramène la peau qui doit etre très-lâche, pour recouvrir la plus grande portion de l'os, qu'il est possible."

The ancients never thought, in fact, of any other but this barbarous mode of operating, and never tried it but when things had advanced to some one of the worst forms of gangrene; that any recoveries at all took place, looks something, in fact, not unlike a miracle. Among the Arabians, we are told, Avicenna tried to spread the doctrine of Celsus, and one Abûl Kassem, a desperate fellow, no doubt, introduced the plan of operating with the red-hot knife.

The history of this part of surgery, by Brunninghausen and other German writers, is highly instructive, reflecting, as it does, much credit on Lowdham, Paré, O'Halloran, and others that we spoke of before, who were the first to throw off the trammels of the schools. Our mediæval literature is a positive blank, and it is not till we come down, perhaps, to the period of the invention of gunpowder, in the 14th century, that the subject of amputation and gun-shot wounds begin to be looked on in that truly philosophical point of view that it deserves.

The circulation of the blood was, as yet, but a beautiful mythus, one set of vessels carrying animal *spirits*, and the other vital *spirits*; much, of course, could not be expected in the way of arresting hæmorrhage. Such a thing as compressing an artery was never thought of or understood.

The history of surgery at this time is one indeed of no little interest. The almost endless "appliances and means" of the old men—the wilderness of instruments and bandages—the farrago of drugs and medicaments, with which the earlier treatises are filled, affording no indication whatever of the success of their operations. It would seem, indeed, on the contrary, that the *simpler* our surgery gradually becomes the better. An assistant pressing the main artery of a limb—a knife—a saw—one or two ligatures, and a roller, now superseding all the fearful-looking things figured in the old books; in many operations, chloroform comes now to our assistance, allowing, in cases of cancer, for instance, the most minute dissection of parts. Some of the Continental campaigns, we are told, were brought to a termination for want of tourniquets, and bandages, and cauteries. How such a thing would read in one of our later engagements,—before Moultan, for instance,—it is not easy to conceive. The *Times*, for example, would look very wry, and all the Daily Press abuse us to the end of the chapter.

Opinions are very much divided on the Continent with respect to many minor points in the treatment of gun-shot wounds and amputation: that of healing the stump by the first intention—that of flap amputation or circular, &c. The great broad principles, however, as laid down by our first surgeons, Guthrie, Hennen, &c., seem to be very generally gaining ground, and acted upon.

In some things, the Germans are, perhaps, behind us. In pure operative surgery, before the last year, they had little opportunity of travelling out of the old and beaten road; while, in matters of pure observation in physiology, chemistry, &c., and the innumerable correlative shades of scientific inquiry, they are as much before us. There is nothing, indeed, that sober, painstaking industry can achieve, that our friends along, and at the other side of, the Rhine have not dipped into.

I spoke in my last of the flap operation. In this country, the *circular* mode of amputation is that most practised. Sir Astley Cooper, I need scarcely say, was the great advocate of this mode of proceeding. He, in common with other eminent English surgeons, thinking that the stump, after flap operation, was followed by more profuse suppuration, and rarely united so satisfactorily, as by the circular method. It is curious, such libration of opinion on this and other subjects apparently so plain and open to observation,—Liston recommending the flap—the host of other English surgeons, the circular or "round-about" method, as Liston was fain to call it. Abernethy, and many of the present French and German school, preaching up the expectant method, our more dashing military friends doing all in their power to preach it down. Abernethy used to put the thing before his class in his own quaint way, after a very forcible manner. He was, of course, for the circular method, when the operation was to be done at all; but here he had his misgivings.

"In surgery," he used to say, "we must do as we would be done by, and then we shall be acquitted at the great day of reckoning. I should be very shy of amputating, because I have seen many cases, which, though it was said they would not do well, recovered. Ask the old surgeons, men who have seen much of hospital practice, and they will tell you that what I say is the case. We have no warrant for lopping off parts of another person's body, but for the preservation of the remainder. There have been numbers of cases of compound fractures since I have been in this (St. Bartholomew's) Hospital, but they have all done well, *except where amputation has been performed*—not a single case had a good stump, and many died." (a)

I have seen crowds of cases of the sort myself in the Continental hospitals; legs made smash of—hands and arms ground to pieces; yet, from the timidity of the patient, as well as the experimentalizing spirit of the surgeon, left to the recuperative powers of nature; all grow well. It has been the chief thing that has struck me in all my wanderings. In O'Halloran's book, even so early as his time, I find the details of not less than twelve instructive cases of the same nature.

I am not going to dilate on the circular mode of operation, as it is quite familiar, of course, to every one in this country. In the German mode of performing it—through the thigh for instance—it differs little from the English method. There are, perhaps, too many knives used, and too much transcendental anatomy exhibited on the unfortunate sufferers; one knife being quite sufficient for all purposes, and, with proper retraction on the part of the assistant, two or three ordinary sweeps down to the bone. They are very particular as to the cleft cloth in cutting through the bone; a mistake, perhaps, as we would say in this country, at the *right* side. The excellent rule of Petit's seems also, I think, very generally followed,—"*couper des chairs le moins qu'il est possible, et des os, le plus qu'on peut*,"—to take away as little of the flesh and as much of the bone as possible. The Germans, true to their physiological education, entertain some singular notions as to the necessity of saving a large proportion of periosteum. By so doing, they fancy the health of the bone is preserved, and exfoliation of any kind avoided. This is a point, perhaps, worthy of recollection.

In amputating through the leg, I believe a good deal of indiscriminate surgery, not of the best kind, has been practised. Chelius, of Heidelberg, at least, speaks flatteringly of a means of amputating in which the skin merely covers over the end of the stump. The experience of other schools would go, however, to show, that some variety of flap operation, as I mentioned before, in every case where there are two bones, is to be preferred. Some of the old people, too, Solingen, for instance, of the Dutch school, recommended the operation at the lower third of the leg, just above the ankle. By the universal consent of all the men in Europe, however, now the maxim has been reversed, the upper part, as near the tubercle of the tibia as possible being preferred.

In amputation through the arm, there is nothing, perhaps, very particular, except the more general use, on the Continent, of the flap method. In contradistinction to the leg, the stump in the arm is left as long as possible. Mr. Guthrie, if I remember rightly, recommends an operation not very different, when it is to be done at the insertion of the *pectoralis major*; some of the best surgeons, however, I need scarcely say—Larrey for instance—recommending, as in the latter instance, to go into the joint itself; there is nothing to be gained, he says, by a short stump; the ligatures irritate in an inordinate manner, the axillary plexus; the stump is kept in a state of twitching from the pectoralis and latissimus dorsi; and ultimately you have anchylosis, or something worse.

The different operations of EXCISION of the heads of bones of joints are held in much repute on the Continent. Jaeger, Meyer, and Textor are those who have spoken most highly of them; they are, however, not without very considerable danger, and it is quite questionable whether an artificial limb would not, in many instances, be preferable. The operation is obviously, especially in ginglymoid joints, more difficult to be performed. The likelihood of severe inflammation and tedious suppuration is also among the things to be dreaded; and the appearance of the limb ultimately not that one should most particularly desire.

Re-section of parts of limbs seems a most legitimate use of the knife and saw, and, in local diseases, has been most valuable. Every school and museum exhibits its triumphs in this way.

Another branch of surgery, almost peculiar to Germany, consists in the restoration of lost parts. "Nose-making," as the German term is,—with us known as the operation of Taliacotius.

Graefe was, perhaps, the first person who introduced it into Germany; several other men, especially Dieffenbach, extending and simplifying the process, and rendering it available in the restoring of lips, eye-lids, and other parts. The all but incredible results of Dieffenbach's practice are related, if I remember rightly, by an old friend and pupil, Dr. Bushnan, in various papers in the *Medical Times*; any one anxious, indeed, to study what may be done to the "human face divine,"—what supplementary noses, and eyelids, and lips transplanted from distant parts, must read the works of this able surgeon.

There is no country in the world, perhaps, where such opportunities for rhinoplastic experiments exist as Germany. The students at the Universities here look upon it rather as a mark of distinction and good fellowship (freundschaft) to slice off each other's noses. They have made wonderful *esprit de corps*, and, as I before said, form quite an integral portion of the community in each of the little towns. They go padded to a duel, so that the respective adversaries might as well fight a feather-bed; the result of all which never fails to be, that the nose and ears come in for all the hard knocks, a new one being quite a matter of course. "Pistols and noses" for two, sounds something ridiculous, but falls little short of the horrid reality.

For a few kreutzers (fourpence) these gentlemen get to a ball, where they ordinarily wind-up by a fight; in their own little mystical dens it is much the same thing. They are great at a grill, and not to be by any means approached at a supper. A barrel of beer is put on end on the table, and woe to the individual that cannot, at any given moment, drink a huge stoup to each of the party.

At Leipsig, a few miles from Berlin, you are shown the celebrated "Auerbach's cellar," where Goëthe has laid the scene in the "Faust." Mephistophiles plying the students with various wines through holes in the table; the more orthodox plan, at present, I was told, was to put the cask upon it.

At Heidelberg, and some of the older little towns, the thing remains in full force yet; the great Heidelberg tun, and the Hirchgasse where all the duels are fought, being amongst the matters most revered by the various chores. At my visit about Christmas, however, the Schlagers were resting in their scabbards, and Christmas trees burning in every *kneipe*.

A surgeon regularly attends upon these fighting matches, with his needles and ligatures; and an ear sewed on, or a new nose put up, or an eyelid set to rights is quite a matter of course. Our friends are as deeply in love as ever next day, and sing eternal youth to themselves and the Rhine.

(a) MS. Lectures, quoted by South.

ORIGINAL CONTRIBUTIONS.

ON ELECTRO-GALVANISM FOR THE CURE OF NEURALGIC AFFECTIONS ARISING AFTER ACCIDENT, AND ITS UTILITY IN OTHER CASES.

By E. W. TUSON, Esq, F.R.S.

The benefit resulting from the application of electro-galvanism, in cases of neuralgic affections after fracture, has already been particularised, and it is now my intention to mention in what other cases it may be serviceable. Injuries occurring near the large joints are tedious, and often very slow in their progress, frequently attended with chronic inflammatory action. Sprains of the ankle and other joints are often longer in their reparative process than fractures, and frequently do we see such injuries cause the patients to be confined to a state of rest for a considerable period. Electro-galvanism may be considered as a stimulant to the nervous system, a stimulant to the most minute fibrillæ, to the most delicate nervous texture, and likewise to the neurilema, or sheath of the nerves, promoting speedy absorption, so that, should the sheath, or even investing membrane of any nervous fibre be thickened or enlarged by extravasation, or any other means, by stimulating the nerves, promoting absorption, and removing the obstruction, the part will assume a healthy action. Sometimes chronic inflammation, or even disease, becomes established from the want of nervous energy to restore a healthy function so as to bring the different tissues composing membranes, or even other portions of the frame, to their normal state and to a proper degree of healthy action. Such may be the condition of the parts after a sprain; the ligaments have been lacerated, the synovial membrane injured, the tendons and their thin sheathes more or less bruised, the cellular tissue distended by extravasation; and it requires a large, or an increased action of nervous power to restore these several parts to their former condition; but, should the joints so sprained be previously in a weakened state, a larger quantity of nervous power still will be required to bring about a cure.

We have, then, an agent, in electro-galvanism, to act upon the nervous system, to excite its action, to restore it to a proper degree of energy, so as to accomplish a cure. The force or extent of the stimulant should be so regulated that it does not produce inflammation or other consequences. If this agent be placed in experienced hands, and be judiciously applied, it will prove of the greatest benefit, and I trust it will be the means of restoring many joints to a healthy condition. How often do we observe the want of proper motion in a joint to arise from a diminution or deficiency of synovial fluid, occasioned by a laxity of nervous power. This may be remedied by proper application of the electro-galvanic spark, so as to act upon the nerves of the joint, which will induce the membrane to deposit a sufficiency of synovial fluid. How often does this condition of a joint become stiff, and even anchylosed; or how often do we see this condition of a joint produce a change in its character, and the membrane and bone assume an ivory appearance, when we are no longer capable of alleviating the state of the parts.

In rheumatism, electro-galvanism will often prove of the greatest benefit; but in such cases the remedy should not only be applied to the trunks of the nerves themselves, but to their more minute fibrillæ that are distributed to the surface of the skin, by which means the membranous tissue is more stimulated by the current passing through the several parts, from the one side to the other; and by such means the sparks may be made to pervade through the centre of the joints, and also to its investing tissues, which will afford relief by producing absorption.

Electro-galvanism is an agent which produces absorption quicker than any medicinal means that we are acquainted with; and this can be clearly proved by its application to indolent tumors, as it very frequently causes them to be absorbed most readily. After other means have failed, electro-galvanism will completely cure some indolent tumors. A lady residing near Harrow applied to me on account of an indolent swelling, situated beneath the under part of the right side of the lower jaw. The tumor occupied the space between the side of the inferior maxillary bone and os hyoides; all the usual means were employed for the absorption of the swelling, but without success. The electro-galvanic spark was then applied about once in a week, or once in ten days, on account of the distance she resided in the country. In the course of a short time the tumor began to diminish, and, ultimately, she was quite cured. Many tumors have been dispersed by the aid of this agent; but it may be here mentioned, that more success has attended its applications after medicinal means have been previously employed. In fatty tumors no benefit has been observed to occur from its use; but, in glandular swelling, experience has proved to me that it may be of the greatest service; and it is an agent that can be made to enter the most distant parts, or deep-seated swellings, and one that ought to be fairly tried.

Mr. Abernethy, in his lectures, used to make the following observations, which are applicable here:—"Electricity is a part of surgical practice that may be considered as *unique*. All other means operate on the surface; but electricity will pervade the very centre of the body. It may be so managed, as to be made to pervade a tumor, even in the centre of the abdomen. It is a species of stimulation, and may be applied in various degrees of force. Much disputation has been raised as to the manner in which electricity operates on the nervous energy, but I speak of it as a stimulant operating on a local disease. Now, as to its application, you must modify it according to the tenderness of the part; if you stimulate the part too much you will produce inflammation, and the tumor will increase. Now, electrify one swelling, and the swelling subsides; electrify another, and it will increase. What can we think of it? and think we must. We must consider that it acts as a stimulant, and increases the action of a part. You should begin with very small charges of electricity. You would like the patient to feel it a little; but, if it be managed so as to produce a feeling of warmth and tingling in the part, and let that feeling subside, if you saw that it did not increase the action too much, then touch it up again, and you might increase the force of the charge. I have very frequently heard people say, if you speak to them on the subject of electricity, 'Oh, I do not think it ever does any good; I have given it a very fair trial; I was electrified every other day for two months.' All this is very possible; and they might have been electrified for two years without any benefit, unless there be some precise mode adopted for its employment, and the effect it produces be regarded. This is the worst thing that can be done; it is this practising without intellect that constitutes empiricism; it is blindly adopting, in this way, a power without a principle to guide it, that I abhor above all things." The remembrance of these observations have induced me to employ electricity, and now electro-galvanism, in a number of cases of tumors, with the greatest and most beneficial results. Electro-galvanism is far superior to electricity for many reasons, and much more calculated for surgical purposes. The force of the sparks can be so regulated, that the stimulating effect should not be too great, by which means its employment becomes safe, and can be productive of no ill consequences, even if it should prove of no service. It becomes, therefore, an agent of great practical utility in judicious hands, and under a variety of circumstances can be employed with the utmost benefit. Its effects in promoting absorption have already been mentioned; and, in cases of obstinate stricture, it has been employed with much advantage, producing more speedy relief than any other means that we can use in our surgical treatment. Not only do these observations hold good in stricture of the urethra, but also in some severe cases of stricture of the rectum. I might here detail the method of employing this agent; but I am always most willing to enter into a personal explanation with any of my Profession, upon this or any other subject that will benefit or promote science.

Indolent ulcers, and even scrofulous sores, frequently result from the want of a proper nervous energy in the part; a want of tone in the nerves to produce a power sufficient to cause them to heal and promote a healthy action. We know that scrofula is a peculiar action affecting the lymphatic vessels and their glands; these parts are the immediate seat of this complaint; but let us look deeper into the cause, and I firmly believe that we may trace it to the nervous system; if so, have we not it in our power to benefit such cases by electro-galvanism. My experience warrants this opinion, and my observations clearly lead me to believe, that great and permanent benefit may result in a number of hopeless cases that are in this great metropolis. Ulcers may have a modified current passed through their whole surface, even if ever so extensive; and medicinal agents may, if necessary, be employed by the same means, which will produce the utmost benefit. By the aid of electricity, we have been able to decompose a solution of sulphate of copper and restore it to its primitive metallic state; we see this in the electrotype, and I look forward to a period when we shall, by similar means, be able to produce some greater and even more advantageous results upon the human frame, bestowing permanent and lasting benefit upon the afflicted sufferer.

In cases where it becomes advisable to stimulate the more minute fibrillæ of nervous filaments which are distributed upon the surface of the skin, arising from the main trunks of nerves connected with the deeper seated branches of a part, it can be accomplished with much advantage. In cases of obstruction to the performance of any natural function, electro-galvanism will be most serviceable in stimulating the nervous action, and thus restoring the organ to a state of health. Medicinal agents do much in the treatment of disease; but electro-galvanism will do more, and produce a more decided result, and a much more permanent advantage may be looked forward to from its proper application.

In cases of sciatica, after blisters, colchicum, morphia, warm baths, acupuncturation, and where all the usual remedies have failed to give relief, electro-galvanism may be safely recommended with every chance of success; benefit will be felt even after the first or second application; and the patient will solicit a repetition of this agent, as affording the greatest relief.

15, Harley-street.

ON THE OXYDE OF SILVER.

By SIR JAMES EYRE, M.D., Physician to the Women and Children at the St. George's and St. James's Dispensary.

In an Essay* which was published by me in 1845, with a view of attracting the attention of the Profession to the curative powers of a then comparatively new remedy, namely, the oxyde of silver, I brought forward numerous proofs of its efficacy, which had occurred to me during the previous three years; and, now that four more have elapsed, I am anxious to record briefly my increased and complete confidence in the above-named preparation, and to endeavour, by stating the success which I have met with, to persuade my medical brethren that this most valuable combination on all suitable occasions, and which, I feel no hesitation in stating, will prove alike advantageous to their patients, and to their own individual reputation. During the last seven years, I have employed it in upwards of a thousand cases, in private and public practice; in fact, whenever a legitimate opportunity presented itself, and I have been successful beyond my earliest and most sanguine expectations! In instances where there has been inordinate secretion, or hæmorrhage from mucous surfaces, febrile action being slight, I have employed it with the greatest advantage; it would not, however, be in accordance with truth to assert that disappointment will not sometimes occur, for, alas! there is no catholicon in medicine; but

* Practical Remarks on some Exhausting Diseases. Churchill, Princes-street, Soho.

I may remark that, in the cases of dyspepsia, gastrodynia, and pyrosis, there exists no such prophylactic; and in hæmatemesis, hæmoptysis, chronic menorrhagia, and hæmorrhage from the intestines, no medicine can compete with it as an astringent and sedative; and this my prolonged experience permits me confidently to re-assert. Nothing, I feel assured, can now alter my opinion, an opinion carefully and anxiously formed;—and if medical practitioners will not give the oxyde a trial, they will neglect it to their own loss. If, however, it should not effect, in the majority of instances, all that has been said in its praise, *if properly prepared*, it will be the fault of the administrator, and not of the medicine.

In the essay above alluded to, I have pointed out those cases in which its exhibition is most appropriate, and, therefore, do not consider it requisite now (though fully prepared to do so) to lengthen this article by a recital of more, my object being solely to arouse attention to the usefulness, and thus to increase the reputation of an invaluable preparation, the curative powers of which are not yet sufficiently known.

In conclusion, I may remark, that the blackening of the skin, through the administration of the oxyde, about which some senseless outcry has been raised, *has never once occurred in my hands;* and, therefore, this, the *only* objection which has been urged against it is futile, and scarcely worthy of being taken into consideration, since the evil alluded to can only arise from the abuse; that is, the too long continuance of, and not the legitimate use of the remedy.

Lower Brook-street, March 5, 1849.

RESEARCHES ON INVOLUNTARY SEMINAL DISCHARGES, AND THE DISORDERS ATTENDING THEM.

By H. J. M'DOUGALL, Surgeon, Fellow of the Royal Medical and Chirurgical Society; formerly House-Surgeon to University College Hospital.

HISTORICAL NOTICE.

The history of the disorder of which I propose to treat, dates as far back as the time of Hippocrates. Although, during the middle ages of medicine, involuntary spermatic discharges were confounded with blennorrhagia, and other so-called venereal affections, and their true nature was unknown, the following quotation, from the works of the "father of medicine," will show that, more than two thousand years ago, he observed the complaint, and described it with his accustomed precision.

Hippocrates says, (a) "Dorsal consumption arises from the medulla; it affects chiefly newly-married people and libertines. They are free from fever, and eat well; but they lose flesh. If you question them, they say they feel a sensation as of ants descending from the head along the back. *When they pass water, or go to stool, they pass much fluid semen*, and generation does not take place. They have discharges during their dreams, whether they sleep with a female or not. On walking, or running, especially if ascending, they experience suffocation, debility, weight in the head, and noise in the ears." It is thus evident that, although the followers of, and commentators on, Hippocrates, either passed the disease over altogether, or confounded it with something else, that original thinker and observer was not only aware of its existence, but had remarked many of its peculiarities. In passing, I may remark, that Hippocrates ascribed the disease almost entirely to sexual excesses,—probably by far the most frequent cause of it at the period when he lived.

Celsus speaks of involuntary seminal discharges in the following terms: (b)—"There is also a disorder affecting the private parts, too great a flow of semen, which so occurs without venery, without nocturnal dreams, that, after a time, it may consume a man with tabes."

Aretæus confounded spermatorrhœa with mucopurulent urethral discharge, as is evident from his description of the disease, which he states occurs in females as well as in males. According to Aretæus,(a) "The semen flows away, nor is it capable of being suppressed even during sleep; whether the man be asleep or awake, the discharge is kept up; nor is there any sensation of it." Further on, he describes the effects of the disease on young men, whom, he states, "it makes to become of senile appearance, slothful, enfeebled, timid, dull, silent, imbecile, wrinkled, inactive, pale, whitish, effeminate, chilly, averse to food, with heaviness in the limbs, and torpor of the legs, impotent, and languid in all things." The first of these quotations describes blennorrhagia, the second, spermatorrhœa; but he applies both to the same disease, and evidently does not understand the difference between the two affections,—an error which has been followed by many after him.

Galen, in the fifth chapter of his sixth book, "De Locis Affectis," describes a "continual and involuntary emission of semen" as gonorrhœa.

Moschion says, that "gonorrhœa is an emission of semen without desire."

Spachius(b) states, that "gonorrhœa differs from nocturnal pollutions in two things: in one, because the pollution is always attended with some imagination, gonorrhœa without any lust; in the other, because gonorrhœa affects men constantly, but pollutions only at night."

Cœlius Aurelianus (c) describes "gonorrhœa, that is to say, an escape of semen, forasmuch as it happens without tension of the private part, an involuntary and constant escape of semen." He considered also, that pollutions were only a slighter degree of gonorrhœa.

Rufus of Ephesus states, "that nocturnal pollutions disorder men more than coitus; because when a pollution happens to a man oppressed with sleep, and his powers asleep, it more oppresses and more affects that man."

Fabricius ab Aquaspendente (d) describes gonorrhœa as a "continual flow of semen, to which neither desire, nor pleasure, nor stiffness (erection), is joined. Its causes are acrimony or thinness of the semen, whence it is unable to be contained in its vessels."

Actius (e) says, that "the stomach becomes deranged, all the body becomes weakened, the patient becomes pale, thin, and dried up, and his eyes hollow."

Sanctorius (f) adds to this that the disease disposes to calculus, diminishes the natural heat, and brings on weakening or loss of sight.

Lommius, (g) in his commentaries on Celsus, remarks, that "frequent emissions of semen relax, dry up, weaken, enervate, and cause a crowd of evils."

Tulpius, (h) a celebrated physician at Amsterdam, says, "not only does the spinal marrow waste, but all the body and mind equally languish, and the man perishes miserably."

Ambrose Paré (i) expresses himself as follows.—"Some have hitherto thought that clap (chaudepisse) has something in common with the gonorrhœa of the ancients; but they are very different one from the other, as you may see by this treatise; for gonorrhœa is an involuntary flow of semen running from all parts of our bodies, to the genital organs, caused by the resolution and paralysis of the retentive faculty of those parts, as stated by Galen at the end of Book VI. de Locis Affectis, or from too great an abundance of blood and seminal matter within the body, which not changing into fat and increase of body, takes its course towards the genital organs. On the other hand, clap, (chaudepisse,) or scalding of the urine, is a sanies which comes from the penis of a yellowish colour, sometimes greenish, at others sanguinolent, approaching the quality of pus, badly formed, and of bad smell, with an acrimony which very frequently eats and ulcerates the canal for the urine, making erection of the penis and of the genital organs painful, because, in the said erection, contraction takes place like a particular spasm; witness the patients, who say they feel as if there were a cord which draws the penis downwards," &c. And again, at page 35 of the same edition, speaking of discharges from the female, he says: "But the flow of gonorrhœa, or of semen, is very different; it is always whitish, and suddenly produces thinness and great debility, with a bad colour in all the body; also at its discharge it excites a slight titillation of pleasure." This great surgeon, therefore, although still much in error respecting involuntary seminal discharges, evidently made one step towards the truth, and established the fact, that clap and true *gonorrhœa*, in the strict sense of the term, meaning involuntary seminal discharge, are not one and the same disease.

Tauvry (a), a French anatomist, in a work translated into English, and published in London in 1701, amongst other questions, proposes the following: "Why a debauchee voids drops of seed when he goes to stool or makes water?" This he answers as follows:—"The seminal vessels are much enlarged by frequent amours; so that, upon the least constriction of the cisterns of the seed, there ensues an involuntary emission. Now, when one goes to stool or makes water, the sphincters shorten themselves, and squeeze the parts to which they are knit. We are not, therefore, to think it strange, that, on such occasions, some drops of seed are voided by such persons, since the shortened muscles constringe the seminal vessels and the prostates which they cover." This is, as far as I can discover, the first recognition, since the time of Hippocrates, of the different modes in which diurnal pollutions occur.

Hoffman (b) has seen, "after long-continued nocturnal pollutions, not only the strength lost, the body weakened, and the face pallid, but also the memory impaired, a constant sensation of cold in the limbs, the sight obscured, and the voice hoarse." "All the body," he says, "becomes destroyed by degrees; the sleep, broken by unpleasant dreams, does not restore, and the patient experiences pains similar to those felt after having been bruised by blows."

Boerhaave, whilst denying that a *constant* discharge of semen can take place, falls into the opposite error of supposing that the semen never can be discharged without producing an agreeable sensation. (c)

Gaubius, however, one of Boerhaave's pupils, admitted, that the semen might escape without any sensation.

Morgagni, (d) as the following quotation will show,

(a) περι νουσων, B. § μ θ.

(b) "Est etiam circa naturalia vitium, nimia profusio seminis, quod sine venere, sine nocturnis imaginibus sic fertur, ut, interposito spatio, tabe hominem consumat."—*Celsus de Medicina*, lib. iv. c. 21.

(a) De Causis et signis acutorum et diuturnorum morborum; libri quatuor: De curatione acutorum et diuturnorum morborum: libri quatuor: Edidit, Johannes Wigan, Oxoniæ, 1722.

(b) Israelis Spachii, Gynæciorum: Argent. 1597, page 272.

(c) Acut. Mort., lib. iii., cap. 18.

(d) Opera Chirurgica Hieri Fabritii ab Aquapendente; Francofurti, MDCXX., page 1,022.

(e) Actius: Tetrabiblion iii., serm. iii., cap. xxxiv.

(f) De Medicina Statica, &c., sec. vi. aphor. 15, 19, 21, 23, 24.

(g) Lommius, Jod. Commentarii de Sanitate Tuendâ. Amst. 1761.

(h) Tulpius Nic. Observationes Medicæ. Amst. 1685.

(i) Ambroise Paré, Œuvres de; Lyon, MDCXLI, livre xix., cap. 16.

(a) A New Rational Anatomy, &c. By Daniel Tauvry, a Member of the College of Physicians of Paris. Made English from the Third Edition, revised, corrected, and enlarged by the Author. Illustrated with Sculptures. London: Printed for D. Midwinter and Thomas Leigh, at the Rose and Crown, in St. Paul's Churchyard. MDCCI.

(b) Hoffman Frid. Consultationum et Responsorum Medicinalium Centuria Prima. Francof. 1734.

(c) Prelectiones ad Institut., quoted by Tissot.

(d) Morgagni: the Seats and Causes of Diseases Investigated by Anatomy. Translated by B. Alexander, M.D. London: MDCCLXII. Book iii. Letter xxiv. Art. 16.

distinguished the discharge of clap which he called gonorrhœa, from seminal discharge, although he admitted that the latter might take place without erection, venereal excitement, or sensation. "How did it happen, then, you will say, to be asserted, with one common voice as it were, that there was a disorder in the prostate gland and the seminal caruncle? Without doubt because, as they did not doubt, at that time, but the humour which drips down in a gonorrhœa, if legitimate, is uninfected semen; so they did not doubt, if the gonorrhœa was a spurious one, but the discharge was of semen contaminated with the venereal miasmata. But afterwards some of the physicians began to suspect, that what flows from the urethra, in a legitimate gonorrhœa, is not always real semen; as they saw that many did not grow so thin and become enervated, as they must, in course, have done from so great a quantity of humour being discharged, and for so many years together, as frequently happens, if it were real semen. And, indeed, we see into what an emaciated state and dejection of strength, they fall, who discharge the semen in consequence of lascivious dreams very often and for a long time together. Some of these persons I have known who, having received no advantage from remedies, and fearing lest they should be hurried into a fatal atrophy, determined, by a kind of happy thought, to tie the penis round about with a band of soft leather under the very margin of the corona glandis, so that, as long as the penis did not become rigid they should feel no inconvenience from it; but when it began to grow rigid that it should immediately create an uneasiness, and the danger of emitting the semen be removed by their being roused from their sleep. Moreover, Boerhaave proceeded further than the suspicions of these physicians led him, as he expressly denied that he had ever known true semen to be discharged without a venereal tentigo, either sleeping or waking; so that it must be a very extraordinary disease indeed, wherein this fluid is spontaneously discharged, or without any sensation. He, therefore, judged the discharge to proceed from the prostate gland. However, I do not say these things because I believe that the semen is never discharged without venereal cogitations; for I believe that, where the edges of the small foramina through which the semen descends into the urethra are eroded or very lax, or where the semen itself is very watery, it may flow down without any lascivious idea, as happens to some from the injection of a pretty warm glyster, or from discharging the intestinal fæces when very hard; except in the former, that which is discharged is always in such small quantity, and of such a kind, that it is not so absurd to account for it from the prostate gland, by reason of its peculiar nature, and of its being always in small quantity; and in the latter it can never be from the vesiculæ seminales. But, as I know that this does not happen on every occasion, as was formerly supposed, so that it does happen sometimes is out of my power to deny."

Haller, (a) speaking of the course of the semen, in his Elementa Physiologiæ, has the following passage:—"A while ago a man most skilled in these things denied that the semen is ever poured forth without venereal erection. If eve. very lecherous men have passed any of their semen with the urine, or during great endeavours at voiding the bowels, that might have come from the prostate, or there might have been disease in those organs. Truly, if nature should have freed herself from the semen without erection and venereal convulsion, it does not appear that so many inconveniences should arise from it when retained. But it seems, that in the living man, the semen is rather poured into the vesicles, by reason of the vesicle readily opening to the liquor sent in, compared with the impediment from the narrow duct suddenly bent, and its narrow-framed mouth." And again: "Lastly, in great tumults of the nervous kind, the semen is emitted without pleasure or consciousness, in epileptics, or those otherwise convulsed, from irritated nerves; also from arsenic, and in suspicion of witchcraft; lastly, in that kind of convulsion which arises from debility in hypochondriasis, and from blood lost, and in a man dying from spasmodic colic."

Sauvages, (a) in his Nosology, defines gonorrhœa to be "a dripping of a seminal or puriform fluid from the urethra, of either sex, or from the vagina of the female." He describes seven kinds of gonorrhœa, and, as I consider the passage interesting, I shall transcribe it here. "1st. *Gonorrhœa pura*, or simple gonorrhœa,—a flow of semen, by drops, from the urethra, in men, without dysuria or desire, nor depending on impure connexion. Such the abuse of beer excites, (which may be cured by a drink of brandy,) a warm clyster, or horse exercise in those in whom there is plenty of semen in the vessels, and the disposition to its discharge is not inconsiderable. But this occurrence is fleeting, and of no importance; nor does it obstruct generation. But the gonorrhœa which passes away habitually is a momentous evil, and obstructs generation: this happens from the excretory mouths of the vesiculæ being relaxed or eroded; moreover, from the repeated abuse of these organs, as happens to filthy masturbators, most of whom are unable to retain their semen afterwards, and pour it forth, without sensation, during evacuation of the bowels. This happens also from repeated virulent gonorrhœas, otherwise acquired and cured as regards their virulence. 2nd. *Gonorrhœa libidinosa*, — an involuntary flow of semen, frequently repeated, without erection, with intense desire. This differs from satyriasis and priapism, by the deficiency of erection; from emission during sleep by the same defect, and also by its occurring during waking. 3rdly. *Gonorrhœa oneirogonos*,—nocturnal emission,—an involuntary and frequent ejaculation of the semen, with desire and erection, excited by libidinous dreams. From frequent and untimely emission of semen many diseases arise, but chiefly among hypochondriacs,—such as asthenia, tabes dorsalis, sterility, anorexia, sleeplessness, epilepsy, loss of memory, hypochondriasis, amaurosis, flatulency, pallor, &c. 4thly. *Gonorrhœa syphilitica,—chaudepisse,—gonorrhée virulente*,—is that which comes on after impure connexion, with pain in making water at first. 5thly. *Gonorrhœa spuria*, is a discharge of pus, or purulent mucus, from the corona of the glans and from the prepuce, arising from impure connexion. 6thly. *Gonorrhœa balani* (Balanitis) affects the prepuce, without any syphilitic virus. 7thly. *Gonorrhœa leprosa*. Whether gonorrhœa be simple or pure, or depending on leprous poison, others may determine." Sauvages has also described the slightest form of spermatorrhœa under his next head, "Dyspermatismus."(b) "*Dyspermatismus serosus*" he defines to be, "the ejaculation of watery semen, unfit for generation, which is the most frequent cause of sterility in man. Very watery semen is poured out during coitus, and that very abundantly, and with very imperfect and momentary erection."

Frank (c) distinguishes true gonorrhœa, or seminal discharge, from blennorrhagia, which he calls medorrhœa. The following is his definition:—"Gonorrhœa is a flow of semen, or of an analogous humour, diseased, or continual, and by drops, (complete,) or occurring without perfect erection of the penis, and with little or no stimulus of desire, from time to time, (incomplete.)" He then goes on to describe nocturnal pollutions, and the progress of the disorder, until it reaches the point when, from the presence only of a female, or from an obscene idea, an emission takes place without pleasure, and spontaneously. He notices also, "which the god-like founder of medicine understood," that some discharge copious and liquid semen when they pass urine or fæces." In speaking of the causes, he enumerates those which produce morbid sensibility of the organs, and notices the connexion between morbid sensibility and debility. Frank, however, falls into the error of most of his predecessors, in imagining that there can be a *continual* flow of semen, as well as in believing, that a *similar discharge takes place in the female*.

(a) Haller Elementa Physiologiæ, lib. xxvii., sect. 3, § vi., Semen in Vesiculis.

(a) Sauvages: Nosologia Methodica, Classis Nona; Fluxus. Ordo iii. Serifluxus. § xxx. Gonorrhœa, tom. ii. p. 401.

(b) Loco citato, §§ xxxi. par 8.

(c) De curandis hominum morbis, lib. iv. De profluviis, ord. iij. gen. iij. gonorrhœa.

CASE OF MORBID IRRITABILITY OF THE EXCITO-MOTORY SYSTEM, GIVING RISE TO SYMPTOMS SIMILAR TO CHRONIC TETANUS.

By WILLIAM BIRD HERAPATH, M.B. Lond., Bristol.

Mr. A. L., aged 26, a lawyer's clerk, of pale complexion, spare habit, with dark hair; married, and the father of three children, is the subject of this case, Feb. 20, 1847.

History.—About nine years ago he was thrown from a horse and received a blow on the occiput, which produced slight concussion of the brain.

Two years subsequently he first felt the symptoms of his present disease.

It then showed itself as a slight stiffness in the fingers and thumbs, with some distortion; there was a peculiar and very unpleasant crawling sensation in the face. The next attack was more severe, and it was induced by over-fatigue; having walked thirty miles in a hot day. Fomentations relieved him, and sleep ensued. In the morning he was able to resume his usual avocations. About Whitsuntide, 1841, he had an attack of cerebral congestion, attended with headache, vertigo, &c., which was removed by venesection, and after a fortnight's treatment he recovered. In the autumn of this year he had another slight attack of the stiffness and quivering in the face, which disappeared in a day or two upon taking a few doses of purgative medicine. From the autumn of 1841 to the winter of 1845 he was perfectly free from these troublesome symptoms; during this period he held a situation which obliged him to take more active out-door exercise, and to this alone he correctly ascribes his health.

In the spring of 1846 he again had an attack, but more marked in its severity. Aperients, and a temperate abstemious diet, persevered in during some weeks, restored him to health. In the autumn it again returned, and "has never thoroughly left him since, although constantly taking aperients." About six weeks ago he was seized with the most violent attack he had ever experienced. The hands, legs, face, stomach, and bowels were all affected with spasm; this continued the whole day. He was bled to 18 oz., and well purged, and in a few days he could resume his work. "In this attack the right wrist was rigidly bent outwards, the left inwards, the legs quite extended, and the toes bent downwards; the fists were tightly clenched." He has subsequently had several fits precisely similar, but they have not lasted so many hours, and the degree of rigidity has not been so great. After each attack he invariably experiences a continual trembling or twitching in the hands; cramp in the feet and calves often follows them. Constipation during wet or cold weather invariably induces a paroxysm. Errors in diet will often do so. Some years ago he had the venereal disease; of which he was cured by a professional man, and no secondary symptoms followed. Before marriage he occasionally had seminal emissions during sleep, and since then he has too unrestrainedly indulged in sexual gratifications.

His sister was afflicted for one year and a-half previously to her death, with a very similar complaint; it at length became true epilepsy. During the three weeks prior to her decease, she became speechless.

I was first called to Mr. L. on Feb. 20, 1847. He was then suffering from a continual twitching of the minute fibrillæ of the interossei muscles on the dorsal aspect of the hands, more especially of the abductor indicis. The fingers were alternately very slightly approximated towards the median line of the hand, and then abducted from it. The fibres of the flexor primi internodii pollicis were similarly affected; consequently, the first joint of the thumb twitched backwards and forwards constantly, uncontrolled by the will of the patient. The fibrillæ of the orbicularis palpebrarum were also thus

acted on, and the quivering of these muscles was very evident.

He told me that these symptoms were always *premonitory* of a severe attack of muscular spasm, which, unless relieved by appropriate treatment, prevented him from following his employment, and gave him great pain, anxiety, and suffering. These attacks of rigidity lasted for several hours, and then left a stiffness and soreness in the muscles for a day or two. The muscles of the forearms and legs were those chiefly affected. It was a *constant state of contraction*. I had not time to inquire into the history previously given, but requested him to write it for me, when I would afterwards peruse it at leisure. Having explained to me the benefit he usually derived from brisk purgation, I prescribed a dose of this description; and imagining the symptoms present to resemble chorea, I ordered 2 scruples of sesqui-oxide of iron every four hours during the day. By this treatment, the attack was parried for ten days. On the 3rd of March he sent for me in haste. He was in bed, complaining of violent pain in the arms, hands, stomach, and head.

The fingers of both hands were strongly flexed and rigid; the phalanges were bent on the metacarpus; the carpus was flexed on the forearm; so stiff and rigid were the flexor muscles that they resisted every effort on my part to overpower them; and these attempts gave great pain to the patient. The quivering previously described had left him completely, and was replaced by a state of *tonic spasm*. (Cheirismus of Marshall Hall.)

The face was swollen, puffy and red, the conjunctiva suffused; the facial muscles were not affected with spasm; he complained of no stiffness in the neck or jaws. The pain in the head and face he ascribed to the effect of his other sufferings.

I directed a brisk purgative to be administered immediately; warm fomentations to be applied to the limbs, and occasionally frictions with some oleaginous substance to relieve the spasm. A blister to be placed between the scapulæ, and a strong stimulating liniment, composed of croton oil and turpentine, to be well rubbed in along the spine night and morning.

4th.—Better to-day; but he did not get relief for several hours. The affected muscles are very stiff and sore. The blister has not yet risen.

7th.—Another attack threatened him to-day, but an ipecacuanha emetic got rid of it like magic.

9th.—The attack came on to-day as strong as ever; an emetic having failed in preventing its accession. The *rigid spasm* continued eight hours without intermission. The effect of full nauseating doses of antimony was tried, but it had no influence on the spasm. More benefit was derived from the purging, induced by a dose of turpentine and castor oil taken early in the attack. Morphia was given at bed time and repeated every two hours until sleep was produced.

10th.—Decidedly better. The stiffness is very slight, but the peculiar twitchings continue. To go on with the oxide of iron, and to use seidlitz powders as a constant aperient.

14th.—He continued pretty well until to-day, when finding symptoms of another fit, he sent for an emetic; it greatly relieved him, and also acted as an aperient. The attack was postponed in consequence. The blister to be kept open with ceratum cantharidis. A good deal of irritation from the liniment has been present during the last three days.

15th.—The paroxysm came on to-day in spite of the thorough cleansing of the alimentary canal yesterday. I was sent for at 8 a.m.; he had been in rigid spasm since half-past 6 a.m. Cramps in the legs were present in addition to the usual symptoms, with great flatulence of the stomach. I ordered an anti-spasmodic mixture of the carbonate of magnesia, compound spirit of ammonia, tincture of assafœtida with peppermint water every two hours.

16th.—He expressed great satisfaction from the mixture prescribed yesterday; it allayed the spasms and relieved the subsequent soreness.

17th.—Quite well to-day—free from the spasmodic twitchings. To continue the mixture, and to take the tonic powders twice a day.

24th.—To-day I was again summoned. I saw him in company with a medical friend. For the first time since my attendance he complained of a stiffness in the jaws; he could not open his mouth; slight trismus; the orbicularis oris was affected also; the arms and legs were rigid as before. Brandy in small and repeated doses relieved him in this attack; it was given on account of the pain in the stomach and bowels; the latter had been opened twice previously to my visit. I ordered an anodyne at bed-time.

25th.—Much better, had a very comfortable night, slept well, and directly after the pills. I now advised him at once to give up his employment, and to leave Bristol, if possible, to obtain a situation in the country; and if it offered a chance of obtaining daily exercise out of doors so much the better. I also directed him to use castor oil as a frequent aperient, and to regulate the dose according to its effects. If this were not sufficiently active, to use enemata of warm water and gruel, with or without oil according to circumstances. I prescribed some morphia and hyosciamus pills as occasional anodynes. I gave him special directions concerning his diet; to avoid everything he had found to disagree with him even in the slightest degree, and when at a loss to consult me by letter.

I met him in town a month afterwards; he had not suffered at all since leaving Bristol; he had obtained a situation in the office of a country solicitor, and was never in better health. Mrs. L. had remained here.

June 10, 1847.—His wife called on me a few days ago to thank me, and report progress; her husband still enjoyed excellent health, and he had not had one attack, although fourteen weeks have elapsed since he last called me in. He had now very little trouble with his bowels; the change of air appeared to relieve the tendency to constipation.

A CASE OF STRANGULATED FEMORAL HERNIA TREATED SUCCESSFULLY BY THE OPERATION RECOMMENDED BY MR. GAY.

By P. L. BURCHELL, M.R.C.S., Kingsland-road.

Elizabeth Cranfield, of 5, Carter's-rents, Cooper's-gardens, Hackney-road, aged 69, a charwoman, not overburdened with adipose tissue, the mother of ten children, a widow for the last twenty years, had enjoyed a good state of health, till, during some extra exertion, about eight years ago, a femoral rupture was produced on the left side. Since that period, she has occasionally been much troubled by the protrusion, although it has always been reducible by her own efforts with more or less difficulty. Bowels usually regular. Habits temperate.

After a descent of the hernia, on the afternoon of Sept. 21st, 1848, she was seized at six o'clock the following morning with violent pain in the region of the navel, extending down the left side of the abdomen to the seat of the tumor, which she observed to be larger on this than on any previous occasion; vomiting soon came on, and, as her friends became alarmed, I was sent for. I saw her about nine o'clock, and found a femoral hernia, of the size of a pullet's egg, on the upper and anterior part of the left thigh, exceedingly tender to the touch, as was also the abdomen in its vicinity, and slightly tympanitic; the pulse was quick and wiry, countenance anxious, skin hot and dry; she vomited stercoraceous matter almost incessantly; and bowels not relieved since the previous evening. She complained of feeling very bad and sick, and of pain, chiefly being of a dragging kind, around the navel.

As the reduction of the hernia could not be effected by the ordinary means, and the symptoms rapidly became very urgent I determined to divide the stricture as early as possible, which I did about ten o'clock, with the kind assistance of my friend Mr. Gay, in the presence of Dr. Catherwood and other gentlemen. The operation performed in this case was that recommended by Mr. Gay, a most admirable description of which he has since published in his treatise on "Femoral Rupture." My patient being completely under the influence of chloroform, I made an incision about an inch in length to the inner side of the tumor, midway between it and the spine of the pubis, its direction being obliquely downwards and inwards, commencing over the inner part of the femoral ring; the superficial fascia having been divided, the finger easily reached the seat of stricture, situated, in this instance, chiefly at the border of Gimbernat's ligament, which, together with a few fibres in front of the neck of the sac, I partially divided with Turner's knife (a concealed bistoury). Slight pressure was now made upon the swelling, and it was completely and easily reduced; the lips of the wound were brought together and dressed in the ordinary way; scarcely a drop of blood was lost; the patient had been perfectly unconscious of pain; the bowels acted three times during the day without medicine; the wound healed kindly in forty-eight hours; and she recovered without any bad symptoms. A small abscess, however, formed a few days after the operation in the vicinity of the incision, arising, I believe, from the want of cleanliness and attention on the part of the nurse, which, on being opened, discharged itself and healed.

My patient remains quite well at the present time.

February 27, 1849.

HOSPITAL REPORTS.

[From our Dublin Correspondent.]

RICHMOND SURGICAL HOSPITAL.

CANCER OF URINARY ORGANS.

Dr. Hutton has lately had under observation two cases of malignant disease, situated in the urinary apparatus, both of which presented characters of interest. In one instance, the left kidney was the organ affected; it was of great size and unusually located, being placed high up in the left hypochondriac region, behind the false ribs, so that it exactly occupied the ordinary position of the spleen, and was liable to be mistaken for an enlargement of that organ. In the other case, the carcinomatose degeneration was confined to the bladder. It occurred in a pale weakly-looking man, aged 55; and the symptoms he principally complained of were, burning pain along the penis and across the hypogastrium in voiding urine, which was passed frequently, fifteen or twenty times in the course of a night, and without difficulty. The urine was of a dark brown colour, containing coagula of blood; it was alkaline, depositing a thick tenacious sediment containing pus globules, and crystals of triple phosphate. The quantity of urine passed at a time was very small, and could be contained in a large-sized egg-shell Upon examining the prostate, Dr. Hutton found an elastic tumor in the situation of the middle lobe; but there was no enlargement of the lateral lobes; and the tumor which was detected, was found, after death, to have been a portion of the morbid growth. No tumor could be felt above the pubis; there were no diseased lymphatics in the groin; and what particularly added to the difficulty of the diagnosis, was the benefit which, on various occasions, appeared to be derived from treatment. Cupping the sacrum, and administering decoction of buchu, or analogous preparations internally, would cause the pus and blood to disappear almost completely from the urine, and relieve the pain altogether during some days. According to the man's own account, the disease commenced about sixteen months ago; previous to his admission into the Richmond Hospital last November he first perceived bleeding from the urethra, and this symptom in time became worse. After making water, he said, the blood would flow in a full stream attended with great pain and straining. By degrees, the excessive hæmorrhage diminished; the frequency of micturition increased up to the time that he first came under Dr. Hutton's observation. This man died on the 13th of February, exhausted by suffering, diarrhœa, and hectic fever.

The bladder, of a very small capacity, was found the seat of extensive cerebriform disease, ulcerated and ragged internally. Dr. Hutton expressed his regret at the *autopsies* of the two cases we have described, that the urine had not been particularly examined for nucleated cells, as he conceived it possible that some of the cerebriform structure being softened and broken down, might have been washed away by the urine. No carcinomatose appearance was presented by any other organs.

WHITWORTH HOSPITAL.

ANEURISM OF BASILAR ARTERY—RUPTURE—DEATH BY APOPLEXY.

BY DR. GORDON.

John Dowd, aged 35, a tailor, was admitted into the Whitworth Hospital, on Thursday, Feb. 1, with paraplegia, and paralysis also of the right upper extremity and the right side of the face. The respiration was slow and stertorous; his pulse was very feeble, but not accelerated; he seemed perfectly insensible, could be aroused with some difficulty, but again immediately relapsed; he had ptosis of the right upper eyelid and dilated pupil on the same side, but both pupils acted under the stimulus of light; the lower extremities were very cold, and the faculty of sensation over the entire surface, but particularly the right side, was very much diminished; the urinary bladder was distended, and his evacuations were passed involuntarily; when roused and interrogated as to the seat of his suffering, he occasionally lifted his left arm to the left side of his head.

The account which his friends gave of his illness was, that for the last twelve months he had been complaining of frequent and severe pain in his head, with a sense of weight over his temples and vertigo; his sleep had become much disturbed, and he had frequent chills and slight rigors. He found it difficult to describe his state, and latterly he was looked on as somewhat childish.

About a fortnight ago the headache became more severe, with increase also of the fits of vertigo; he became more confused and inactive.

On last Saturday night, when he returned from his work, he complained of great cold and shivering, with uneasiness in his forehead and indistinct vision; he saw this night the flame of two candles instead of one.

On Monday he was observed to speak thickly, and to stagger when attempting to walk; he said he was afraid to go out lest the police might arrest him for drunkenness.

On Tuesday, double vision was again very well marked; he saw double the number of windows which existed; but this double vision was confined to the right eye. On this day he had also coldness and numbness of the right side of the body, and complained that he had not full power of it.

On Wednesday, he seemed rather better; but the partial loss of power of the right side continued. His appetite was very good, but his speech continued to be indistinct, and his expressions were very childish. Between three and four of that day he was suddenly seized with a convulsive fit; these fits returned frequently during the night, and in the intervals he was in a semicomatose state, and breathing with deep stertor.

In this state he was admitted into Hospital. The coma gradually increased, but was at times interrupted by fits of delirium and excitement. The breathing was abdominal, and accompanied with deep stertor,—the pulse 132, and very feeble.

On Sunday, Feb. 4, a most profuse perspiration broke out over the entire body. He then lapsed into profound coma and expired.

On removing the calvarium, the veins on the upper surface of the brain were found congested. There was a considerable effusion of blood at the base of the brain. The extravasation was found principally above the arachnoid, *i.e.*, between it and the brain, and passed down between several of the convolutions, separating them to some extent.

There was also more serum than natural in the lateral ventricles. The extravasation was found to have occurred from the rupture of a small aneurism, which had existed at the base of the brain.

The tumor had arisen from the upper part of the basilar artery, about half an inch from its origin, and contained some coagulated blood. The other arteries of the brain were perfectly healthy.

PROGRESS OF MEDICAL SCIENCE.

IRELAND.

(From our Dublin Correspondent.)

DUBLIN OBSTETRICAL SOCIETY.

A meeting of this Society was held on Thursday the 1st of March;

DR. MONTGOMERY in the Chair.

URETHRITIS IN THE FEMALE.

Dr. M'Clintock detailed the histories of two cases of urethritis in females. One of these patients was a lady in the fourth month of her twelfth pregnancy, who had been suffering from this affection of the urethra for two months, and had tried a variety of means for its removal, prior to his seeing her. The other patient was a poor countrywoman, who had given birth to five children, three of whom were removed by craniotomy, in consequence of a large osteosarcomatous tumor within the pelvis. The symptoms in both cases were nearly identical, and were as follows:—Intense burning pain during each act of micturition, accompanied with much straining and bearing down. There was no discharge from the vagina, nor any evidence of disease of this canal or of the uterus. The urine of each, examined in the ordinary way, seemed healthy and free from albumen. Looking at the meatus urinarius, the mucous membrane of the canal was seen to be in a highly vascular and swollen condition, so as to form a considerable tumor at the orifice. This when touched was exquisitely sensitive. Having satisfied himself as to the pathological state of the parts, he commenced the treatment. In the first case, he began by trying astringent local applications, such as alum, zinc, and lead washes; and these failing to produce any beneficial effect, anodyne lotions of various kinds were next used, but with no better result; lastly, he applied directly to the part a strong solution of lunar caustic, but neither did this bring about any improvement in her condition. It then occurred to Dr. M'Clintoch to make trial of copaiba, which we know exercises a very marked influence upon the mucous membranes generally. He accordingly commenced with three capsules of the balsam in the day, and increased the number to four per diem. This treatment at once produced the most decided improvement; so that after she had taken eighteen capsules she was entirely freed from her torturing complaint.

In the second case the complaint was of six week's standing, and, without waiting to try the effects of any other remedies, he at once commenced the use of copaiba capsules in the manner just described, and with a like satisfactory result, as a perfect cure was established before she had finished the contents of the box. A subsequent examination of the urethra, showed that it had re-acquired its natural healthy characters. In commenting upon these cases, Dr. M'Clintock very clearly pointed out how they differed in their symptoms and pathological nature, from gonorrhœa, from vascular tumor of the meatus urinarius, and from thickening of the cellular tissue surrounding the urethra,—a disease first described by Sir C. M. Clarke. Lastly, he alluded to Dr. Ashwell's chapter on "Chronic Urethritis," in the last edition of his treatise on female complaints, which is the first work containing a description of it. The extremely incontrollable nature of the disease described by Dr. Ashwell, which almost set any treatment at defiance, inclined Dr. M'Clintoch to entertain suspicions as to whether the cases he met with could have been of the same nature as his; and yet that they really were instances of inflammation of the urethra he established beyond any manner of doubt. In order to reconcile these conflicting results, he could only suppose that the form of the complaint seen by him was of a milder and more tractable nature than had come under Dr. Ashwell's care; or else that the inflammation had been limited to a part of the canal only.

Up to the present time, both the above patients have continued in excellent health, and had no return of their truly painful malady.

SCOTLAND.

[From our Edinburgh Correspondent.]

EDINBURGH ROYAL INFIRMARY SURGICAL HOSPITAL.

REMOVAL OF A TUMOR OF THE UPPER JAW, BY MR SYME.

Mary S—l, aged 45, servant, admitted Feb. 20. Two years ago observed a slight swelling beside the canine tooth of the upper jaw, on the right side. This was accompanied by looseness of the tooth, which was shortly afterwards extracted. A small vascular tumor projected from the cavity, and has continued gradually to enlarge till the period of her admission. She has no pain in the tumor, and only feels uneasiness when pressure is made over the antrum. When the tumor was about the size of a nut, caustic was applied to it, and since then its increase has been more rapid.

She is a very healthy-looking countrywoman, and there is nothing to be observed as remarkable in her appearance, except a slight fulness of the affected side of the face. On examining the mouth, however, a vascular-looking tumor is seen projecting downward in several directions. The largest lobule extends under the hard palate, but is not attached to it. The tumor altogether seems to be about the size of an egg. The antrum feels enlarged and thickened.

Feb. 24th.—The superior maxillary bone was removed by Mr. Syme to-day, with the exception of the floor of the orbit, which not being involved in the disease was allowed to remain. The tumor completely filled up the antrum, but was not adherent to the walls of the cavity. A single incision from the malar bone down to the angle of the mouth was sufficient for its removal. For obvious reasons chloroform was not administered to the patient. The tumor was found to be fibro-cartilaginous in its structure.

Feb. 27th.—The stitches were removed to-day, and the whole incision has united by the first intention.

March 3rd.—This patient continues to go on favourably.

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THE MEDICAL TIMES.

SATURDAY, MARCH 10, 1849.

"Doubtless the pleasure is as great,
Of being cheated, as to cheat."

As with the silent lapse of time manners insensibly change, and the habits of society glide

into new moulds and forms, partly the result of the ordinary circle or revolution which the phases of all human fashions undergo, and in part, also, the effect of the gradually expanding progress of discovery; so is it with the respective departments of the great branches of human knowledge, which, in a word, may be said to proceed from one common parent or trunk, however diversified in the remote character they ultimately display, and in which they appear specially to concentrate. With the accumulation of years, they undergo incessant modifications, often, however, unconsciously repeating as novelties the discarded theorems and rejected problems of preceding eras; but, withal, they advance in a line, which though sinuous in its form, and ofttimes widely tortuous in its direction, curveting away from the main course, is, nevertheless, continuously in the direction of the great—the clear—the unerring zenith of universal Truth.

These *diverticula*, if we may so name them, of the great onward march of the discovery of truth, are but as resting-places, whence the mind, discursive, tries the security of the ground it has measured, explores attentively the several relations of the objects which it has been surveying with the whole circle of their connexions, and, assured of the solidity of its superstructure, proceeds with conscious vigour in the further hopes of the expansion of its powers, and in the enlargement of the unlimited boundaries of knowledge.

To the truly philosophic mind no inquiry can be more exciting than that of tracing the gradual march of progress in the different sciences, from the earliest dawn of their record to the present eventful period. Nor is such an investigation a matter of mere idle speculation, for it is one pregnant with the deepest and most invaluable instruction. In unfolding to us the errors of the past, it becomes a beacon to all our future speculations; and, in confirming the accepted truths or propositions of the preceding class of observers, it secures a more enlarged field for the extension of future observations, and presents a more firm basis as the substratum on which the further progress of inquiries into the phenomena and laws of nature is hereafter to rest. Connected thus, or rather indissolubly linked with the past, that inquiry becomes the index, and even casts the mould, of the future.

Medicine (employing that term in the widest and fullest acceptation of the word) supplies an illustration of our subject-matter, in, perhaps, a more complete degree, than any other science with which we are acquainted; and this, too, whether as respects the rude and elementary character it assumed, when mankind first became cognizant of it as a branch of human knowledge, or the widely diffusive range of the facts which it now embraces, with the allied groups of subjects which reflect and receive mutual light from it, as well as regards the mode in which it was studied, and the fashion after which it was generally practised. To this last topic we shall restrict our observations at present, as, indeed, the other is of too comprehensive a nature to admit even of a general summary, within the limited space to which we are necessarily confined. And our remarks will be restricted merely to the causes of the prevalence of quackery, or the irregular practice of the healing art.

As early as the period of Celsus, it was undoubted that the study of medicine constituted only a portion of a general branch of scientific education or literature; and he subjoins a very sound reason why it was so:—"*Scilicet iis hanc maxime requirentibus qui robora corporum suorum quieta cogitatione, nocturnaque vigilia minuerant.*" Thus, obviously, the study of the Science of medicine, intimately associated with literature, would seem to have originated principally with that class of individuals who had abstracted themselves from the natural health-invigorating pursuits of the fields and of rural life, for which they had exchanged the bustle of commerce, and the din of the city; but in that exchange of their physical condition, prudently foresaw that their new mode of life and existence required to be corrected and modulated, so that every compensation and every possible equivalent might now be brought to bear in favour of the civilised state of human society. Happy would it have been for the more enlightened moderns had such principles influenced their plans for building, and for laying out the public and private dwellings in their cities; and still more fortunate if they could have enjoined a knowledge of some of the rudimentary principles of health, as implied in an acquaintance with the common laws of physiology, based on the history of the general structure of organic bodies, and their positive relations to the material elements of the world, in which they are destined to live and move.

Without, then, extending our remarks to those circumstances in the nature of the healing art itself, as professed by properly educated men, and which may be supposed (indirectly, doubtless) to favour the prevalence of, and almost countenance quackery, let us briefly consider whether the mind of the people is sufficiently instructed, so that it can be held competent to form an opinion thereon. Herein, we conceive, rests the root and origin of the evil—*want of education*—sheer, downright ignorance on those personal topics which ought to form the fundamental basis of the knowledge of every one, however hardy and iron-knit his frame may be, and whatever may be the sphere of life he is destined to fill. The baneful influence of superstition, in remote eras, spread its *incubus* weight on almost every department of knowledge, and Medicine did not escape being involved in its meshes. As man emerged from Superstition's trammels, Reason resumed its sway, and the language of the savages, even of our own times, points to the medical character, by the not inexpressive term of the *Mystery-man*. Blended as the science of healing internal diseases was in the remote ages of history, immediately preceding the fabulous era, with the profession of the minister at the altar, and, more recently, the art of curing injuries and wounds being conjointly practised by the barber-surgeon, it was not to be inferred that mankind generally had any very accurate notions of the real method of the healing art; and still less was it to be credited that the vulgar and unlearned, the laborious peasant and indefatigable artizan, would follow other counsel when invalided or sick, than what superstitious practices might enjoin, or the talisman of a word might suggest.

In this mode—first, the belief of supernatural influences co-operating and ruling in the cure of different maladies—secondly, the natural tendency in numerous affections to subside gradually into perfect health, after certain intervals of time—and, thirdly, the firm conviction in the minds of many of the lower orders of a species of fatalism as to the cause, progress, and terminations of disease (which was well evinced in the opposition shown by many on the attempt made to introduce inoculation, as well as vaccination, as a means of diminishing the ravages of that most foul disease, the small pox; even your Turk, to the present hour, displays the same decided fatalism and stoical indifference, under illness, to the issues of life or death)—a certain distrust as to the value of medicines was naturally enough engendered in the public mind; and like all the weaker traits of humanity, has enjoyed the full force of hereditary transmission, and is ever ready to be blown up into a *flame*, when the popular feeling is exalted into a *ragé* (as they express themselves in Paris) whether the devotees of *the quackery* submit to the passes of a Mesmer, to the digestion in cold water at Preisnitz, the vapour baths at Carlsbad, swallow wholesale the bushel pills of one quack, or patiently acquiesce in the excoriations inflicted by another.

Thus it would seem to be established that there is a connexion—natural, shall we say?—between our weak humanity and the attractions of quackery; between the fascinations of the serpent that bewitches to cure, and the victim that precipitately throws itself on its fang; for in no other light do we hold the delusive hopes these charlatans parade before the minds of the unlettered many, and even (we may say, ofttimes) beguile and entrap those whose education ought to have taught them better. But though we offer this apology, if it can be so called, for the connexion, it cannot be supposed, for an instant, that we would have it justified;—such an idea is alike remote from our pockets as it is from our principles; for of all the delusions which enwarp the better judgment of man, there is none greater that feeds on his very vitals—than the charm of the medical charlatan, whether he offers a specific for one kind of ailment, or, more liberal, supplies one universal in its character. Our readers will now be prepared to consider the remedy we would suggest for this state of the public mind as regards medicine; and, without enlarging further on the topic at present, we may remark, that it essentially consists in a sound *physical* education for the great mass of the people, as distinguished on the one hand from religious education, and, on the other, from the prevalent range of secular education. Unquestionably, therefore, if any knowledge of a terrestrial nature be considered paramount before all others, it must be the knowledge of the great, and wonderful, and mysterious mechanism of our own bodies; for, unless the organic functions be in just order and proper trim, it is vain to expect sound health, the mental powers

will proportionally flag and languish, and the sickly frame exhibit how much the organic functions constitute the substratum of the animal.

THE IMPORTANCE OF PSYCHOLOGICAL EDUCATION.

It appears from returns which have been made, and upon which reliance can be placed, that there are more than 23,000 persons of unsound mind in this country. Of these, nearly 5,000 belong to the upper and middle-classes of society, and about 18,000 are paupers. It is evident, therefore, that mental diseases constitute an important item in the afflictions of mankind; and that it is the duty of those who practise the healing art, to make this class of maladies their especial study.

It is a singular circumstance, however, in the history of medicine, that the psychological education of medical men has been grossly neglected. The maniac has been esteemed the outcast of society; the very eleemosynary Institutions which *have been* formed for his reception, *have been* converted into prison-houses, where the unfortunate sufferer has been doomed to have his existence embittered by the restraints and cruelties which science, falsely so called, has imposed. A better day has, however, now dawned upon him, and his condition, once viewed as hopeless, is considered as capable of amelioration. Science and humanity, notwithstanding, have been slow to do full justice to the mental sufferer; and, while our private and public asylums especially set apart for his reception, have been reformed, the young Medical Practitioner has been almost precluded from studying mental diseases under the same advantages as he does other maladies.

It is only within a very few years that our national Lunatic Asylums have been opened for the purpose of allowing Medical Pupils to study there; and to this day none of our licensing Corporations institute any examination as to the knowledge which candidates for their diplomas possess of the nature and treatment of insanity. Psychological education in this country has, in consequence, made but slow progress amongst the great body of Medical Practioners; and till a more enlightened system is adopted we cannot expect this department of medical science to make those advances which it ought.

Notwithstanding that the public Lunatic Asylums of this country were closed so long against Medical Students, it appears that the Governors of some of them entertained the benevolent idea of admitting young Physicians to visit them, and freely to observe the treatment of the patients confined. This was the case at St. Luke's in this Metropolis, and Dr. Beattie, the physician to the hospital, about a century ago, "offered to the perusal of the gentlemen who honoured him with their attendance the reason of those prescriptions which were submitted to their observation." From the supineness of the members of the Profession, or from other causes, this liberal offer was neglected, and the benevolent intentions of the founders of the hospital were frustrated.

But while psychological education was stagnant in our own country, it began to make progress in some of the Continental States. In France the celebrated Pinel commenced a course of lectures on insanity in his own house, and his pupils enjoyed the advantage of seeing patients brought from the Salpêtrière for the purpose of illustrating his observations. Esquirol trod in the footsteps of this great man, and at the same hospital gave clinical instruction to a large number of students from 1817 to 1826. At Bicêtre Ferrus lectured, and subsequently M. Lemet; at Lyons, M. Bottex; at Montpellier, M. Rech. The fame of these illustrious physicians extended throughout Europe, and attracted from different parts Medical Students. M. Baillarger also in Paris commenced a course in 1841, and, like Pinel, illustrated his cases with patients selected from the Salpêtrière.

In Germany, also, the study of mental disease began to make progress so far back as 1818. At Berlin, Horn gave Lectures on Insanity, then Neuman, and, subsequently, Ideler. In other cities young Medical Men were admitted to see the patients in the Lunatic Asylums, and they thus acquired a practical experience which eminently fitted them for usefulness in after life.

The example thus set to the Physicians of our own country was not lost upon them, and Sir A. Morison was one of the first to deliver a course of Lectures on the subject of Mental Diseases. We believe he commenced these in the year 1823, and they were open, not only to the members of the Profession, but "to such other gentlemen as felt an interest in the subject." To Dr. Sutherland belongs the merit of delivering, in the Hospital of St. Luke, lectures and clinical instruction to medical pupils, after this Institution was re-opened, in 1842, for the admission of pupils. Dr. Conolly, at Hanwell, has also been indefatigable in his efforts to promote psychological education. He has been almost constantly engaged, for the last seven years, in giving lectures on Insanity, at the Institution with which he is connected; and his fervent zeal to promote this department of Medical Instruction is evident in his gratuitous course of instruction to the Profession, and in affording to its members frequent opportunities of seeing the patients in the Hanwell Asylum.

It is through the exertions of Dr. Webster that Bethlehem Hospital has been opened, so that pupils may study mental diseases within its walls, and the Governors now present a free ticket for six months' attendance on the medical officers annually to two pupils educated in the schools attached to the Hospitals of St. Bartholomew and St. Thomas.

While, however, the Licensing Medical Corporations do not require of candidates for their diplomas proofs of their having studied mental diseases, and institute no test to ascertain their proficiency in this department of learning, it is hardly to be expected that the great body of Medical Men will devote that attention to it which its importance demands. It is time that this defect was remedied; and we call upon the rulers of our Colleges without delay to use the means at their command to induce the rising generation of Medical Men so to study mental diseases, that in after life they may be enabled to treat them as scientifically as they do those which more immediately affect man's physical frame.

CITY NUISANCES.

Any subject of discussion involving the health, comfort, and welfare of a city containing, with its suburbs, about three millions of inhabitants, needs no apology,—therefore we return once more to our London nuisances, and more especially to Smithfield, "the Great Nuisance." In this matter let us strive, all we can, to bring the centre under sound sanitary regulations, and the influence will extend, as the circle extends, until the whole country shall participate therein. Far more liberal than our old favourite, Falstaff, certain Solons of our City Corporation, at their late meeting, not only passed a decided negative upon even entertaining the question of removal, but also gave us "reasons;" which we shall endeavour to illustrate and digest as we proceed. First premising that we are more generous than they, for we accuse no one of unworthy personal motives; although, in answer to their assertion, that the Press had been bribed—bribed, indeed! and for such a purpose—we might ask, whether the occupation of one, would not lead him to court the favour of his brethren of Newgate Market; of another, whether his proximity to the scene might not warp his judgment, &c. &c.; but we turn from such trifling, and enter upon the "reasons." The first speaker commenced by denying, as it were with an oath, the necessity of the removal; and declared that, so far from Smithfield being a nuisance, it was the very spot where health was to be found—its sinks and stinks, in other words, being the savoury and salient points whence to extract the vital vigour — the richer the more racy. The second said, that it was his practice to recreate and recruit the health of any part of his ailing family by sending them to Smithfield, whence they speedily drew strength like an ox. And a third asserted, that he regularly sent there, thirteen or fourteen of his children (a goodly number) to inhale life's primest blessing. But we refrain from further following these gentlemen, rejoicing that our taste lies in another direction; and will go on to give a few statistical details, gathered from a pamphlet written by "John Bull," who, naturally enough, roars most lustily against the procrastinating cruelties of Smithfield.

"No greater injury to the public health can exist, than that of slaughtering in the heart of large towns; in London, especially, on account of the very close and dense accumulation of houses and population, the mischief is more particularly obnoxious to general reprehension. Accordingly, among the rolls of Parliament of the year 1380, a Petition occurs from the inhabitants of Smithfield and Holborn, against the butchers of Butcherhall-lane, praying that the butchers might be forced to kill their beasts at 'Knyghtsbrigg,' or elsewhere, away from the annoyance of the people, under penalty not only of forfeiting such animals as might be killed in the 'Butcherie,' but of a year's imprisonment. The prayer of the Petition was granted, and its penalties enforced for several reigns. Bruyere, a French writer, states, that

Charles IX. of France had by an order of the 15th February, 1567, consecrated the principle that abattoirs, or public butcheries, should be placed at the extremities of towns; and goes on to say, that 'Paris offered, till lately, in many much-frequented streets, the spectacle of slaughtering-houses and melting-houses joined to the shops of retail butchers, streams of blood and heaps of offal infected the air and offended every sense. The continual passage of animals impeded the general circulation of the city; and the oxen, often overheated by severe driving, escaped from their conductors, spreading terror and destruction around them.' Happily for the inhabitants of Paris these evils have long since been put an end to, and that great city is celebrated for having the most extensive and best regulated abattoirs in Europe. We have seen, with much pleasure, the extremely clean and even neat appearance of these public slaughter-houses; we have seen the expeditious manner in which the animals have been killed, without the least unnecessary pain or excitement, and must confess that the comparison with our own system was a subject of wonder and regret. A witness before the Committee of the Commons in 1828, was asked if he was sufficiently acquainted with the arrangements at Paris, to tell the Committee whether or not inconvenience was felt there during the summer season, from the meat sustaining an injury by being carried from the abattoirs to the places of sale? To this he replied,—'The French butchers *invariably say not.*' 'The butchers of Paris were *opposed to it at first?*'—'*Yes.*' '*How are they now?*'—'*Every one in favour of it.*'

Again, in the year 1837, a Report of the Committee of the House of Commons described Smithfield as "a nuisance of the worst description, *retained by a monopoly* in the heart of the Metropolis." And one witness estimated the loss from the bruises inflicted upon the animals brought to market at 100,000*l.* per annum, caused mainly by the circumscribed space, not more than about five acres, into which these animals have to be compressed; for, while the inhabitants of London have increased in the manner we have described, Smithfield, its only cattle-market, has remained comparatively stationary. It is not only used as the area for cattle on Monday and Friday, as well as for the sale of horses and donkeys, than which no exhibition, as at present practised, can be more indelicate or disgusting; but for hay and straw on other days, excepting Wednesday, which is the only *open* day; and to give some idea of the nature of the thoroughfare on this day of comparative quiet, "John" says it has been proved that upwards of 1500 carts, wagons, and other vehicles passed through in one hour!

A word as to the Californian character of the subject: several of the speakers at the late Corporation meeting said that, so far as regarded the pecuniary benefit, they wished they were well rid of the market; but our friend Bull says, that, by a Bill brought into Parliament so recently as in the year 1835, they actually attempted, in order to enable them to add only *three quarters* of an acre to Smithfield, to tax the *graziers and farmers* with the payment of 72,000*l.* by means of additional tolls levied on all stock sent to market. We think this tells a tale relative to the corporate value of Smithfield. And Bull also says, that, in the year 1731, there were only 88,304 head of cattle sold, and 480,000 sheep; and that, in 1846, no less than 210,757 head of cattle, and 1,518,510 sheep were brought to market. Can anything stronger than this be advanced? Let Sir Charles Knightley rejoice in the healthful breezes of his own rich Northamptonshire domain, where he may be a great man; but let not his name nor his opinion be quoted as worth the trimming of a bullock's tail in reference to the sanitary condition of the City of London. Cleanliness, we have been taught by theologians of old, is next to godliness; and if so, and for no other "reason," we say, let Smithfield Market be removed.

If the Corporation should have any difficulty in determining what to do with the "sad vacuity," we dare say our talented contemporary, the *Builder*, would serve them at a pinch. We can well imagine its columns glowing with the recommendation of fountains, and groves, and walks,—a place, indeed, long wanted in the City,—where the citizens and their children might have an open and free space for recreation and enjoyment; or otherwise adorning it with colonnades, columns, and all kinds of architectural beauties.

VOLTAIC ELECTRICITY.

Mr. Alfred Smee, F.R.S., has just announced to his friends a most important discovery in animal electricity. By a test, which he terms "Electric voltaic," he has satisfied himself that the terminations of the sensor nerves are the positive poles of a voltaic circuit, whilst the muscular substance is the negative pole. The sensor nerves are the telegraphs which carry sensation to the brain, and the motor nerves carry back volition to the muscles. The brain he infers to consist of five distinct voltaic circles, which, upon theoretical grounds, he believes to be sufficient to account for all mental phenomena. Mr. Smee has already succeeded in making artificial electric fish, and artificial muscular substances.

NAPHTHA, A NEW ANÆSTHETIC.

Latterly, Professor Simpson has been experimenting with light coal tar naphtha, in order to ascertain the extent of its anæsthetic effects. That which he has used is, we believe, a purer form of the naphtha used for the solution of caoutchouc in our large manufactories of caoutchouc articles. Chloroform can scarcely be used by some of our poorer country medical practitioners, or in veterinary practice, in consequence of its expense. It costs, in most localities, about eighteenpence an ounce. The lighter coal tar naphtha is sold for about a penny an ounce. We have seen some of the experiments which Dr. Simpson has performed with naphtha, and they were most perfectly successful. The persons who breathed the vapour were rapidly and completely anæsthetized. Its only advantage appears to be its unusual cheapness. It is by no means so pleasant to inhale as chloroform; but the actual effects of both agents appear to be nearly the same. The coal tar naphtha employed by Dr. Simpson was from the large manufactory of Mr. Tennant, at Bonnington. It is a complex fluid containing a number of pyrogenous oils.

Dr. Simpson believes that, in all probability, the active anæsthetic constituent of the naphtha is benzole, an agent with which he made a variety of experiments fifteen or eighteen months ago, at the time when the anæsthetic effects of chloroform were first discovered by him.

In the Number before the last of the *Medical Times*, Mr. Nunneley, of Leeds, has described common coal gas and Dutch liquid as "new anæsthetics." The anæsthetic powers of both these agents were described by Dr. Simpson during the course of last year, in our own, and in other Medical Journals of the time.

CHICORY.

We perceive by an article in the *Times* of Saturday last, wherein mention is made of our comments on the nature and use of Chicory, that the attention of that powerful Journal has been again given to the subject of the adulteration of coffee, with reference also to the fiscal regulations relating thereto; and we have no doubt, that, once having taken up the complaint, the means will be found to work out the cure, so that the public and its exchequer may both be benefited.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—Feb. 27, 1849.

J. M. Arnott, Esq., President.

A paper was read, entitled—

"*Reports and Statistical Tables of the Cases at the Cholera Hospital of St. Giles in the Fields, in* 1832. By the late Richard Pinckard, M.D., Physician to the Bloomsbury Dispensary, and Fellow of this Society. Communicated, with Explanatory Remarks, by J. S. Streeter, Fellow of the Society.

"Cases of Asiatic cholera appeared in the parish of St. Giles in the Fields in the commencement of 1832. A Cholera Hospital was established for their reception, and placed under the superintendence of the late Dr. Pinckard and Mr. Walker.

"Between the 15th of February and the 29th of May, a period of fifteen weeks, 131 patients were received into the Hospital, or treated at their own habitations. The *First Table* gives the number of cases admitted, and the number of deaths, in each of these fifteen weeks. The average number of cases per week was about 9; the number of deaths about 4·5. The total number of cases was 131; and o deaths, 69. No cases were admitted between the 29th of May and the 26th of June, when the disease re-appeared. During the succeeding sixteen weeks, (from the 29th of June to the 16th of October,) as is shown in the *Second Table*, 394 cases were admitted, and 182 deaths occurred; the average of cases per week being 26, and of deaths 12. The *Third Table* gives the duration of the cases, whether fatal or not fatal. The *Fourth Table* gives the numbers of deaths and recoveries amongst patients of different ages and of either sex respectively. The proportion of recoveries was, in both sexes, the same, but varied much according to the age of the patients; being highest between the ages of 10 and 20,—lowest in the most advanced period of life. In the *Fifth Table*, the cases preceded by diarrhœa are distinguished from those not preceded by that symptom; and the proportion of recoveries is shown to have been much greater amongst the cases of the former class. In the *Sixth Table*, 124 cases, observed during the spring months, are divided into those admitted 'in the stage of impending collapse,' and those admitted 'in the state of actual collapse;' and the proportion of deaths and recoveries in each of these classes of cases is shown; the numbers of the patients recovering, 'with fever,' and 'without fever,' as well as the numbers dying, 'in collapse,' 'in reaction,' and 'in fever,' being likewise specified. The

Seventh Table gives the same facts with respect to 381 cases which occurred in the autumn; and the *Eighth Table* is a summary of the same facts with respect to the whole number of 505 cases. It is shown, that of 237 admitted in the state of 'impending' collapse, only 34 died, (21 in collapse, 7 in re-action, and 6 in fever,) while 203 recovered. (175 without fever, 28 with fever;) and that, of 268 admitted in the state of actual collapse, 219 died, (195 in collapse, 15 in re-action, and 9 in fever,) while only 49 recovered, (27 without fever, and 22 with fever.)"

The President observed, that now was a good opportunity for gentlemen to make communications on this most interesting subject.

Mr. Streeter: To the paper which has just been read, I would add, that the first four cases were reported by Dr. Pinckard himself to the Board of Health, and may be found in the 3rd Number of the *Cholera Gazette*. As a Fellow of this Society, I should like to direct attention to the fact of the very large number of cases of cholera which occur without premonitory diarrhœa, and to the greater danger attending those cases; for I do not think that sufficient attention has been paid to those cases in which collapse has been ushered in without previous symptoms, and to those in which there is scarcely any vomiting and purging, and which I believe are universally fatal. There are a large number of cases in which the disease is ushered in by but without previous purging and vomiting. With reference to treatment, I think a distinction should be made between cases of collapse originating directly from the poison, and those in which premonitory diarrhœa has existed for several days, as in those cases the collapse is due partly to the poison, and partly to the exhaustion from serous evacuations. After the most careful observation, I have come to the belief, that there can be no recovery except where nature or art sets up the action of vomiting; and, as to remedies, any attempt to check that process, checks the mode which nature adopts to overcome the disease. We are constantly told, in reference to the progress of a patient, that all is well "except the vomiting;" but I believe that the only successful way to produce re-action is to encourage the vomiting, and sustain it at intervals, regulated by the powers of the patient. With respect to the agent for the production of this, it seems to me to matter little; mustard, and salt, have been favourite remedies, and certainly the latter, from its known harmlessness, is worthy of adoption; cold water, also, will in many instances succeed, but there have been cases in which it will not keep it up, and then powerful stimuli must be employed.

Dr. Peacock: My attention has recently been attracted to the subject of the paper, in consequence of some of the children removed from Mr. Drouet's establishment to the Royal Free Hospital having been under my care. 155 children were received into the Hospital, of whom eighty-four were affected by the epidemic, thirty were attacked with severe vomiting and diarrhœa, and nine with symptoms of decided cholera. Of those cases which commenced with diarrhœa, only two went on to collapse. In many cases, there could not have been very decided premonitory symptoms, as it was my custom to ask questions on this point three or four times a day. I examined three out of the fatal cases, and found extreme congestion of the brain; the lungs imperfectly expanded; the large vessels very much engorged, as well as the right auricle and ventricle; the blood was partially coagulated. The alimentary canal contained the peculiar white pultaceous material; there was paleness of the mucous membrane; and a very largely developed condition of the glands; the ducts of the liver free from bile; the gall bladder tolerably distended with viscid bile, and the urinary bladder was contracted. In only two instances, among the children, was there any cramp, though generally, in cases of diarrhœa, they complained of pain in the bowels. In reference to the treatment, I do not feel able to recommend a specific course. My aim was to arrest the disease in its incipient stage when the state of collapse occurred. A blanket soaked in hot water, and sprinkled with turpentine, was wrapped round the patient, who was then enveloped in two other blankets, and allowed to drink freely of cold water. In the case of a girl, in the state of collapse, and to all appearance dying, lying on the bed quite insensible to surrounding circumstances; her eyes closed; pulse imperceptible; temperature beneath the tongue only 88°, I determined to subject the patient to galvanic influence, and directed one pole to the neck and the other to the epigastrium; she was aroused; breathed more freely; in a quarter of an hour the thermometer beneath the tongue indicated 92°, and she recovered after a slight febrile re-action. Certainly, this method has the effect of arousing the patient, but in another case in which I tried the remedy, its effect was less satisfactory than in the case of this child. Before the children were sent into the Hospital, my views were opposed to the idea of the contagious character of cholera; but from what has subsequently come under my observation, I now entertain the opinion that it is capable, under unfavourable circumstances, of being propagated by infection. In one ward there were 87 boys, and in another 73 girls, and 14 attendants; it may, therefore, be supposed, that the place was very crowded. The children were admitted on the 5th, and the attendants were sent in on the evenings of the 5th, 6th, 7th, and 8th; during that time three or four were sent away, and others taken in their places. On the whole, there were probably eighteen or twenty attendants on the children during the first ten days or fortnight they were in the Hospital. On the 13th, indisposition commenced among the attendants; the first case was that of a man who died of cholera in the Union. Between that date and the 21st, we had eleven of them ill with vomiting and purging, and three with vomiting purging, and collapse, of whom one died. But the case did not rest here. From the first, no intercourse existed between the children in the Hospital and the Union; and after the man was taken to the Union and died, there were a number taken ill. I think it is a very striking fact, that there had been no cholera in the Union up to this time; but when communication was opened between the Hospital and the Union, then the cholera broke out in the latter place. While, also, the attendants on the children in the hospital were attacked with the epidemic, the patients and nurses in other parts of the building wholly escaped.

Dr. Webster: It was very difficult to follow the reading of the tables; but it struck me that, in the early period of the epidemic, the mortality was greater than subsequently, and also that the mortality in this hospital was greater than in any other part of England. It is also a curious fact, that though the number dying of cholera in that period was great, yet that the general mortality was less; and the same phenomena is presented now; it is very remarkable that the general mortality both of London and of the country is very much diminished.

The President: The cholera can scarcely be said to be prevailing in London now.

Dr. Webster continued: During the twenty weeks ending the 1st of February of this year, the number of deaths in London was only 23,415; while last year, it was 29,220, consequently there were fewer deaths this year by 5,805; in fact, the mortality was 24¼ per cent. more then than now. But the difference is more remarkable as to diseases of the respiratory organs. In the last twenty weeks, the deaths from this cause were 3,689, and in the same period of last year, 8,269; consequently, although enhanced by cholera, there is a diminished mortality of 4,368, or about half; so that it appears the public health has not materially suffered. Dr. Peacock has alluded to the question of contagion. My opinion is, however, rather confirmed,—that is, that it is non-contagious. Then there is another point,—whether it is a new disease. I do not think it is. I believe it may be traced in the writings of ancient authors; and my view is confirmed by one whose opinion ought to carry weight with it,—I mean Dr. Chambers.

Dr. Baly: The subject of the relation of the precursory diarrhœa to cholera is important. The question is, whether the diarrhœa is a part of the disease, and if so whether we can cut it short. As far as I have observed at Millbank Prison, the diarrhœa is of three classes: in the one, there are one or two evacuations before collapse; in the second, there is serous diarrhœa, rice water evacuations, and occasional vomiting. In both these cases, I think the diarrhœa is a part of the disease; but it seems to me impossible to stop it by the ordinary remedies. Then there is the third kind, in which at first the evacuations have not the character of rice water, and there is no vomiting or cramp. This goes on for several days, and in the early stage may be checked. The choleraic diarrhœa subsequently ensues. It appears to me that the early diarrhœa in such cases, of which I have seen several, is not a part of the disease, but predisposes to it; but this class is not very frequent; in the more frequent cases the ordinary remedies fail in cure. As to treatment of the cholera itself, I have not met with any greater success than others, and I believe that no one will succeed till a specific be found for it. We are at greater disadvantage in cholera than in typhus fever, because the effects of the typhus poison are more under our control than those of the cholera poison. Strong stimulants, I think, are of little avail, and, generally, the less we do the better. Warmth is beneficial, but not a great degree of heat; a very moderate degree of heat is certainly good. I should also recommend the administration of cold water, not for the purpose of producing vomiting, but to dilute the blood. I have found benefit from the use of chloroform, which acts as a palliative, by relieving pain, the cramps, and vomiting.

Dr. Copland: These tables afford us a kind of information which we did not before possess; and, therefore, I regard them as a valuable accession to our stores of medical knowledge. As to the treatment of cholera I believe there is much of justice in the views of Mr. Streeter; but there are certain items of treatment which have not received sufficient attention. The facts adduced by Dr. Peacock in proof of infection are also most important. Before the occurrence of the disease in this country, I investigated its nature; and, by the permission of the Directors of the East India Company, I had the inspection of their Medical Returns from 1817 to 1828; and from these I came to a conclusion contrary to what I before entertained. I previously believed that cholera was truly an epidemic; but, from the investigations I then made, I came to the inference that the disease is actually infectious. The subject of infection, in reference to cholera, is a matter of the utmost importance, and I think this country is very much indebted to the previous Board of Health, who came to the conclusion that it is infectious, and, under their directions, means were employed to separate the sick from the healthy, and thereby prevent contamination; and to this measure it is to be attributed, that the disease was so little productive of mortality in this country. A great deal has been said of the influence of exhalations in causing cholera, and the Board of Health, or rather the Board of Works, has done essential service in calling attention to the removal of the sources of these. But the mischief would be greatly diminished by not allowing the sick to contaminate the healthy. In places where these exhalations are the most abundant, the disease is more attributable to the poor congregating more together on such spots; for, as you find among the Irish and in the Scotch fishing villages, the disease did not depend so much on local sources of contamination as on the free communication of the healthy with infected individuals. In 1831, I recommended the use of warm blankets moistened with turpentine. I found them of service in young patients; but they had little effect in advanced cases of collapse and in aged adults. But other remedies deserve attention—for instance, Dr. Stevens' saline treatment, which is at least worthy of trial. I would also direct attention to various precautionary matters, but will not now further intrude on the Society.

Dr. James Arthur Wilson: I should be glad if Dr. Baly would give us some information on the saline treatment. I know that he can relate to the Society matter of very great interest, and which will be eminently useful to us in the treatment of a

disease we shall soon have to contend with. I should like to hear him on the efficiency of saline injections.

Dr. Baly: I had intended to mention the injection of saline fluids into the veins. I used this kind of remedy in six cases, and the result was uniformly death. In the first case, the effect of it was very encouraging; the patient previously appeared to me as if in his last gasp; in a quarter of an hour he breathed gently, seemed in a quiet sleep, and the colour in the cheek was natural. In no other case was the effect so marked; while in all there was a return to collapse. In two cases I employed large doses of calomel; one man had five 10-grain doses and five scruple doses, and after death it was all found in his stomach, with the exception of a small portion in the duodenum.

Dr. Peacock: The same result attended the saline treatment of the epidemic in Edinburgh.

Mr. Streeter: I think the experience of this country in the former epidemic has settled the point, that the treatment by injection of salines into the veins should be abandoned. I at one time hoped much from stimulating the skin by mustard cataplasms on the arms and over the abdomen; they reddened the skin, but produced no reaction, and this was tried in several cases. I found that, unless vomiting was produced, reaction did not occur; and this from an experience that extended over some hundreds of cases. It is, I think, important that we should treat cases of diarrhœa as if they would turn to cholera, and my prescription generally was,—1 gr. opium, 1 gr. acetate of lead, 1 gr. capsicum, 1 gr. calomel. With respect to large doses of calomel, I found no benefit arising from them. (I gave half a drachm in one instance.) I also saw phosphorus administered in two cases, and in one case a pill was found, as taken, in the stomach, and, in the other, in the appendix vermiformis.

The President called on the Surgeon of the Dreadnought.

Mr. Busk: Out of forty cases that have come under my notice, about half have terminated fatally; so that, while the cases have not been numerous, they have been very fatal, and have been generally confined to young men of muscular strength, and who had been in a condition to obtain sufficient wholesome food; the majority of them have been from colliers. In these cases I have observed a considerable difference in the type of the disease between that now prevailing, and in the previous epidemic. I refer to the greater proportional number who have not died in a state of collapse at the present time; they have generally died in a state of oppression and coma, and almost invariably with suppression of the urinary secretion. Also, in the symptoms of the disease in the state of collapse there is considerable difference; the cramps are not so severe, the coldness not so intense, and the facility with which heat is restored is much greater now than formerly. In many cases the temperature in the axilla was 96, and that under the tongue 78, showing that the blood in the lungs was cool and probably stagnating. Another difference is, the absence of perspiration, while, in 1832, the perspiration was enormous. The duration of the disease, also, was very much longer, from their not dying in a state of collapse. On the treatment, I can add nothing to the observations of Dr. Baly and others; my opinion is, that we have no treatment, heroic or otherwise, suited to control the disease: the only thing I am certain of is, that chloroform relieves the cramps, and thus has a beneficial influence in the way of relief, but it has no other control over the disease. The chief force of the disease, at the present time, seems to fall on the kidneys; no means have had the effect of inducing secretion of the urine; turpentine epithems and frictions have alike been unsuccessful. Another point is, that after the urine has been suppressed, and when it is again passed, the first is invariably albuminous; the tubuli are usually found crammed with epithelium, and the functions of the gland are thus obstructed. The great thing here is, to excite the action of the kidneys. With regard to the pathology of the disease, I have nothing particular to offer. There is an affection, however, of the large intestine which I do not remember to have seen described. It usually occurs in the transverse arch of the colon, and consists at first of congestion of a patch of the mucous membrane, which, if the case is prolonged, seems to be followed by circumscribed gangrene. In these cases especially, it would appear that bloody motions are passed; but motions of this character are not limited to them. Blood, in any quantity, in the motions, has almost invariably been a fatal sign. (The speaker here exhibited two specimens, consisting of the transverse arch of the colon, showing the simple ecchymosis and gangrene of the mucous membrane.) No doubt it must be very violent action which produces this extreme disorganization; the disease appears to depend upon the introduction of a morbid poison, which nature making an effort to eliminate, the attempt destroys the membrane.

Dr. Baly, before he resumed his seat, begged to call on a gentleman who had made chemical analyses of the blood in cholera cases, to give the meeting the benefit of his studies.

Dr. Garrod: In general, the results of my analyses have accorded with those of Dr. O'Shaughnessy. In cholera the blood is altered in a manner not found in any other disease. Its specific gravity as well as that of the serum is increased. In one patient, who had only been ill a few hours, I found the blood of a tar-like consistence, specific gravity 1081, that of the serum 1040, ten or twelve degrees above the healthy average; whereas, in ordinary diarrhœa, even when attended with profuse discharge, the weight of the serum has not been found increased. An interesting question here arises: Does the collapse in cholera arise from two causes,—that is, sometimes from the loss of fluid, and, at other times, as in cholera sicca, from simply a poisoned blood? With regard to the fibrine, I think that the alteration is rather in quality than quantity, and that it gradually becomes softer and less elastic, until it ceases to coagulate. With regard to the urea, from several examinations, I am disposed to think, that in the stage of collapse it is only slightly increased, whereas in the consecutive fever its amount becomes very excessive. The uric acid seems to follow the same law. As to the salts, I do not think they are so much diminished as stated by Dr. O'Shaughnessy; but I can hardly speak satisfactorily on this point, as my analyses are not yet complete. In one case, the blood taken during the collapsed stage was alkaline, but it afterwards exhibited an acid re-action. The stools were alkaline, the vomited matters acid.

The sitting was then adjourned.

LONDON UNIVERSITY.—MEETING OF THE MEDICAL GRADUATES.

A General Meeting of the Graduates of the University of London was held on Tuesday week last at Freemasons' Tavern for the purpose of considering, along with other matters, how the interests of the Medical Graduates were likely to be affected by the projected Medical Bill if suffered to become law. It appeared, that as long ago as March last, steps had been taken for organizing the general body of Graduates, which resulted in the appointment, by a general meeting last June, of a Committee of Graduates in arts, laws, and medicine, for effecting the general improvement of their academical position. The gentlemen thus appointed exerted themselves with so much earnestness and success as to have obtained, both from the Senate and Sir George Grey, the recognition of their claim to a much higher position in the University; and a new charter, with this object, is expected shortly to be granted. They have also obtained the assent of the Senate to ceremonials and other details of internal arrangement, calculated to give the University its due weight in public estimation.

Among the rest the special interests of the Medical Graduates were not forgotten. Finding they were carefully ignored in the proposed Registration Bill, they resolved to recal to its authors the memory of their existence, by presenting themselves before the Select Committee of the House of Commons, then sitting, and claiming a right to be heard in self-defence. Drs. Storrar and Robert Barnes were accordingly examined on behalf of the Graduates, Drs. Billing and Hodgkin, two members of the Senate, having previously given their evidence on behalf of the University generally. The evidence of these gentlemen placed the claims of the London University on an equality with those of Oxford and Cambridge, and either itself to grant licenses to practise, or that its Graduates shall be entitled to licenses from the College of Physicians without further examination, on the high ground, that the examination already undergone by its candidates furnished a far severer test of their qualification to practice than is afforded by the examinations of any other body in the Kingdom.

We cannot help remarking, that this assertion is not attempted to be denied. We were prepared to believe the fact, from our knowledge of the determination of the eminent Medical Senators of the London University, that, in their department, at least, it should not be found wanting. And our convictions have been justifiably strengthened by the high position taken by so many of the Medical Graduates both in London and in the country, in spite of the numerous hindrances to their advancement, which experience alone would enable any one properly to understand. We shall take a warm interest in the success of the just claims of the London University. It will speak little in favour of any Medical Reform, if the views of a body which has so effectually raised the standard of Medical Reform be not consulted, and its high position recognized.

The non-medical graduates of the London University have taken a very proper and spirited view of their position in this struggle. We shall conclude this article with an extract from the report furnished us of the proceedings at the General Meeting. It was attended by about 250 Graduates, many from distant parts of the country. The chair was taken by F. J. Wood, Esq., LL.D. After Resolutions had been unanimously agreed to respecting the New Charter, and the necessary arrangements connected therewith,

Dr. Tyler Smith proposed a resolution expressing the cordial approbation by the meeting of the course taken by the Committee in behalf of the Medical Graduates, and their reliance upon its continuance. Drs. Storrar and Robert Barnes had been examined, specially on behalf of the Graduates, before the Select Committee of the House of Commons, and their testimony had added greatly to the clear evidence given by Drs. Billing and Hodgkin on behalf of the Senate. (Hear.) The effect appeared in the printed minutes of the evidence; for while there was no mention of the University of London at all in the former evidence,—comprising about two-thirds,—there was not a single witness examined after them, whose opinion was not requested by the Select Committee about the University; and almost all the opinions thus elicited declared the superiority of its examinations to those of every other body. (Hear, hear, hear.)

Mr. Foster, M.A., LL.B., was especially gratified, as a non-medical Graduate, to be asked to second this resolution, as it affected every Graduate of the University, that the superiority of its degrees, in any one department, should be felt and acknowledged by all. (Hear.) He claimed for the Graduates of London the same civil rights, in all respects, as belonged to those of Oxford and Cambridge; and he held that they were entitled to it by contract and had earned it by desert.

THE SURGEONS AT THE BATTLE OF THE JHELUM.—The surgeons were at one time quite within range of the enemy's shot, and a bheestie of the 2nd European Regiment had his arm knocked off just behind where the surgeons of that corps were riding.

AT A COURT OF COMMON COUNCIL, on Thursday, the motion of Mr. Norris, to remove Smithfield Market, was negatived without a division.

REVIEWS.

A Practical Treatise on the Domestic Management and most Important Diseases of Advanced Life. With an Appendix, containing a Series of Cases, illustrative of a New and Successful Mode of treating Lumbago and other Forms of Chronic Rheumatism, Sciatica, and other Neuralgic Affections, and certain Forms of Paralysis. By GEORGE E. DAY, M.D., Fellow of the Royal College of Physicians, and Physician to the Western General Dispensary. London: T. and W. Boone. 1849.

According to the immortal bard, old age should be accompanied by honour, love, obedience, and troops of friends; but, alas! the decline of life has other accompaniments, which it is more particularly our sad lot, who wish to prove ourselves to "ancient patients, restorers of life and nourishers of age," to consider. Strictly speaking, old age has no diseases peculiar to itself. The so-called senile gangrene is a termination to a disease most frequent in the decline, but which belongs to all periods of life,—arteritis. Senile marasmus is but the manifestation of the decay of nature; and the "climacteric disease," upon which the late Sir Henry Halford laid so much stress, is an effect, and not a cause,—a result of disease, not itself a disease. Dr. Day, at page 63, defines the climacteric disease to be "a sudden and inexplicable decline of the vital powers." Yet, he adds, at page 65, "it is generally engrafted on other complaints, assuming their character, and accompanying them in their course. It blends itself with the effects of any fixed organic mischief in the constitution; takes on the appearance of any periodical irritation to which a patient may have been subject, or adopts the features of a casual disease." The real state of things is unintentionally yet ingeniously perverted in this statement. Decline of vital power is an essential concomitant upon old age. Where the *vis medicatrix* is slight, the power of malady is great; where resistance is feeble, the attack is strong; and where there is not cure there is aggravation. The unfavourable forms that disease will take in the decline of life do not require a phantom, in the shape of a sudden and inexplicable disease, called climacteric, to comprehend their nature or to explain their formidable progress. The above statement, placed in a philosophic shape, would stand thus:—"The complaints of old age assume the character imposed upon them by the decay of vital power, and this character follows them throughout their course. Any fixed organic mischief in the constitution partakes of the new features attached to it; any periodical irritation to which a patient may have been subject becomes, with the decline of vital energy, a more grave and serious complaint; and casual disease may, in the same manner, become formidable in its progress, and quickly fatal." Not, however, when there is the loss of vitality to account for such phenomena, by any sudden and inexplicable agency; but by the absence of powers, the want of which is discernible by comparing the features of the same complaint in the young or the adult, and appreciable by all the circumstances of analogy and comparison which are capable of being instituted between the same disease or affliction at various periods of life.

The medical sciences will never be emancipated from that state of uncertainty so much deplored by the philosophic Cabanis, so long as such laxity presents itself in the writings of eminent and distinguished physicians, as we are in this instance criticising. The stern, hard logic which has been introduced into the higher branches of science, the common-place, matter-of-fact sense necessitated in the ordinary intercourse of life and conduct of affairs must also prevail in the practice of medicine. The days of mysticism have gone by, and fanciful theories are as much at discount, as the dogmatism of schools and authorities. Every one thinks and investigates for himself; even the results of experience have received too many sharp questionings to be able to be contorted into fantastic shapes without danger to the whole fabric of medical knowledge. It is for this reason that we dwell more upon this slight deviation from straightforward argument than we otherwise would have done. It was very well for such men as Dr. Rush, Sir Anthony Carlisle, and Sir Henry Halford to call that a cause which is an effect, to designate that a disease which is the result of disease and of diminished vitality, and, having created a phantom, to give it a name; but for Dr. Day, one of the "young England medical school," and one of the foremost among the young blood of which we also flatter ourselves to form a part, now so happily and so forcibly infusing itself into old and decaying institutions, and he, too, mounted far on the ladder reaching to fame and eminence,—for Dr. Day to follow in their wake may be a very fashionable, but not a very philosophical, practice of medicine. But, probably, the notion was suggested by the wish to please the patient. It was gratifying to imagine that it was not decay of life that aggravated the symptoms, but some sudden and inexplicable decline of vital powers which *was* called "climacteric disease." It was sufficient that it was inexplicable, that it should not have received a name. There was plenty of time to find admission into our over-burdened nosologies, when its character and phenomena had been carefully studied and well defined. But as it is certain that, as the number of names disappear, the more we become acquainted with the true pathological character of disease, and that, notwithstanding the diversity of symptoms entailed by age, constitution, diathesis, &c.; so, in the present case, there was no want of a name for that which has no distinct existence whatever.

The diseases of advanced life are in reality, as before stated, the same as those which afflict humanity at all periods, but they are modified by the circumstances in which the organs and vital functions are placed. It appears, on referring to the Registrar-General's tables for the last five years—from 1843 to 1847 inclusive—that the total number of deaths of persons aged sixty or upwards, occurring in the metropolis during that period, amounts to 53,048. Of these, 15,136, or about two-sevenths, are recorded as dying from the effects of old age. Dr. Day very justly suggests, that, if a proper examination after death was always insisted on, the number would be wonderfully lessened, for very few die from sheer old age. But, taking these numbers as there given, there are 47,912 cases left of deaths from actual disease. Among these we find, that 12,598 are deaths owing to diseases of the respiratory organs; 6,947 to diseases of the nervous system; 3,141 to diseases of the digestive system; and 2,841 to diseases of the circulating system. Besides these, we have 1,076 recorded cases of diarrhœa, 748 of influenza, and 417 of erysipelas. Dr. Day treats, accordingly, of the different diseases according to this, their comparative frequency. From the view which we take of diseases of advanced life, and, as we endeavoured to show, in our editorial article of the last week, that death produced purely by old age rarely occurs, it is obvious that we should have preferred to consider these diseases in the light which, in this first class, the anatomical changes in the respiratory organs, and the modifications in the functions induced by advanced life, produce upon the diseases of the said organs; so, also, in regard to the modifications induced in the nervous system and its functions; in the changes in the digestive organs, and in the organs of circulation; the imperfect chylification and formation of blood, and the greater or less insulation of organs, that takes place in old age.

Dr. Day wrote, however, for the public as well as for the man of science; his treatise is on the "domestic" management of disease, and therefore he did well to separate the practical from the philosophical portion of the inquiry. Apart from the theoretical questions which we have felt it our duty to comment upon, it is indeed a work of great merit and utility. The first of its kind, it is likely to remain for a long time the sole authority in those matters of which it treats in so able and so satisfactory a manner. Besides the Profession, few aged persons will peruse such a volume without advantage. It is not only that they will find therein admirable rules for the preservation of health in declining life, and valuable general observations on the medical treatment of disease at the same epoch, but it is that, in studying the cause of disease, they will learn to avoid it. Thus, for example, what Piorry called the *hypostatic* pneumonia,—and the Profession are always ready to believe that they have found out a new disease when they have invented a new name,—is irritation and subsequent inflammation, (*pneumonia,*) induced by congestion. And that congestion is brought about, in the decline of life, by lying too much in one position. Nothing easier than to avoid this evil. A little restlessness is sometimes a good thing. So also, for example, aged persons should carefully avoid retaining their water too long; yet, on the other hand, when middle-aged or old persons get into the habit of not retaining their urine for a sufficient length of time, the bladder diminishes in size, its walls thicken, and, after a time, it will not bear the slightest degree of distention, imposing upon its possessor, as a French writer on old age observes, "la necessité de la vider a chaque instant, et deranger tous les actes de la vie sociale."

The "new and successful mode" of treating lumbago, advocated by Dr. Day, is a form of counter-irritation, said to have been introduced into this country by the late Sir Anthony Carlisle, and which consists in the instantaneous application of a flat iron button, gently heated in a spirit lamp, to the skin. Dr. Corrigan published, about three years ago, an account of some cases very successfully treated by nearly similar means. Dr. Corrigan's plan was, however, to touch the surface of the part affected, at intervals of half an inch, as lightly and rapidly as possible. Dr. Day has found greater advantages to result from drawing the flat surface of the heated button lightly over the affected part, so as to act on a greater extent of surface. The Doctor speaks so enthusiastically of the benefit to be derived from this practice, that it is evidently highly deserving the attention of the profession at large.

Synopsis of Percussion, Auscultation, and other Methods of Physical Diagnosis. By RAY CHARLES GOLDING, M.D. London: Henry Renshaw. 1849. Pp. 62.

This little book is intended not so much to teach, as to refresh, by generalization, the abstract knowledge gained by reading and experience. It consists of nine chapters and an Appendix, in which are contained—The Methods of Physical Diagnosis—a Description of Healthy Respiration, and of the Sounds of the Heart—The Healthy and Physical Signs of the Regions of the Chest and Abdomen—The Morbid Changes elicited by Percussion—Auscultation—Manipulation—Inspection—Mensuration—Succussion, and the Physical Signs of the more important Diseases. This Synopsis will prove highly useful to medical students and junior practitioners.

A Manual of the Dissection of the Human Body. By LUTHER HOLDEN, F.R.C.S., &c. Part I. London: Samuel Highley. 1849.

A good manual for anatomical students is calculated to be highly useful to them in the dissecting-room. The object of the Author in the Work before us, is to draw the attention of the student to the prominent facts of anatomy, and to teach him the ground-work of the science; to trace the connexion, and to point out the relative situation of parts, without perplexing him with minute descriptions. It is intended to publish the work in Four Parts, comprising the dissection of the arm, that of the head and neck, the abdomen and pelvis, and the leg, respectively. This First Part contains the dissection of the front of the chest—the axilla, the upper arm, front of the forearm, palm of the hand, anatomy of the back connected with the arm, muscles of the shoulder, back of the forearm and hand, dissection of the ligaments. If the subsequent Parts of the Work are as well executed as that now before us, it will, when finished, reflect great credit on the Author, and will be highly useful to the student of anatomy.

The Undercliff of the Isle of Wight, its Climate, History, and Natural Productions. By GEORGE A. MARTIN, M.D. London: John Churchill. 1849. Pp. 366.

This work, though not strictly medical, contains some interesting facts in reference to climate in connexion with disease. The Author also treats of the natural history, geology and hydrology, and the botany of the Undercliff. The volume is calculated to be highly interesting and instructive to the tourist or passing visiter, and we would strongly recommend all who have visited or intend visiting the Isle of Wight to possess themselves of Dr. Martin's excellent work.

Lameness in the Horse; with Coloured Lithographic Plates, illustrative of the different species of Lameness. By WILLIAM PERCIVALL, M.R.C.S., &c. London: Longman and Co. 1849. Pp. 271.

This work contains most valuable observations, almost in every page, on the subject of which it treats. The Author shows himself a master in veterinary science, and we strongly recommend his book to the veterinary surgeon and others who have to do with horses. The volume is embellished with ten beautifully-coloured lithographic drawings.

Sowerby's System for Purifying and Ventilating Sewers.

The plan proposed is to have air shafts, with tops for receiving the wind and throwing down a stream of pure air into the sewers; to have chimneys communicating with the sewers, to allow the impure air to escape; to supply a stream of disinfecting fluid, or a jet of chlorine gas, for mingling with and purifying the impure air as it escapes up the chimneys. The Author's system certainly merits attention.

CHLORIDE OF OLEFIANT GAS AS AN ANÆSTHETIC.

[To the Editor of the Medical Times.]

SIR,—A few days after the publication of the last Number of the *Medical Times*, Dr. Snow did me the favour of forwarding to me a pamphlet "On Narcotism by the Inhalation of Vapours;" and from Dr. Simpson I yesterday received a communication on the subject of my note to you, published in the Journal, by which I learn, that what I had supposed to be new anæsthetics had been already spoken of. Dr. Snow relates experiments he has performed on three mice, with the Dutch oil, and Dr. Simpson informed me that he has made experiments with both the substances which I mentioned: and that in the *Monthly Journal*, published eight or ten months ago, he described the anæsthetic powers of Dutch liquid. Had I been in the least aware that such had been done, of course I should not have announced these agents as new; but the facts having appeared in two journals which I never see, accounts for my ignorance of what had been done. As there is no date beyond that of 1848 to Dr. Snow's pamphlet, I am not aware of the precise date of his experiments, which originally appeared in the *Medical Gazette*; but as he alludes to those of Dr. Simpson, it must have been some time after his.

I may mention, that with coal gas my experiments were made in last July; with the Dutch liquid it was not until near the close of the year, though it was one of the substances I had long before put down for trial; but having several others at hand, and there being some difficulty in procuring the fluid, it was postponed until others had been disposed of. So far as I am individually concerned, it was to me the discovery of new agents; but these gentlemen having publicly named them, have a full claim to public priority, which I most cheerfully concede.

Dr. Simpson's paper I have not seen, not having been able yet to obtain the Journal in which it appeared; I therefore take my knowledge of his trials with Dutch oil from what Dr. Snow says, in his quotation, which is, "that its vapour, when inhaled, causes so great irritation of the throat, that few persons can persevere in inhaling it long enough to produce anæsthesia, but that he had seen it persevered with until this state was induced." While out of the three mice upon which Dr. Snow experimented, two died, and the third was not made insensible, as he supposes from the irritating nature of the vapour, an account from these gentlemen of so discouraging a character, as would certainly deter any one from using the fluid in practice. Indeed, had I seen these reports of its effects, in the hands of two gentlemen of such great experience in the action of anæsthetic agents, I should have considered them so dangerous as not to justify or render necessary any further experiments with it.

But such has certainly not been the case in my hands. I find it to be the least irritating of any anæsthetic agent which I have tried, and further investigation justifies me in repeating all I said in my notice of it. I have tried it upon many dogs and cats, young and old, in large and small doses; in no one instance have I seen any irritation caused by it, nor any repugnance to its inhalation. The animal quickly and pleasantly passes into a profound state of insensibility, and remains so. As I stated, a more death-like condition is recovered from than after chloroform, and in every instance the animals have quickly rallied and remained well, except in one where I intentionally destroyed it to observe the *post-mortem* appearances. Having ascertained the effects upon animals, I inhaled it myself, and found the action not only not disagreeable, but perfectly agreeable in every respect. My assistant, Mr. Beaumont, has taken it once, and my pupil, Mr. Morhouse, has taken it twice, on two successive evenings: both were rendered as insensible as is either necessary or safe for the performance of any operation whatever, or by whatever agent induced. In neither was there the least irritation; in fact, both begged for more before becoming insensible, and when rallying from this condition; and both were immediately well. The latter of the two, who has three times inhaled chloroform, declares the effect of the Dutch oil, both at the time of inhaling, and subsequently, to be far more pleasant than that of chloroform. I last night gave the Dutch oil to four gentlemen. In all it answered admirably; all had previously taken chloroform, and they were unanimous in declaring the oil to be more effectual, pleasant, and speedy, with less uncomfortable feelings afterwards. I repeat, then, it is an agent likely to be usefully employed; and I can only account for the unpleasant consequences in the experiments of Dr. Simpson and Dr. Snow by the supposition that the preparations they used were impure, which I imagine Dr. Simpson now would agree to, inasmuch as in the letter with which he has favoured me he says, after this notice he obtained "some more pure, and got effects exactly like chloroform." There are other substances which I have tried the effects of, and found to possess anæsthetic power,—one, indeed, far more powerful than any I have yet seen named; but lest I should again find myself anticipated, I abstain from naming them until the paper in which the experiments are related appears in the "Transactions" of the Provincial Association.

I am, Sir, yours faithfully,

THOMAS NUNNELEY.

Leeds, March 2, 1849.

P.S. Dr. Simpson informs me, in objecting to Dutch oil, "that it is too expensive, (far more so than chloroform), and it is very difficult to purify." I am not a practical chemist sufficient to determine this question; but the constitution of the fluid, and the formula for its preparation, would not lead me to form such an opinion. Neither carburetted hydrogen nor chlorine are at all expensive gases, and the process for combining them is not a complex one. That which I obtained at two different times appears to have been pure; the price charged was very much less than I was charged for chloroform when it was first introduced, at least 30 per cent. less; and if the price of chloroform has fallen considerably now that it is an article regularly made, there is no reason to suppose that of Dutch oil would not do so in the same proportion. This Mr. Bullock has promised to calculate, and inform me of.

COD-LIVER OIL.

[To the Editor of the Medical Times.]

SIR,—You will oblige by making known, or requesting some of your Correspondents to explain, the curative power, or medical essence, contained in the cod-liver oil.

It must appear strange to the public, as also to the younger members of the Profession, that, whilst the medical men cry out against quackery, and call upon Government to enact a law to do away with its baneful effects, physicians and surgeons of repute prescribe, as a panacea, a disgusting and unauthorized nostrum. After this, What is quackery?

Having witnessed the fatal effects of such empirical practice, I feel anxious to be informed upon the subject.

Remaining respectfully,

AN OLD SUBSCRIBER, M.D.

Hull, Feb. 23, 1849.

MEDICAL PROTECTION AND PERSECUTION.

[To the Editor of the Medical Times.]

SIR,—That Medical Reform is required, no one considering the grievances of the Profession can deny; that it is to be laboured for most strenuously, and sought by every legitimate means, is allowed on all hands to be commendable and necessary; that the strong arm of the law should suppress the depredations of the hordes of quacks and impostors who infest the country and injure Medical Practice, is a fact too obvious to be insisted on; but, at the same time, I think you will agree with me, there may be a just and an unjust way of bringing about this much-to-be-desired reformation. The Apothecaries' Act was a measure adapted to a by-gone day, and, beyond question, legitimate Medicine owes much to the exertions of that body in its behalf; but the power of prosecuting *illegal* practitioners must have been delegated to them under the impression it would be exercised towards ignorant quacks and presuming pretenders to the Art of Medicine; the law never could have contemplated the *persecution* (not prosecution) of the members of any Licensing Body within the United Kingdom; and, indeed, this would appear to be the universal opinion on the matter by all liberal-minded men, as witness the formation of the National Institute, to which, in the first instance, all members of the Profession are admitted, without distinction as to the College from whence their license is obtained. It would, indeed, in this enlightened age, seem rather too absurd to assume, that a Practitioner who is a member of the College of Surgeons is *incompetent* to mix a bottle of lotion for one of his patients, and, in the event of his presuming so far, render himself liable to an action for *illegal practice*; or that a graduate of the University of London, (or any other British University,) though admitted on all hands as qualified to prescribe for a *king*, would yet be acting illegally by compounding for a *pauper* a dose of calomel and jalap. That these are absurd distinctions, no longer calculated for the present day, the enlightened founders of the National Institute were well aware; and that the Apothecaries' Company have fully concurred and co-operated in their views is well known by all. How is it, then, that certain agents of the "Medical Protection Society" are loudly asserting it to be the intention of that body, in conjunction with the Apothecaries' Company, to prosecute *all general practitioners* who do not hold the license of the Hall, (no small task by the way;) let them beware how they venture to do this in the face of such a body as the National Institute, and in defiance of the universally-expressed opinion of every liberal-minded member of the Profession. According to their theory, I presume a man may be highly competent to all the exigencies of surgery,—he may be fully qualified to prescribe for "all the ills that flesh is heir to,"—but must NOT, as he values his reputation, administer a dose of salts to a beggar.

Personally, my interest in the matter is small,—I have long been in a position, that neither Medical *Protection* or *Persecution* Societies can benefit or injure; but it is not so with many highly-respected friends; and I feel confident you will be doing but justice to a well-educated and honourable class of the Profession, (although not licentiates of the Hall,) by assuring the members of the Protection Society that, in the present day, defended as all ranks of society are by an all-powerful Press, such distinctions as they seem to wish to uphold *are dying out*.

I have the honour to remain, Sir, your most obedient Servant,

AN OLD SUBSCRIBER, AND A MEMBER OF THE NATIONAL INSTITUTE.

March 6, 1849.

THE APOTHECARIES COMPANY AND THE DRUGGISTS.

[To the Editor of the Medical Times.]

SIR,—On seeing the recent decision of Mr. Serjeant Heath, as reported in your valuable Journal of the 3rd instant, in the case of the Apothecaries Company against Mr. Lobo, am I to infer from that important decision, "What is sauce for the goose is

to be sauce for the gander." If such is really the law of the land, I call upon the Company to prosecute every known druggist in England and Wales, who are *wholly and solely bonâ fide Apothecaries*, and who practise the real functions every hour of a person so denominated, under the Act 55th Geo. III., and under the very nose of the Company. Should the Company feel disposed to wage war with druggists, whilst there is much substantial evil to be grappled with, the section which clearly exonerates chemists and druggists from the penal clause of their Act, which clause, I think, the judge of the Bloomsbury Court was not aware of; if he were, he does not know that to that single clause the Apothecaries Company owe their golden monopoly. It is a well-known fact, that every druggist prescribes and compounds his medicines in *purely medical cases*; nay, and compounds all the prescriptions of all legally-qualified physicians in England and Wales; and not one apothecary in ten ever has a prescription to compound except his own; and, if the druggist were prohibited from so doing, he would be a ruined man. Thus, I say, legalise the present race as they now stand, and let the future druggists be called apothecaries, and let them be examined at Apothecaries Hall, and not be allowed to visit or prescribe. I have not the least hesitation in saying, that were I to turn informer, I could make a fortune without emigrating to California, as I could produce fifty cases per diem against the druggist, and as many against the different Members of the United Colleges of England, Ireland, and Scotland. I take it for law that 20*l.* can only be recovered in the County Court, although a defendant might have infringed the Act fifty times, as in the superior Court the judges have allowed 20*l.* for every case moved against an unqualified apothecary.

Yours respectfully,

PRIOR TO THE ACT OF 1815.

St. Alban's, Herts, March 4th, 1849.

GOSSIP OF THE WEEK.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, March 1, 1849:—John Prowse, Somerset; William Webb, Shrewsbury; Thomas Crowther, St. John's, near Halifax; Richard Skinner Henning, East Brent, Somerset; Thomas Harrison Marshall, Kingston-upon-Hull; Frederick Whitbourn, Epsom; Freeman Izod, Esher.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 2nd instant:—Messrs. Peter Allen, Smarden, near Cranbrook, Kent; George Frederick Gwyn, Long Stratton, Norfolk; John George Gibbs, Baker-street, Portman-square; John Smith, London; William Henry Johnson, Weymouth, Dorset; William Reynolds Haynes, Sussex terrace, Camden-town; and William Cooke, Gainsborough. At the same meeting of the Court, Mr. Mark Hamilton passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College; his diploma bearing date June 20, 1842.

THE ASYLUM FOR IDIOTS, PARK-HOUSE, HIGHGATE.—The Patron—His Royal Highness the Duke of Cambridge—visited this noble Institution on Tuesday last. His Royal Highness arrived at eleven o'clock, and was received by the Rev. Drs. Reed and Holloway, Dr. Conolly, Consulting Physician to the Hanwell Lunatic Asylum, and by several other members of the Board of Direction. Park-house is a capacious mansion, enclosed within its own grounds, extending over about sixteen acres; and, both from the elevated relative position, (being several feet higher than the cross of St. Paul's,) and the adaptation of means to ends, it is most admirably suited to carry out the idea of an asylum for the hitherto forlorn and hapless idiot. The house, at present, contains sixty patients, male and female, varying in age from five to twenty-three years. Most of the cases are decidedly improving; many of them, on admittance, being incapable of articulation, of the use of their physical powers, or of making known the most ordinary necessities of nature. His Royal Highness, on entering their school-room, appeared gratified and delighted by hearing them, in their own way, sing a verse or two of "God save the Queen." His Royal Highness then inspected the various dormitories, and nurseries; afterwards visiting the gymnasium, where the capable patients, under the guidance of the master, went through their usual exercises at the sound of the drum. His Royal Highness entered freely into conversation with the Rev. Dr. Reed, honorary secretary, and with Dr. Foreman, resident physician, spending an hour in the house and grounds, manifesting his intense gratification at having visited such a philanthropic Institution, and expressing his conviction that it deserved the support of the community at large. His Royal Highness intimated his intention of presiding at the Anniversary Dinner, which will take place at the London Tavern on the 28th instant.

"THE FELLOWSHIP."—The Court of Examiners of the Royal College of Surgeons have just given notice of their intention to hold a Court for the examination for the Fellowship on Monday the 2nd, and Wednesday the 4th of April next: for further particulars, see our advertising columns.

HARVEIAN ORATION.—Dr. Badeley, of Chelmsford, is appointed to deliver the Harveian Oration before the Royal College of Physicians, on the 25th of June next.

ELECTION OF A PHYSICIAN TO THE BEDFORD INFIRMARY.—At the Adjourned Meeting of the Governors of the Bedford General Infirmary, His Grace the Duke of Bedford, Grand Visiter, in the chair, the Rev. Dr. Mountain moved, and Mr. Lindsell seconded, a motion for the appointment of Dr. Paris Dick as Physician to the Infirmary, in the room of Dr. Witt, whose resignation we lately noticed. The reverend mover alluded to reports which had been circulated in reference to Dr. Witt's introduction of Dr. Dick; and clearly proved, that no unfair or improper interference had been exercised. Mr. Whitbread, the Perpetual President, then rose and proposed Dr. Lloyd, whom he highly eulogised; and spoke strongly against the principle of a retiring officer nominating his successor. Captain Trollope seconded the motion. Mr. S. C. Whitbread then proposed, and the Rev. W. Alliott seconded, Dr. Barker. Mr. T. C. Higgins said, before the Governors proceeded to vote, he would mention, that it was intended to open a subscription to procure a portrait of Dr. Witt by some eminent artist, to be placed in the Committee-room, in commemoration of his great services to the Institution; which was warmly approved. The ballot then took place, and the numbers were: For Dr. Dick, 207; for Dr. Lloyd, 59. Dr. Dick was then called in, and the Grand Visiter announced to him, that he had been duly elected Physician to the Bedford General Infirmary, an important post, filled by his predecessor with the greatest satisfaction. His Grace added: "You come here with the reputation of a kind and humane man; I am sure it will give the Governors the greatest pleasure to find that you have such a character, and that you will maintain it. I have the satisfaction of informing you that you are elected by a large majority."

APPOINTMENT.—R. Lloyd Williams, M.D., F.R.C.S., has been appointed Visiting Physician to the North Wales Hospital for the Insane.

ELECTION OF A PHYSICIAN TO THE LIVERPOOL INFIRMARY.—A meeting of the trustees and annual subscribers to the Infirmary met in the Board-room of the Institution on Monday morning, for the purpose of electing a successor to Dr. Freckleton, the retiring physician. Mr. Edward Gibson was called to the chair. Mr. George Grant proposed Dr. Turnbull for the vacancy, observing that he thought it due to that gentleman to give him the appointment, he having been for some time the Physician to a kindred and very important Institution, and having obtained the approbation of every member connected with it. He concluded with an eulogium on the skill and ability of Dr. Turnbull. Mr. Daniel Willink seconded the appointment; which was put to the meeting and carried unanimously. Mr. John Cropper proposed, that Dr. Freckleton be appointed one of the Consulting Physicians to the Institution; which was seconded by Mr. Richard Gibson, and carried with the same unanimity as the preceding one. Dr. Turnbull returned thanks for the honour that had been conferred on him, and gave his assurance that his best exertions would, at all times, be used to merit the good opinion entertained of his capabilities.

NAVAL ASSISTANT SURGEONS.—The Royal College of Surgeons of Edinburgh is moving on behalf of the Assistant Surgeons in the Navy. The following resolutions were recently adopted by this learned body. It was moved by Professor Syme, and seconded by Sir George Ballingall, Professor of Military Surgery,—1. "That the College have long regarded the position of Assistant Surgeons on board ship, as unbecoming the members of a liberal Profession, and unfavourable to the discharge of their duties." 2. "That the College have endeavoured, by petition and remonstrance, to redress the grievances of the Assistant Surgeons in respect to the wrong position which those gentlemen at present occupy, but without success." 3. That until redress is afforded, it would not be proper for the College to exercise their privilege of recommending candidates for appointments to the Medical Service of the navy." We have all along stated our conviction, that the House of Commons would not readily allow the case of the Assistant Surgeons to drop. At the same time, we indulged a hope, that the Admiralty would take such steps, with reference to the Assistant Surgeons, as would render further discussion in Parliament on the subject unnecessary; and we yet truly hope that we shall not be disappointed.

THE METROPOLITAN SEWAGE COMPANY have already laid down their apparatus for irrigating nearly one thousand acres of land; and a memorial was lately presented to the Commissioners of Sewers in their favour, signed by the owners of nearly seventy thousand acres.

THE NEW RIVER COMPANY AND SANITARY REFORM.—The *Builder* says, that the New River Company have agreed to furnish water to the whole of the courts and alleys in the City twice a-week, *gratis*, for sanitary purposes.

CHOLERA NEAR SUNDERLAND.—We learn that in the parish of Washington, seven miles west of Sunderland, and situated upon the north bank of the river Wear, seven persons were visited by spasmodic cholera, all of whom died.

EDINBURGH.—There have been 11 cases reported during the past week, viz.:—Thursday, 3; Friday, 1; Sunday, 1; and Monday, 6. Only 3 deaths have been reported, and there have been 5 recoveries.

GLASGOW.—In Glasgow the number of cases is gradually decreasing, and the deaths bear a smaller proportion to the number of cases, while the number of recoveries is on the increase.

THE CORONER FOR MIDDLESEX.—Mr. Wakley, M.P., is, we understand, confined to his residence at Harefield-park in consequence of severe illness.

UNIVERSITY COLLEGE HOSPITAL.—The Annual Meeting of the Governors, Council, and Members of this College was held yesterday, at the College, Mr. Warburton, M.P., in the chair. The Annual Report stated, that during the Session of 1847-8, 315 pupils in medicine, 252 in the arts, and 308 pupils of the junior school had entered the College, the fees paid by them amounting in the whole to 15,302*l.* 14s. The Council had, during the Session, been informed, that the existing library and lecture-rooms were not large enough to accommodate the pupils, and they had therefore engaged Mr. Donaldson, the architect, to erect premises in the rear of the hospital, in the place of the erection destroyed by fire in 1836. The basement floor was for models of machinery and drawing; and there were also two large rooms, each to accommodate 150 students. The cost of the building, which was nearly finished, would be 7,657*l.* The Committee regretted, that the funds of the hospital were not in a flourishing condition, they having lately been 3,000*l.* in debt. To meet this demand, 1,200*l.* had been raised by subscriptions. A Mr. Kennedy had bequeathed the sum of 500*l.*; Her Majesty had that morning presented them with 300*l.*, out of the estate of the late

Mr. Sawyer, of York; and there were several other sums, amounting to 1,600*l.*, which would enable them to clear the income of the Hospital from encumbrance. There were 120 beds in the Hospital, and there would soon be increased accommodation. The Committee had to express their deep regret at the loss of the Earl of Auckland, their late Vice-President, and also for the deaths of Mr. Liston and other gentlemen of note, whose talents were much missed. The expenditure of the College had exceeded its income by 500*l.*, which they had to draw from the funded stock; and though the number of the pupils had greatly decreased, they attributed that to the depressed state of the nation. The Report was received, and, after the transaction of some further business, the meeting separated.

Bethlehem Hospital and Medical Students.—After some years' consideration of the subject, the authorities of Bethlem Hospital have at last agreed to open the establishment to medical students paying the usual moderate hospital fees.

Management of the Edinburgh City Poor-house.—The monthly meeting of this Board was held on Friday week; Mr. James Grey in the chair. Mr. Henderson brought forward the following motion:—"That Dr. Crawford be called upon either to withdraw the grave charges made by him against the management of a part of the poor-house, or to specify his charges against individuals, and the cases of those alleged by him to have been sufferers, that the Board may be enabled to investigate into the correctness or incorrectness of the allegations made by him." A long, desultory, and somewhat acrimonious discussion followed, in the course of which Dr. Crawford stated, that owing to the manner in which matters had been managed, some time ago, in the Convalescent-house, the death of some infants had been caused by want of proper medical attendance; and that in one particular case, a newborn child had died from strangulation. He also stated that fifty males and females had been indiscriminately mixed together in one room, and that the scenes which had arisen from this cause were disgusting in the extreme. Ultimately an amendment proposed by the Dean of Guild was adopted. It was to the effect, that a Committee be appointed to investigate into the case of a child alleged to have been strangled in childbirth, of which Dr. Crawford had given specific notice for the first time that day. The meeting then adjourned.

Munificence.—The following magnificent bequests have been made by the late Mrs. Mary Tucker, of Bramford Speke, in the county of Devon, for medical charities, at the suggestion of Sir R. H. Inglis, Bart., M.P. The Devon and Exeter Hospital, 1,000*l.*; Barnstaple Infirmary, 600*l.*; Exeter Dispensary, 200*l.*; Windsor Dispensary, 200*l.*; Hospital for the Cure of Consumption, 100*l.*; Society for Incurables, 100*l.*; and the Syrian Medical Aid Society, 50*l.* Altogether, the amount bequeathed by this charitable lady, to the above and other charities, amounts to upwards of 12,000*l.*

Electricity and Light.—Professor Brande states the likelihood of utilising electricity for light rests in the decomposition of water by cheap electricity, and the combustion of its constituents passed through naphtha, or some such body.

Intense Cold in Norway.—At Vang, in Hademarken, province of Aggersuus, the 2nd of January, the cold was so intense (40 degrees centigrades) that quicksilver became frozen, and persons who were in the open air lost their breath.

The British Museum.—A return, moved for by Mr. W. Ewart, M.P., shows, that the total number of volumes of printed books received, from 1814 to 1847 inclusive, under the Copyright Acts, by the trustees of the British Museum, amounts to 55,474; and the number of parts of volumes, including music, to 80,047. The number of maps, charts, &c., received since 1842, amounts to 187; and the number of parts of maps, &c., to 131. The total number of volumes of printed books contained in the library of the Museum at the end of the year 1848, amounted to about 435,000; the number of maps, plans, and charts, to 10,221; the volumes of MSS. to 29,626; the rolls, of various kinds, to 2,946; the number of charters and instruments to 23,772; the number of MSS. on reed, bark, and folded, to 208; the number of papyri to 55; and the number of seals and impressions to 851.

Statistics of Births, Marriages, and Deaths in France.—M. Moreau de Joannes has presented to the Académie des Sciences Morales et Politiques documents in which we find the following results, which we think it right to observe differ greatly from those of other statisticians:—In 1846, when the population of France was 35,500,000, the number of births was 983,475, being one for every 36 of the inhabitants. At nearly the same period (1840—1841—1842), the number of births in Russia was in the proportion of 1 in 23 inhabitants; in Prussia, 1 in 27; in Austria, 1 in 26; in England, 1 in 34. We must not be in too much haste to draw apparent consequences from these figures. In 1782, when the great rights of property, the convents, and mortmain predominated in France, out of 25,500,000 souls there were 975,703 births, nearly as many as in 1846; the proportion of births to the number of inhabitants being then 1 in 25. But the great question is, what was the mortality? During the last period of eight years the mortality in France was about 1 in 47. In 1781—82—83—84, it was 1 in 25 and 24. The rate of mortality was, therefore, diminished nearly one-half in 60 years. In 1846, the mortality in Russia was 1 in 28; in Austria, 1 in 33; in Prussia, 1 in 38; in England, 1 in 45. During the period between 1817 and 1841, the number of marriages in France was 1 in 127; in 1846 it was 1 in 134, although the population had continued to increase: because, as has already been demonstrated, the question lies not only in the births, but in the mortality also. There are more marriages and more births in the towns than in the country, and yet population increases more rapidly in the country, because in the country the youth are freer from those temptations to precocious debauchery which in the towns too frequently vitiate the constitution of the parents. Out of 14 births, 13 are legitimate.

MORTALITY TABLE.

For the Week ending Saturday, March 3, 1848.

Causes of Death.	Total.	Average of Five Winters.
All Causes	1,138	1,169
Specified Causes	1,136	1,164
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	310	221
Sporadic Diseases:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	42	54
Tubercular Diseases	174	203
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.....	134	141
Diseases of the Heart and Blood-vessels.....	46	40
Diseases of the Lungs, and of the other Organs of Respiration	204	243
Diseases of the Stomach, Liver, and other Organs of Digestion	55	67
Diseases of the Kidneys, &c.	10	13
Childbirth, Diseases of the Uterus, &c.....	5	9
Rheumatism, Diseases of the Bones, Joints, &c.....	8	7
Diseases of the Skin, Cellular Tissue, &c.	..	1
Malformations	5	3
Premature Birth.....	25	23
Atrophy.....	20	15
Age.....	51	73
Sudden	12	14
Violence, Privation, Cold, and Intemperance	35	37
Causes not Specified	2	5

Caution to Corn Cutters.—Much regret has been expressed in the city at the demise of Mr. White, of Cheapside, under circumstances of a rather singular character. The deceased gentleman, it is understood, had for some years been in the habit of having his corns cut by a celebrated chiropodist, and upon the latter retiring from business, another party, we believe, performed the operation. A slight cut, unnoticed at the time, subsequently led to mortification, and the toe dropped off; while, from Mr. White being of a full habit of body, it was considered that not even amputation could save his life, and he speedily sank. Not many years ago, we recollect the death of a gentleman, the head of a wealthy establishment in St. Paul's Church-yard, from a similar circumstance.

Gun Cotton can be applied to propelling carriages. This explosive material, when twisted or matted, burns slowly, and thus consumed, the products pass into a vulcanised globe, 1½ inch thick, which expands considerably, and thence acting upon pistons, drive the wheels of a small phaeton or a bath chair.

TO CORRESPONDENTS.

"Amigos."—1. It would be handed over to a succeeding Government. 2. In all probability the matter would be proceeded with.

"Medico-Chirurgus."—The old regulation of the College of Physicians, restricting the Fellowship to the Graduates of Oxford and Cambridge, was repealed in 1835.

"Tyro."—If the patient survives the shock, he will run great risk of violent inflammation and profuse suppuration.

"B."—It is generally considered, that amputation is necessary when a large joint is wounded, such as the knee.

"Medicus."—1. Surgeons of emigrant ships are not bound to settle in the colony to which they proceed. 2. The owners of vessels do not in general agree for a back passage.

"A Medical Student."—The Matriculation fee is not returned if the candidate is rejected; but should he afterwards appear for examination, he is not required to pay an additional sum.

"Homo Medicus."—The Apothecaries' Certificate is not required by the Board.

"Galen Secundus."—About eight or nine Lectures will complete the course.

"Londinensis."—1. The Edinburgh Royal Infirmary contains about 300 beds. 2. The fee for a year's attendance on the Surgical Practice is £5 7s. 6d.

"Mr. Sidney." — The formula for Chloroform is $C_2 H Cl_3 O + H O$.

"M. B., Lond."—The disease is regarded by the author as an instance of fatty degeneration.

"Rusticus."—Gutta Percha dissolved in Chloroform, so that the liquid is about the consistence of honey. It must be kept in a well-closed bottle, and, when used, it has simply to be poured on the wound. The chloroform instantly evaporates, leaving a flexible covering over the part, which adheres strongly, rendering neither dressings nor bandages necessary.

"Anti-critic" is right in his conjectures.

"Quæsitor."—The two diseases are identical.

"A Member."—A Bill will, in all probability, be introduced this session.

"Quod si."—The actual cautery is not now employed.

"M.D."—The Secretary of the College of Surgeons will readily furnish the desired information.

"Honesty" had better consult a bookseller's catalogue, and judge for himself.

"Alpha, Liverpool."—The bill makes no provision for such a contingency.

"Curiosity."—Yes: Ambrose Paré employed both boiling water and boiling oil in the treatment of gun-shot wounds. He repudiated this practice from mere accident.

"Omicron."—The expenses depend on circumstances.

"Egrotus."—The fee offered will not induce us to alter our determination.

"Lector."—The work, we believe, cannot be purchased, but may be seen in the British Museum.

"Cantab."—The communication will, in all probability, be inserted.

"Studens, Kennington."—Lithic Acid, when pure, is white.

"Ecce."—The Surgeons separated from the Barbers rather more than a century ago.

"Dr. W. P. Brookes, Cheltenham."—The communication did not reach us in time for insertion in the present number.

"Dr. W. B. Herapath, Bristol."—Communication received.

"Dr. Williamson, Brighton," is thanked for his interesting paper.

"A Constant Reader."—(1) No; but there is danger from private informers. (2) Both parties are liable to a prosecution.

"Dr. W. Reed Clanny."—Communication received.

"W. P. D."—The authorities at the Horse Guards will not grant remuneration for such a certificate, except under particular circumstances.

"Chemicus."—An application to the Secretary of the Veterinary College will elicit the desired information.

"Dublinensis."—We cannot say.

From an extraordinary press of matter we are compelled to omit this week Mr. Wardrop's Work on Diseases of the Heart.

"Dr. Turley's" concluding letter shall appear next week.

ORIGINAL LECTURES.

THE GULSTONIAN LECTURES.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS.

By W. W. GULL, M.D.,

Fellow of the College, and Fullerian Professor of Physiology at the Royal Institution of Great Britain, &c.

[Reported expressly for the "Medical Times," and revised by the Lecturer.]

Lecture I.

(Continued.)

ON THE NERVOUS SYSTEM.

Proceeding upon the belief that the spinal system is chiefly for motion, consisting of many segments, whose parts have a definite arrangement and relation, we are naturally led to inquire into the means whereby we are enabled to employ it. It will be readily conceded, that a previous knowledge of the mechanism itself can be no guide to us, inasmuch as but few persons have any, even the most vague, idea of its existence; and with those who have an anatomical acquaintance with it, a contemplation or consideration of its parts forms no link in the chain. The phenomena of volition, are *intention—result*, the sensation guiding to the end without any calculation of the aptness or adjustment of the means.

The will produces its effects under the guidance of sensation. I would illustrate this by referring to the muscular movement of the eyes and the phenomena of vision. The eye is directed to objects by two pair of nerves, the third and the sixth,—the former being, as I have stated above, an exception to the crossed influence of the brain, and, as it would seem, for a very mechanical reason. Suppose any impression affects the two eyes equally, the third nerve and the sixth adjust the eye to a due convergence upon it, and we get an equable motion of the two globes; but again, let the object be placed on the right or left side: we now require, in order to direct the eyes to it, the conjoined action of the third nerve of one side with the sixth of the opposite. As the optic nerves manifest a decussating result, the object being most distinctly perceived by the nearest eye, for illustration, say the right, will transmit its impression to the left hemisphere, which will re-act upon the third nerve of the left side and the spinal centres of the right, comprising the sixth; both eyes will be immediately directed to the right, the head turned thitherward also; and, if necessary, by a movement of the right arm, any approaching injury repelled. But, if we suppose any other disposition, viz., that there should be no decussation, or that the third nerve should not be an exception, the beauty of the existing arrangement becomes especially obvious. As the body is now constituted, if the object affects both eyes equally, and, consequently, both hemispheres equally, we have a conjoined action of the recti muscles of both eyes; if, by the lateral position of one object, one hemisphere be affected, which will, from the decussation of the optic nerves, be that opposite to the object, we must have such an arrangement, that this hemisphere can act reversely on the segments of the cord. Hence do we find all the phenomena placed in a beautiful circle of relations. Thus, proceeding from the external object, the ray of light affects the nearest eye; this transmits its affection to the opposite hemisphere; this, in its turn, re-acts upon the spinal segments in connexion with it, viz., the third of its own side, and the segments of the opposite, turning both eyes, and directing the upper extremity, if necessary, to the object, and returning to the point whence we set out.

In regard to this decussation, there is another fact worthy of consideration, and which has been spoken of by others, viz., that the nerves placed above the point at which the decussating fibres cross from side to side, are as much subject to the law of inverse action as the nerves below. The seventh is an example. That this should be so, cannot be adduced as anything strange, if we regard the symmetry of the segments after the manner here maintained; for, as such a crossed influence seems even necessary, as I have striven just now to show, it remains to consider what part would be most appropriate for the placing of the commissural fibres; and out of this arises a principle of great interest in regard to the *exact point of the decussation*. It is well known that hemispheric lesions, producing hemiplegia, affect the upper more than the lower the extremity, and the seventh and eighth nerves with the lingual are generally less affected than the nerves of either the arm or leg. The paralysing influence is, therefore, not equally distributed through the opposite side; it is felt most severely in the parts which lie in the direction of the decussating fibres. Hence, had the commissure been from the summit of the segments of the spinal system, and the same ill effects followed as we now know to result from cerebral lesion, would there not have been a much greater depression of the respiratory centres under cerebral injury, than is now produced? And is there not a conservative adjustment in this particular position of the decussation, as well as in the decussation itself, by which the respiratory centres are *placed out of the line of action of the hemispheres, on the segments of the cord*.

The relation of sensation to the reflex movements is in the higher animals a complicated one; and, whilst we admit the principle laid down by Hall, that it does not form *any necessary* part of excito-motor phenomena in their simplest condition, yet are there others in which the sensation is intimately and essentially precedent to the movement.

The unity of organization in man and the higher animals is such, that the condition of one part may react through the whole; and this is strikingly demonstrated in the nervous system, in the central parts of which, although the same symmetry and anatomical relations may exist as in the lower animals, yet there is not by any means the same physiological independence. In the development of the parts of the human body, there are many relations shadowed forth which tend to show that it has a symmetry like the lowest animal forms; and there is coincident with these immature states the same independence of function. I call attention here to these well-known facts as confirmatory of a distinct spinal system; for, whilst we must admit, that in the adult the nervous segments have less independence than in the fœtus, as proved by the phenomena of anencephalic monsters, and the results of craniotomy; yet we may not deny to the adult the same symmetry as the fœtus—the same arrangement of the active parts. I might, perhaps, adduce the fœtal movements in proof of the excitability of the spinal centres, for, I think, they cannot be regarded as voluntary. If it be true, that the tissues in their developement pass through phases of lower organic forms, we may expect the same independence of action to be coincident with these transitory conditions, as is found in those permanent states. I had a striking confirmation of this principle in the heart of a fœtus of the fourth month. It was expelled prematurely about five o'clock one summer's afternoon, and, at eight o'clock in the evening, I proceeded to open the thorax, in order to inject the minute terminations of the bronchial tubes, and, to my surprise, I found the heart to possess some irritability; it contracted on being pricked with a needle after the manner of a fish's or reptile's heart, when it has become so exhausted as to have lost its rythmic movements. This muscular irritability was like that of the cold-blooded animals; nor can we doubt that its spinal segments had the same relations.

There is a close subjection of motion to sensation in the action of the muscles of expression. I refer to those movements which have been called emotional, and which are as directly *excito-motor* as any, with this peculiarity, that emotion or sensation forms a necessary part. If we style the spinal movements *mechanical*, they are *psychico-mechanical*.

The combination of sensation with voluntary muscular movements has, by Volkman, been shown to be the source of our knowledge of locality and direction. It is not to my purpose here to consider how he has applied this to visual direction and position of objects'; but I may just mention, that it has long seemed to me obvious, and I have long so taught it in lectures, that, as it is by the muscular movements of the upper extremity that we test the direction of any force acting upon the sensitive nerves of the fingers, so it is, by the contraction of the muscles attached to the eye, that we tell the position of any object which sends its rays to the retina. If the object be placed above we use the superior recti; if below, the lower; if to the right the muscles of the right side.

The great discovery made by Sir C. Bell, that the posterior nerves of the cord were for sensation, and the anterior for motion, led him to express his belief that the columns of the cord itself had corresponding functions. Nor would it be easy to admit the contrary, if there were any grounds for believing that the columns were continuous with the nerves, and formed by them; but as I have, at the beginning of this lecture, attempted to prove such an opinion is not founded upon observation, and although experiments devised for the proof of this opinion may seem to be affirmative of the separate function of the columns, yet one must object to them as extremely fallacious, considering the oblique origin of the nerves from the segments of the cord. Nor are experiments at all conclusive, inasmuch as very different results have been obtained. Amongst modern physiologists, such an exclusive function is no longer maintained; but as yet no general law has been enunciated which shall apply to pathological conditions. I am of opinion that the cases on record of local lesion of the cord will warrant the conclusion that the law demonstrated of the nerves does not obtain in the columns; that neither the anterior nor the posterior columns have special functions in reference to sensation or motion. And whilst, on the supposition of continuity of fibres upwards in the cord to the brain, such a separate office of the columns seemed inevitable, so, on the other hand, if it can be proved that they have no such function, we have an argument for the segmental symmetry, and for that theory which is now generally admitted, of the fibres of the cord being commisural, uniting and weaving into a system these many centres for muscular action, and adapting them to our use.

From this general survey, I hope, in my next lecture, to pass to the consideration of paraplegia; and my endeavour will be to show, that there are at least three forms of this affection, which are accompanied with distinctive symptoms, and that the phenomena presented by paraplegia greatly favour this zonal and independent symmetry of the spinal system, and the commisural function of the columns.

THE CROONIAN LECTURES.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS.

By J. CONOLLY, M.D.,

Consulting Physician to the Hanwell Lunatic Asylum.

Lecture II.

ON HYPOCHONDRIASIS—EPILEPSY—AND GENERAL PARALYSIS OF THE INSANE.

Mr. President,—I now proceed to observe on the character of insanity as modified by association with some disorders of the body. Hypochondriasis is an instance in which apprehensions are entertained respecting a person's own health, and where the uneasy impressions are transmitted to the brain; in such, there is an acute sensation of smell, and of the nerves, combined with disturbance of the mucous membrane, conveying to others the idea of structural disease. In pulmonary consumption, the mild delirium often seen is one example of the nervous system in which the impressions received are not in just measure with the surrounding circumstances. Epilepsy is another disease often associated with insanity, but which may exist without affecting the intellect. In many cases, the maniacal paroxysms are not soon observed; but they frequently precede epilepsy, the patient falling

forward without any effort to save himself; in many patients these fits continue to recur. One patient, an old seaman, when so affected, always tells me he has seen the Holy Ghost; some merely sing or dance; others fancy that they have been robbed or beaten; one was unconscious that he had fits. The temper is very much discomposed. Disease of the heart is not unfrequently found associated with paroxysms of fear or excitement—something like hysteria. Disease of the uterus and ovaries, also, are of great importance in association with insanity. In some it occurs with displacement of the colon, but at Hanwell this is of very rare occurrence.

But of all the modifications, the form which is accompanied by general paralysis is the most remarkable. The first appearance of this is different in different cases; in some cases the epileptic attack is said to be the beginning of the whole disease. Another form is one in which, for some time, a change of character is observed in the patient,—such as becoming extravagant or ostentatious; when this is seen, then we find that the patient is really paralytic. But its most fatal character renders it of great interest. At Hanwell, the deaths among the males, by paralysis, is 50 per cent., but only 11 on the female side. It attacks patients of every age from 20 to 80, but it is not very common before 30. Of 143 cases, 5 were between the ages of 20 and 30; 1 between 70 and 80; 12 between 60 and 70; 47 between 50 and 60; and 52 between 40 and 50. Then the question arises—How long does the insanity last? This is very difficult to establish in all cases; but of 20 or 30 now affected with general paralysis, none have been so for more than four years. I should say that two or three years is the probable duration of life, after they are first taken. The paralytic affection is first detected in a slight quivering of the muscles round the mouth, and a peculiar affection of the speech—a slight delay in the succession of words or syllables; the speech by degrees becomes more and more imperfect; but the patient does not appear troubled that he cannot speak better. The ordinary motion of the tongue, in some cases, is not affected, while in some it is; and in others protrusion cannot be effected. In one there is a kind of jerking motion; then an unsteady and feeble gait. In this class, deglutition is unimpaired till the later stage; the sphincter muscles seem unchanged; sight and hearing are unaffected, but there is occasional dilatation of the pupils. One anomaly of the disease is, that the patients do not waste as in ordinary paralysis. In one case at Hanwell, a man aged 32 had slight paralysis; an appearance of perfect contentment; he had no wish, though married, to change his condition; he had been insane two years and a-half. Another, who had been affected only a short time, left his card for me, before admission; he called himself Sir William, Baronet; and I was quite sure that I should find him paralysed; he stated that he was second in command at Navarino, and that he took 35 ships. This disease affects all ranks—the artizan equally with the wealthy; and in all thus attacked, I very much fear that the malady when once declared pursues the same course. I know that some are more hopeful in this respect than myself, but at present I am strongly impressed with the idea of its fatality; yet, of all fatal maladies, it seems attended with the least distress; the mind is so full of hope and joyous; their wives are the handsomest, their prospects are the best, their accomplishments boundless; they almost always suppose themselves persons of rank; while, sometimes to the last, they are like children. One poor man said he was the Pope; that he had twenty-five wives, and that his father was King, and his mother Queen, of Ireland. In the early part of last year, a medical friend called on me, accompanied by a gentleman; the latter was engaged in an occupation demanding much and close attention; he was temperate, and married. But two months before, though only 30 years of age, he had become affected with ptosis of one eye; to this succeeded an attack of apoplexy, three days after which he had amaurosis and ptosis; for a time all seemed to go on well, except that his articulation was imperfect and his memory impaired; his general health had improved, and he requested my opinion; that opinion was unfavourable, and everything confirmed my view of his condition. This gentleman died within twelve months, life seeming to be extinguished by the early cold of last winter. My own largest experience is among the poor; but I have seen the same affection among the rich. They come to me staggering, hitting or kicking all the chairs in their way, shaking hands with everybody; and in a few months they die. In several cases, the epileptiform attack recurs frequently; others are only affected with stupor; in a few, restlessness; and in a very few, tears and disturbance. One gentleman, of the legal profession, a barrister—not 40—who had just surmounted the difficulties in the way of his attaining to eminence, was attacked with general paralysis, which completely disabled him. He would sit all day with his books before him, but doing nothing; and yet he imagined that he had written volumes of poetry; and he died in a state of almost entire dementia. Another: a solicitor; had been engaged in the labours of his profession from five in the morning to ten at night; his constitution then broke up; and after he was afflicted with this malady, he fancied himself to be the Duke of Lincolnshire, and that he had won millions by racing. In two years he died. In Hanwell, we have many illustrations of patients suffering from overwork of the brain. A man, aged 30, in good general health, was admitted in October, 1846. This man, in November, 1845, at the time of the railway fever, was employed at press, working many hours together. After this, he was troubled with headache. On his admission, he said he never felt better, but talked continually of the press, and of printers drinking ardent spirits. His mind was not much disturbed, and this patient is still living. If the mind, however, is much discomposed, something generally happens to carry them off. Disappointments in business may also be cited. A man, aged 39, hatter; amiable, industrious, and interesting. After working seven years with an individual, he was disappointed in his expectation of having a part of the business. He became afflicted with general paralysis; always cheerful; three months after he was taken, he walked with extreme difficulty; he was always expecting to get better, and fancied that his wife was coming to take him home to a pretty cottage. He died in a few months. There is a very curious resemblance, in the symptoms of this malady, to those seen in intoxication; for instance,—the mental exhilaration and exaggeration, the loss of speech, and, lastly, the stupor. Then we anxiously inquire, what is the cause of all this? I think one peculiarity of it may throw some light here. This is—that it is peculiar to males, and that paralysis is almost entirely unknown in women above the poorer class. Climate, no doubt, has its effect; for the fact seems to be, that, common as it is in the north of Europe, it is comparatively rare in Spain. Then, a greater proportion arise from moral causes. In one asylum, out of 146 cases of general paralysis, the causes were ascertained in 96; and, out of these, 60 were found to arise from moral causes, such as losses, poverty, reverses, &c. Intemperance had its 20 victims; and intemperance combined with other causes, 15 of the 60. In others, the cause was ascribable to hot climate, abuse of mercury, and foul air. In private cases, it very generally arises from moral disturbance; and, in some, as the consequence of a severe fall. To the appearances after death we look with some anxiety, and I fear with disappointment. The most general state of the brain is, calvarium injected; much serum in the arachnoid; cerebellum larger; the brain generally firm or soft; the pia mater congested. As regards the consistence of the brain, it has been thought of great importance. On looking carefully into it, I find the consistence to be changed in twelve out of eighteen; and in five of the twelve, more or less hardness or firmness throughout. The ages vary from 30 to nearly 60. One important point is, whether treatment can arrest it, even in its early stages. My own opinion on this is very unfavourable. Esquirol had successful cases; but Royer Collard, who succeeded him, none. I should say, that the general condition of the patients forbids bleeding; in two cases in which this was resorted to, but in which I had no share, the effects were most disastrous; neither of the patients spoke for twelve months after, and died. We confine it generally to local bleeding; and, in cases of stupor, a blister is very useful. Then the question arises, whether the mental excitement can really be prevented; and, if so, whether by mercurial treatment. My experiments on this point were unsuccessful; but I have heard lately of several favourable cases. It may be, that in the beginning of the attack, it is a fair mode of treatment to bring the patient under the influence of mercury. As regards moxa and seaton, I really believe them to be utterly useless. The patients, also, cannot bear strong impressions; strychnia, or electricity, are alike objectionable, and even the shower or warm bath. One important matter is, a well-regulated diet, without stimulants; also, cleanliness, exercise, and careful superintendence; and I am quite sure that, with patients of all ranks, nothing is so good for them as society. There is one consolatory circumstance in relation to this subject. It is conceded by all, that these poor people were most unhappy in our older Lunatic Asylums,—passing all their time fastened in a chair, or under other kinds of physical restraint. I would refer you, on this point, to Dr. Jacobi's own pages, who was an advocate of that kind of treatment, for a just view of the cruelties perpetrated. The patients were more and more irritated, and death came upon them prematurely. But, at the present time, we may point to all the Institutions with much satisfaction. So long as ever the patients are able to move about, they are at liberty to do so; their clothes are changed, if required, four or five times a day; and it is a consolation to see them so comparatively comfortable. Much care is taken that the skin does not become affected; much attention is also paid to the beds, which are of many different kinds; but of all of these, I would speak most gratefully of Dr. Arnott's water-bed; we have one man in Hanwell now, who has been ten months lying on it, without a spot or ulceration appearing upon him, and who will thus die with as little suffering as possible. This illustrates my point,—that the non-restraint system does not merely consist in the disuse of chains, waistcoats, &c., but also in the employment of means to relieve the mind; and it is because I believe in the beneficial results of this manner of treatment, that I have so earnestly recommended the disuse of restraint in all our asylums.

ORATION

DELIVERED AT THE ANNIVERSARY MEETING OF

THE LONDON MEDICAL SOCIETY,

MARCH 8, 1849.

By W. HUGHES WILLSHIRE, M.D. Edin.; M.B.S., Physician to the Royal Infirmary for Children, &c.

[Reported expressly for the "Medical Times." and Revised by the Orator.]

MR. PRESIDENT AND FELLOWS,—But twelve months have elapsed since we assembled here together, as we meet to day, to celebrate the anniver- of the Medical Society of London. Twelve months have passed since you signified to me your pleasure that I should occupy the position in which I have now the honour to appear. Though, *prospectively*, the coming of the present time has seemed to me long, now, on its arrival, how short and rapid has its transit been! Upon its footsteps onward in the march of time I have dwelt with interest daily augmenting, because I felt that each one brought me nearer to the hour when I must present myself before you and fulfil the duty I had undertaken to perform. But though the time beforehand seemed long and promising in resources, from which I might make choice for my subject, to-day, that the sand has run its hour, it appears to me to have been short and barren in the extreme. And yet, in reality, this cannot have been the case; it is rather the result of my own misfortunes. If I have found

no fruits, it must be because I have not more diligently sought for them; or, if I have waited for those I thought the ripest, I have but tarried too long, and now, all have fallen from the tree. But bound together, as we all are, in the fellowship and freemasonry of sympathy, in affording consolation to the halt in mind, as well as to the sick of body, I trust you will not be indisposed to bestow upon me somewhat of the same compassionate spirit, should the performance of the task which has devolved upon me seem to you to stand in need of it.

It so happened, Sir, that the last time we met upon a similar occasion as the present, we knew not but that we were standing on the brink of a vast cavern of political and social darkness, into the depths of whose impenetrable shadows we might rapidly be thrown. When last we were assembled here, we could not tell but that the natnre of our own calm duties to society might be changed and broken by the convulsions of this and of other States, —that the avocations we have ordinarily to perform, in our attendance at the couch of every-day sickness and disease, might be metamorphosed into those of healing the wounds, and alleviating the physical disasters of civil war and bloodshed. We knew not but that again, as fifty years before, hundreds of our brethren should be offering consolation to the wounded on the field of carnage, or relieving the casualties of warfare in a foreign clime.

Since then, indeed, how vast has been the change with others; but with us how almost unruffled has been the tenour of the scene. We have remained almost quiescent, and have marked the rolling on of that great undercurrent of human opinion which has been sapping, slowly but surely, the foundations of the greatest States. We have heard the low-booming of that mighty ocean, which, approaching wave after wave, has overthrown and disruptured the boundaries of the most ancient power. But *we* have been left untouched, the sea floating over the commonwealth of our society is yet bright with sunshine, and rippled but by favouring airs. As yet *we* have been alone called to the bed-side of that daily sickness to which, however peaceful be the life of man, by the nature of his mortality he is necessarily subject. As yet, I say, the furrow of the bayonet and the shattering of the ball have not called upon us, with their attendant horrors, to come and minister to the sorrow which the fire-brands of warfare leave behind in their desolating train. But upon the great subject I thus touch upon I dare not dwell; indeed, I have ventured thus far with it only to prove how we have cause for rejoicing on this our anniversary, that another shall have come round to us, and that, linked together in the great bond of the prosecution of medical science, *we*, unlike our brethren on the Continent, have been left in the calm and quiet performance of our daily duties of diminishing those sufferings and softening those miseries under which man appears to be absolutely obliged to suffer,—that we have not found them heaped higher by the accumulation of new ones not *necessarily* attendant upon the bodily infirmities of our race, but which are rather the result of those wilder and more barbarous elements of our intellectual manhood, as proved not only by the physical but often the moral evils they produce. But none more energetically than ourselves would have arisen at the loud call for those ministrations we have undertaken to perform, *whenever* and *however* sorrow and misfortune have been produced; and none, also, would have more deeply regretted the *necessity* for their performance, or more greatly deplored those evils to whose mitigation we should so willingly have lent our aid. Fraught, however, as this subject is, with aspects of a dark and sombre hue, yet I dismiss it with some feelings of regret, because it is linked with others of a high and noble character,—things which could not fail, in virtue of their own great nobility and import in bestowing some value by the medium of their own reflexion upon whatever he might say, who should venture to speak of them to a body of intellectual men. For then—whilst throwing aside as valueless all things which could be construed into the politics of *parties* —that madness of many for the gain of few—we should find rising up before us in their place the grander themes of the civilization of humanity, the establishment of new principles in the direction of States, and the development of new motives, both of personal and collective influence, which ramify into every branch of human knowledge and interest.

But with us the consideration of such things dare not be. *We* are connected with each other for one great and special purpose, and to-day we meet to celebrate the foundation and continuance of the grand object we have in view. We must often break some of those links which bind us together in the great chain of social existence, and lower the feelings they give rise to, to hold all the tighter those which unite us with the sick man, and which form the ties by which we are bound together in our endeavours to alleviate his pain.

Restricted, then, as I feel myself, to a subject purely illustrative of our relation to the Profession of Medicine, yet I have found it no easy task to select one, to whose importance I could hope to do justice, remembering how often the same range of material has been searched through and admirably treated in many previous eloquent orations—*orations* in which at intervals we have had brought before us reminiscences from the biographies of our more eminent and now departed fellows, and from which the orator had borrowed, from the brilliante xamples of their lives, teachings rich in value for the guidance and perfectioning of our own—*orations* in which that commemorative tribute to transcendant merit has been paid which ever is its due, and in which we had gleaned for the progress of our own professional career deep warnings uttered by the high and solemn voices yet echoing from the kingdom of the dead. Conscious of the ability with which these things have been performed, and of my own deficiencies in rendering them justice had they been left untouched. I shall allow to-day the memories of our departed fellows to rest in silence and the past.

I am tempted to forego, too, those advantages which other and able *orators* have found in making the subject of their address a retrospect of the progress we have made during the year in the science and art of Medicine. To some no subject may seem more consonant with my office than this, considering the purposes for which we weekly meet together; and no duty may seem more obligatory, than thus recalling to your memory the valuable results we have derived during the past session from the labours of so many of our Fellows. But, hopeful as might be the duty of offering you proofs of our advancemeut in the science of medicine, important as would be the office of reviewing what we have accomplished in the practical application of it as an art, on this occasion they will be foregone, to venture, though it may be hazardously, on a less frequently trodden path. Still another source was left to me—but how different from the rest. The waters of the other springs how clear and calmly flowing!—these, unfortunately, how turbid and irregular their course! I leave them without regret; I pass by the troubled current of *medical politics*,—a subject embracing things most uncongenial, points upon which, of course, we all cannot be expected to agree, objects for the discussion of which our ordinary assemblages are never the arena, and for which our present anniversary seems to me to offer no fit and proper opportunity to treat of. Discarding, then, most willingly, all that is *usually* implied by the term of the *politics* of our caste—yet, if we interpret this word in its proper sense, like unto the *politike* of the Greeks—it is still from within its circuit that I have sought the subject of my address. But, as the term is rarely so employed, it is but right that I bestow upon it one of a more definite character, and I employ for its designation the words of Dr. Mackness, in his translation of the "Akesios" of Professor Marx, and denominate it the *moral aspects* of *medical life*. Upon the great principles of these none of us can scarcely differ, nor can we find their consideration devoid of interest, however imperfectly it may be performed. In the practice of the art of medicine lie open for our exposition some of the great ethical questions of humanity, upon the importance of whose right understanding it is as necessary for us to be clear, as it is upon those principles of our science which guide us in the every-day duties of our professional life. Without the influence of the one, the performance of the other would come poorly off; without the eye of moral perception being clear, the hand of physical interference will become paralysed and weak. But I know full well, notwithstanding, the quicksands on which I should be in liability of treading did I venture on *some* topics connected with the ethics of our art, and the danger of the desire to leave the broad pathway of the *technicalities* of our professional duty to touch upon subjects apt to be regarded as lying beyond its sphere of action, and as not within its scope. I shall, therefore, confine myself within limits admitting, I trust, of no discrepancy of thought.

But even did I venture to step beyond this mark, I ought to feel but little anxiety as to what opinion might be formed, seeing that very lately the ground has been broken by many high and noble-minded men in their search after truth; and, in proof, let me refer to the work of Sava, on the "Deserts and Duties of the Physician"—to that of Simon on "Medical Deontology"—to that of Debreyne on the "Morale of Physiology and Medicine"—to Dr. Mackness's translation of Professor Marx's "Akesios"—to the Address to the students of Guy's Hospital by our Fellow, Dr. Bird—to the last Lumleian lectures by Dr. Wilson at the College of Physicians—to the able articles on Medical Ethics in the later numbers of our leading *Medical Quarterly Review*—and last, though not least, to the establishment of the Medico-Ethical Association of Manchester. The ground, then, is broken; there is a pathway clear upon it, and to use it is legitimate. Let us do so; let us listen to that warning voice which has told us, that the time is come when a higher tone is being given to our questionings of life and death, to our investigations of disorder, and to its greatest evil, pain. That a nobler aspect is being impressed on our over-sensual philosophy, and that we must be fast adding the soul long missing to that which, if left devoid of it, will render much of what we have to do barren, unsocial, and unsympathysing in the extreme. It is impossible that we can offer an excuse any longer for allowing the assertion of that writer to be correct who has but lately affirmed, that there is an absence of anything like sympathy for human suffering in the works of modern writers on pathology, and that the study and practice of anatomy, both healthy and diseased, seems to have frozen up the springs of human kindness and of feeling. Need *we*, indeed, however, may it be asked, think any such excuse necessary, since the author of this assertion adduces the Essays of our own Fothergill, especially those in which he treats of pulmonary phthisis, as models for imitation, when making known to our professional brethren our researches into the painful records of suffering humanity. It is for the English medical practitioner to boast, that whilst a foreigner has affirmed that diseases are described with more icy coldness than if they were the remnants of fossil reptiles, yet that from among ourselves he has sought for a remarkable exception to the rule.

From amongst ourselves, also, whilst not forgetting others, shall I attempt to prove, that we have been long aware of that truth which has again recently been told us, that for the right understanding and beneficial handling of human disorder, there is oftentimes the need of a cultivated and passionate humanity. But with our own Fothergill I have begun,—I have made the first step amid the moral aspects of medical life. But other names are pressing on me. There is a long-linked chain of bright images in the historic records of our professional career. They are like the

"Bright procession of skiey visions in a solemn dream,
From which men wake as from a paradise,
And bring new power to tread the thorns of life."

But there are few of them that I can dwell upon, though many would be suited to our present aim. And of these what more worthy of selection than

the remembrances of some of those men, the heroes of our art, who have performed what they did more as the dictates of conscience than the questions of science, with whom their art appeared but as a practical exposition of morality, in whose performance they dig their own graves by their efforts to exterminate disease;—men who saw, that, in the practice of their art, they were called upon to lay aside all personal pre-occupation, and to regulate their conduct by principles of the most elevated character;—men who fought under a banner emblazoned with the insignia of entire devotion, and the symbols of the most perfect renunciation of self; men who felt that they were charged with a mission of so serious a character that they could not conceive themselves at liberty to mingle less elevated considerations with a destiny so high. And if such are to be found, do they not offer us abundant reasons for our firm belief of the ennobling characters in which are written the *moral aspects* of medical life, can we not fall back upon their remembrance with pleasure and with profit, when we find, that their motives for action, and the rewards they obtained for it, were found to consist in such moral considerations alone. We must feel that, with respect to the *former*, they should be ever so derived; but, with regard to the *latter*, it is natural to us, both from our disposition and our real temporal and daily necessities, that results more tangible and substantial in their character and fitness should accrue to us than those alone arising from a satisfying of our moral nature. *Il faut vivre* is the proverb of our neighbours; it is not the less urgently the case with us too; and, although rewards and riches, emoluments and offices, do fall upon and favour many in the practice of our art, yet, with others, it is not so, and all their hope of satisfaction must be rested on their consciousness and the world's confession, at some future period, of their moral worth. If they had not this, what else would remain for them? Do they not, in striving for it, fall noble victims in that from which ordinary men would shrink as a certain and destructive fate.

Three years have now just passed since a steamer dropped her anchor in the Funchal Roads. From her mast head hung the sign of desolation—from it drooped mournfully the yellow flag. A strange and deadly sickness was with her, had tracked her silent pathway o'er the waves—pestilence had swept away her officers, her surgeons, and her men. Of those who had left in her the shores of Britain for those of Africa one-third alone remained behind. And now came the ship of desolation before the mountains of Madeira, and asked for help. But there was a ban on the plague ship, and she dared not near the shore, she was forbidden to approach; had she done so, the batteries would have opened on her their whole line of guns. Forlorn and dejected as they were, the survivors yielded now still more readily to the disease, and in this miserable condition, and no medical aid at hand, they hovered, at a distance, over the unfriendly isle. But the equinox was approaching, and thus they dare not stop, and, crippled as they were, they made preparations for crossing the Bay of Biscay—*the Bay of Storms*. But there chanced to be at Madeira one *Sidney Bernard*, a surgeon of our own clime. With seven volunteers from some English merchantmen, did he come forward, and offered his services and his men's in taking the plague-ship home. It would be supererogation to waste words in praising such noble conduct. A more signal act of cool disinterested heroism is not written in the history of man. His and his men's services, of course, were joyfully accepted, and safely did they bring the vessel to the mother-bank,—but, with the fever, her stern enemy still raging between her decks, and before whose fearful hand many more had sunk on their passage home. But, home she came; the pilot boarded her in the Channel, and he died there too; and now the heroic Sidney Bernard having accomplished his task, sickened of the fever, and perished as well. What was his reward? Ere we tell it, let us change the scene; let us glance upon a record from the history of another life, painted line by line with that of Sidney Bernard in the journals of the day:—

There was a merchant at York—a clear-headed energetic man. He speculated boldly, and as it happened, successfully in rail-roads. He bought in as low as he could, and of course sold out as high. When he made a permanent investment, he took good care that the line in which he placed his capital should be ably and adroitly managed. His gains actually became enormous. He obtained a membership of Parliament, and the families of our patrician ancestry soon saw him a vast proprietor of land. As for the true amount of his riches, the Income-tax Commissioners could alone guess rightly at that. So men worshipped him—refused to call him by his simple names, and glorified him as the Railway King. Men watched his movements in the Share-market, and imitated them. Men sought his advice and followed it, and thus did they, by doing so, make much money, and by the same procedures yet hope to make still more. Men of whom to many the world gave credit, that they had had enough of it before.

These records in these two men's lives were published. We read them, and what did we do? In order to evince their gratitude, for what I know not, Englishmen raised a subscription for the most successful railway speculator of the day. In their list were to be seen written the names of the fairest, the noblest in the land. Nearly 20,000*l.* were obtained in a short time, and yet money still poured in. But, *Sidney Bernard*, what of him?—of the heroic volunteers of the steamer called "Eclair?—" of the orphans and the widows its plague-struck habitants had left behind? Men were silent; no testimony was proposed to carry down the history of their daring humanity; no subscription was raised to help up the struggling families of the dead; not a rain-drop of mercy seemed to fall to reward the unselfish courage of those few who survived. And so time passed; at length, the very shame boiled up in the breast of one noble heart, and he, by the permission of the *Times* newspaper, boldly told his countrymen their disgrace, recalled to them how England's nobility and gentry had come in crowds to do worship to a successful speculator, whilst they were callous to the high deserts and melancholy fate of Sidney Bernard and his companions. This evidence of shame was then re-echoed by other voices than the first; and an attempt, at last, was made to give to the memory of Bernard some sort of testimonial; what was the result I, unfortunately, know not. Where, let us ask, were the motives for such deeds as those of Bernard's? where was the reward the author of them obtained? They are to be looked for in the *moral aspects of medical life*. But I do injustice to the *living*, thus alone to prove it from the actions of the dead. We have men yet with us who may claim the recompense of services almost beyond all price. Men who yet live, day by day, careless of all, save the one intent of the great purpose of their life.

Let me speak to you of the name of *John Conolly*. His price is measureless; he has raised the office of the Physician to that of the noblest benefactor of the human race. To him is worthy the recompense of all nations; to him they should heap their tribute at his feet. How vain! gold, in its very purity, would be naught! To him, in some grand temple of humanity, should be raised an altar to his fame; for him some new Michael Angelo Buonarroti should carve the marble of his form.

And by his side should stand another. In the calm stillness of such a solemn fane should repose the memory of *Seguin*, of the Bicêtre,—a man of whom it has been recorded, that by him a wild ungovernable idiot, exciting fear, aversion, and disgust, has been transformed into the likeness and manners of the human race,—a man who, unaided, struck out a new path of unwearied, laborious, and self-sacrificing exertion, the result too great to be merely brilliant,—it has become silently humane. But, whether such triumphs of humanity,—whether the names of Conolly, Seguin, and Güggenbuhl be written on the tablet of brass or the diffluent surface of water,—the recording angel has placed them on the same page of light stamped with those of Bernard, Howard, and Wilberforce. In these examples, we see exemplified some of the most interesting of the *moral aspects* of medical life. In one, we see the man viewing, with a heart of commiseration, the solitary, desolate abode of pestilence, soon to be cast adrift upon a stormy sea,—adrift, with too few to guide it safely through the terrors of the deep,—and devoid of all assistance or consolation from the ministrations of any to whom the art of Medicine was known or familiar. Another, living but to watch, with diligent eye and benevolent mind, the errant wanderings of the highest, the loftiest element of man,—so glorious in its powers, its attributes of health,—so melancholy a spectacle when overclouded by idiotcy or fatuity, or raging in the terrors of acute mental disease. One feeling his soul sicken at the wretched and forlorn condition of him whose only fault was the possession of a fallen mind,—making this condition the study of his life, and finding, as the result, both in this and in other lands, that the days of the maniac were days of bondage and of dirt, of darkness and unregarded fever, of restlessness and thirst. The confession was wrung from him, that the humanity of his attendants was blunt,—that his feelings were hardened,—and that, to use his own words, he never could forget having more than once discovered, that dying patients were not relieved from restraint, and that, even in the restlessness of death, their feet were strapped or chained to the couch, and that, alas! an order to release them seemed to excite surprise. Intense sympathy with human suffering, then, characterises all. But, had *they* stopped, or did *we* cease *here*, such sympathy would be of little use. With *it* alone, as mere impulse, the child of emotion, we should soon forget our work,—we should soon lose sight of the necessity for more than half its performance. But, with another aspect in sight,—with the persuasion that our duty is ever a sphere of energetic usefulness and exertion,—we find the sunbeam that glows upon, that ripens the fruit. We learn it to be our duty to risk all hazards in turning our sympathy to account in alleviating those misfortunes we thus have commiseration for. And in the names I have mentioned we see both of these grand aspects in the ethical history of our life. In one we behold the springing forth, strong and vigorous, of a high degree of physical and moral courage, which, in the fulfilment of its duties, fears not death. When Sidney Bernard put his foot on the deck of the fever-ship, he knew that the laws separated him from all communication with the world. Upon the reeking planks of pestilence he knew that for a time there alone could he rest. He knew that in the air he must breathe floated a poison deadly and devastating in its kind—that over him would hang upon a thread the sword of dissolution which had so fearfully and rapidly descended upon other men. And he knew not for certain that for all these risks and chances of fatality any recompense awaited him, should he pass through their contingencies unscathed. But no matter; he felt for the misfortunes of his fellows. He knew his duty towards them; he performed it; and he died. This, whatever ruder ages than our own might have said of it, we must regard as the heroism of the moral man.

"The *forms*
Of the heroic change from age to age;
The *spirit* in the forms remains the same."

A combination such as this of moral and physical courage, so necessary in the prosecution of our duties, and which renders to account the feelings of sympathy which precede it, I know full well has been affirmed to be reducible to causes which yet, after all, hold but a limited sway. The world is disposed for believing that a man will always do that for which he is well paid; that every man, however obdurate to some motives, has yet got his price, and for that he may be had.

[To be continued.]

GLANDERS IN MAN.—A Mr. St. Lawrence, veterinary surgeon, died, a few days since, from glanders, caught from a diseased horse, some of the discharge from which got into a scratch on his hand, whilst he was administering a dose. The flesh dropped from his bones, and the eyes fell out of his head.

ORIGINAL CONTRIBUTIONS.

ON POISONING WITH ALCOHOL.

By W. WILLIAMSON, M.D. Edin., Brighton.

However desirable and important a correct diagnosis may be, in cases of alcoholic poisoning, in practice we find it often very difficult, if not impossible; for while the symptoms peculiar to alcoholic stupor or coma are very similar, if not identical, with those produced by several other narcotic poisons, they are further liable to be complicated from the occurrence of apoplexy or simple effusion, as a consequence of their action on the circulation of the brain; and still more so from the falls, bruises, or blows, to which the intoxicated are often exposed, when concussion or compression may be produced so as to simulate the state in question, thus surrounding the practitioner with the most perplexing difficulties. For instance, a man who had been engaged in a drunken brawl, and received suspicious-looking wounds, is found dead or comatose. In the absence of fracture or depression of the skull, how impossible would it be to say how much depended upon the spirits he had drunk, and how much upon the injury he received. And yet these are the circumstances in which the practitioner is often called upon to act—circumstances demanding the exercise both of decision and caution; where he may have to choose between the stomach-pump, the lancet, and the trephine; and whereon, too, may hang a very important medico-legal question, involving the life and liberty of a fellow-being. Another case may be found—under suspicious circumstances or otherwise, where the patient is more or less capable of being roused by agitation or pinching—his breathing may be stertorous and irregular, pupils dilated or closely contracted, with more or less rigidity or spasmodic twitchings of the muscles of the face or extremities; perhaps, also, with marks of bruises or knocks upon his body, while his breath may or may not smell of spirits or any other narcotic, or there may be evidence of spirits in the vomited matter where he lays; and yet with the most perfect connexion of all these circumstances, the medical man finds himself quite nonplussed, and unable to say how much of the symptoms may depend upon the direct effects of the alcohol; and, whether there may or may not also exist apoplexy or compression from effused blood or otherwise; so that in the absence of information regarding the immediate history of the patient, the practitioner must trust entirely to his judgment and presence of mind as to the nature of the proceeding he may adopt. About eight months ago I was called to a similar case. A man was found on a lonely moor on a cold frosty morning, lying on the road, cold, stiff, and insensible, his breath smelling of spirits, with a profusion of vomited matter lying beside him, and spattered over the ground; he had several marks of injury on his body, and there was appearance of great struggling having taken place in the neighbourhood. These marks, however, with the exception of one over the eyebrow, (which he may have received on first falling,) were confined to the leg and arm of the side on which he lay, chiefly on the outer side of the knee, ankle, and elbow; while the marks on the ground around him corresponded with such as would be made by the struggling of a person lying on his side; his clothes, too, were torn and ruffled over the seat of these injuries, and his hands and nails showed evidence of his having been tearing and clutching at the gravel of the road. Moreover, although it was found that he had been annoyed by some disorderly navvies on commencing his journey, there were no marks of any foot-prints but his own within considerable distance of where he lay, while these navvies easily proved an *alibi* during the remainder of the night after they had been seen in company with the patient. Taking all these circumstances, then, into account, I came to the conclusion that this was a case of simple convulsion, perhaps from apoplexy, induced by the excitement of the spirits he had drunk, acting on a constitution peculiarly predisposed, and perhaps, also, assisted by the exertion required in climbing the steep hill he had just ascended, while the marks of injury had entirely been the result of the fall and the consequent struggling. Life, however, had all but fled, when I first saw him, and he shortly sank; and, being refused a *post mortem* examination, we were unable further to corroborate our opinion. Such cases are not uncommonly met with; so that the practitioner requires to exercise the greatest caution in adopting his course of procedure. He will, no doubt, find considerable assistance in forming his opinion of the case, should he find fissure of the skull or depressed bone, or, if blood be found flowing from the ears and nose; and if the patient cannot be roused at all by brisk agitation or pricking. The existence or absence of reflex movements on tickling or pricking the extremities will also afford negative evidence: thus, in simple apoplexy of the lobes of the brain or in compression, not involving its base or the medulla oblongata, the reflex indications generally remain entire. If, however, the medulla oblongata is involved in the accident, this symptom also goes for naught, being equally wanting, as in deep narcotic stupor, where these phenomena are generally null, or but slightly elicited.

The following case presented three rather puzzling features:—1st. I could learn nothing satisfactory regarding the mediate history of the patient; further, than it had left home about four hours before in perfect health, in order to play with some companions; and that it had but shortly recovered from some slight eruptive fever.

2nd. It was an infant (two and a half years), and very likely to suffer from pressure on the brain from effusion, induced by the irritation of teething, disorder of the digestive organs, or perhaps from exposure to cold; and we know that hydrocephalus often occurs after scarlatina and other eruptive diseases, from such exciting causes.

3rd. The nature of the alcoholic beverage (the doctored porter of a low public-house) was such, that the smell of the breath could afford but little assistance. So that I may be so far pardoned for the error of diagnosis I was led into at first.

On Sunday, 2nd December, 1848, I was hurriedly requested to visit a child (C. O——, aged two and a half years) in the neighbouring street, the messenger reporting it dying or dead. By the time I reached the place she had been conveyed into a chemist's shop. I found the child quite comatose, with alternating convulsions, and received the following history:—The little girl had but lately recovered from an eruptive fever, but during the past week had been considered quite well, and was allowed to play about the streets with her companions, and this morning had taken breakfast very heartily. The child was then taken away to spend the day with some neighbouring children, and the mother heard no more of it until one o'clock, when she was informed that her child was lying in a fit, and that it had been so for about half an hour.

On arriving at the house she did not like the appearance of matters (a number of workmen were drinking in the room and very uproarious), and she carried off the child to a chemist's shop in the next street, where I found it. I could now learn nothing as to how the child was seized, or how it was occupied during the previous part of the day, (the people of the house, who were sober, keeping out of the way.) In absence, then, of any assistance in this way, I was obliged to look to the symptoms alone for my guidance. When I first saw the child, it lay as if dead; its arms and legs flaccid, pliant, and dangling when lifted up, and the whole body, when laid at ease on the floor, assumed that peculiar attitude of *abandonnement* I have often remarked in the deepest stage of drunkenness; the breathing was somewhat irregular, and slightly stertorous; jaws locked, and foam appearing at nose and mouth, which seemed to be the principal cause of the abnormal breathing; pulse strong, and bounding in all the large arteries, particularly in the carotids and temporal artery,—about 100; pupil fully dilated, and insensible to any impression from light; eyelids drooping and tremulous; temperature of surface low, and contrasting strongly with the bounding pulse and strong beat of the heart.—indicating that the circulation was decidedly failing at the capillaries rather than at its centre; face pale and swollen, adding much to the expression of the attitude of the body already alluded to; muscular system generally soft and flabby in the intervals of the convulsive movements, with the exception of the levators of the lower jaw, which continued spasmodically contracted. The convulsions returned at intervals of four or five minutes, and lasted about the same space of time, and involving the greater part of the muscles of the body, but most severely those of the left side; slight strabismus also appeared, with occasional symptoms of opisthotonos; perfect anæsthesia, and no evidence of reflex phenomena could be elicited by tickling or pinching the extremities; abdomen tympanitic. The child had no symptoms of teething, nor could I discover any signs of heat or irritation along the gums. Under these circumstances, then, I looked upon the case as one of simple coma, where the danger to be averted was effusion (which, I much feared, had already taken place), and directed my treatment accordingly. The lancet and the hot bath, followed by sinapisms and irritating enemata were put in requisition, while it was found impossible to administer anything by the mouth. When in the bath, the convulsions became less severe, and as the blood from the arm began to flow in a full stream, the pupils at first made several ineffectual attempts at contraction, and then shut spasmodically, and continued so. The mustard cataplasm, also, applied over the abdomen, after laying nearly half an hour, produced some redness, and elicited some unequivocal evidences of returning sensation. The mustard was then removed, and orders given to repeat the enema with several drops of croton oil, when I left my little patient for some time. And I may just here state, that although I had some misgivings as to the nature of the case, particularly from the pale and swollen state of the countenance, and the flaccid condition of the muscles in the intervals of the convulsions, the symptoms of threatening effusion, and the history of the case, (as far as I could then ascertain,) I think at least warranted the procedure I adopted. And, even had I known the nature of the agent in operation, I question whether I should have been justified in withholding the use of these heroic means, to avert the effusion that seemed so imminent.

At 6 p.m., (five hours after I first saw her,) I found that the enema had operated freely, unloading the bowels of a large quantity of highly offensive matter; slight vesication had taken place where the mustard had been applied; and the symptoms now altogether assumed the appearance of narcotic stupor; the patient could be roused by agitation; when, looking round wildly, it almost instantly relapsed into insensibility; the convulsions were gradually abating, and almost total paralysis of the left side was discovered; the pupils continued contracted, and light was now highly offensive, causing general uneasiness and spasmodic closure of the orbicularis muscles.

I had learned, when absent, sufficient of the history of the case to satisfy my mind as to its real nature, which, moreover, the symptoms now tended more strongly to corroborate, if not to render self-evident. The men who were drinking in the house where she was had induced her to take several draughts of the beer they were drinking, when, after she had shown some unequivocal symptoms of intoxication she dropped off in this fit. They now got so alarmed for the consequence, that they strongly resisted the proposition for calling in assistance or sending for the mother of the child, hoping to be able to rouse it by their own exertions; but, failing to do so, they sent for the mother, who carried it off as mentioned. Although they were also drinking spirits, they denied having given it any; and the absence of the peculiar smell in the breath would so far corroborate their statement,—otherwise of little value.

She being now able to swallow a little, a purgative was administered and I left, again visiting her at 10 p.m., when I found that the bowels had be-

freely moved; she was now easily roused, and drank freely of water, which she was allowed *ad libitum*.

The convulsive movements had almost left her, although she occasionally started and screamed when left alone; the symptoms, however, had altogether so far abated that I considered her out of danger. She was put to bed for the night in an airy apartment, with a warm bottle to her feet, and I expected to find her convalescent in the morning.

Monday morning.—I found my little patient moving through the room by the assistance of the chairs and table; she looked very weak, and was unable to walk without help, her left side still exhibiting symptoms of slight paralysis; her face was pale, and her eyes looked rather wild. She had had a very restless night, frequently starting and screaming in great terror; but had taken a little breakfast, and was trying to amuse herself with her playthings. The secretions being very offensive, I prescribed some alterative medicines.

December 12, ten days after the illness, I found the little girl still pale, but active and cheerful. She now sleeps and eats well, although she continued restless and peevish until three or four days ago; all symptoms of paralysis have disappeared, too, so that she may be considered quite recovered.

The effect of the bleeding upon the pupil of this child was very striking. The pupil, from being dilated to its fullest, and perfectly insensible to its usual stimuli, as the blood flowed and the pressure on the brain became relieved, made several imperfect attempts at contraction, (seeming to quiver and hesitate,) and then closed permanently, as if the dilation had been the result of a greater amount of pressure, (entirely overpowering the functions of the iris,) while the lesser amount of pressure only acted as an irritant, exciting strong contraction of its fibres. This explanation I should rather be inclined to adopt, than that the one state acted as a stimulus upon the dilator and the other upon the contractor muscles, as is usually received.

The important features of this case, however, as bearing upon alcoholic poisoning, consisted, I think, peculiarly, in the flaccid and flabby state of the muscular system and general surface of the body, and the marked discrepancy that existed between the low temperature of the surface and pale features, and the strong throbbing action of the heart and large arteries,—indicative, evidently, of failure of the circulation, beginning at the capillaries rather than at the heart, as is generally believed. May not this be peculiar to the action of several of our more powerful narcotics? We find, on inhaling chloroform, that there is always a tingling sensation on the sentient surface, particularly at the tips of the fingers, before the sensorium gives evidence of its being affected, while insensibility to pricking and pinching is sometimes induced while all the faculties of the sensorium are yet preternaturally excited (a certain amount of excitement being understood to precede insensibility.) And may not this, too, better account for the engorgement of the heart, lungs, and large vessels found after death from these narcotic persons, than the common statement, that it depends upon "*failure of the heart's action.*" The yet mysterious agency of the capillaries, in carrying on the circulation, is well known. And we can easily imagine how the withdrawal of their assistance, by destroying their sensibility, could bring about this effect. And that the loss of sensation (sensation being but the result of peculiar changes excited in the extreme points of the nerves, by which they are then carried to the sensorium, as by the wires of an electric telegraph,) in any part of the organism, has a marked effect upon the strength of its circulation, we daily learn from the common consequences of injured nerves and paralysis of the limbs, whereby the vitality becomes so low, as often to threaten sloughing and other troublesome effects. And, that this is the manner by which chloroform, alcohol, and other allied narcotics produce death, (rather than by paralysing the heart in the first instance,) I have no doubt, from closely observing the effects produced both upon myself and others, by inhalation of chloroform. (a) The features too, of this little patient, were placid and strikingly swollen, while the whole attitude of the body, immediately on the cessation of the convulsions, assumed that peculiar look of sensual *abandonnement*, which I think highly characteristic of alcoholic poisoning. Even in this little child the protruding and parted lips, the swollen face, and the peculiar position that the limbs and body assumed were quite unmistakeable. I had often been struck with this in people I have seen *dead-drunk* with spirits; and on visiting the opium shops of the Chinese in Singapore, I was strongly impressed with the idea of its forming a characteristic symptom—sufficient to distinguish it from the state of stupor induced by opium. In the narcotism of opium, the flushing of the face seems to remain longer, and while it continues there is more evidence of excitement in the features (generally, too, of a more intellectual appearance), while the haggard, death-like look that follows is never to be forgotten if once seen on the large scale. These characteristics may no doubt be considerably modified by the circumstances under which we see it in these countries (particularly from the systematic way in which this state is induced, and the inuring of the system to the use of the drug.) Still they are symptoms, I think, not to be neglected. And, further, to the physiologist, they may afford some interesting hints, and a wide field for the play of the speculative philosopher also. For instance: may not these peculiar and distinctive expressions of the features, induced by alcohol and opium, be indicative respectively of peculiar states of action going on in the nervous centres, and corresponding again with certain states or modes of psychical being?

Convulsions we have seen may be equally the result of alcohol, opium, and direct injury, and so may paralysis; so that they afford no distinctive marks for our guidance.

The absence of reflex responses, too, on tickling and pricking the extremities is but of negative value; for in apoplexy, or injury involving the base of the brain or medulla oblongata, they will be equally wanting, as in the deep stupor of narcotism, that so generally is destructive of these evidences of an *intact medulla* and spinal cord.

The case of your correspondent "F." is decidedly so singular, that I feel inclined to suspect a fault somewhere in the evidence, by which he was led to believe that the child had swallowed anything like the quantity of brandy mentioned (nearly half a bottle). It is scarcely possible, and contrary to all my experience, that it could have been so quickly taken up into the system, that, within the space of two hours, the stomach-pump returned the water injected into the stomach "scarcely smelling" of the spirit!

(a) In mentioning the subject of chloroform, I cannot help stating, (in reference to those fatal cases we have lately had reported,) that they all seem to be purely the result of suffocation, where they have not otherwise been satisfactorily accounted for by the action of excitement on diseased bodies. Dr. Simpson attributed the death of the Newcastle case, and, perhaps, correctly, to closure of the glottis and consequent suffocation; but oxygenation may be equally prevented, and suffocation produced, by filling the lungs entirely, or nearly so, by the vapour of chloroform, to the exclusion of a sufficient supply of atmospheric air, as it would be by strangling or drowning the individual, and from the quantity used in these cases, and the mode of administration followed, at least much greater caution and judgment would be required than is often bestowed upon it. Were chloroform at all dangerous in proportion to its medicinal powers, we should hear of far more fatal cases than we do, considering the number of ignorant bunglers who daily use it. The *post mortem* examinations all corroborate this view, in showing the dark, unoxygenated state of the blood, and its collections in the lungs and internal cavities. If this be the case, it is evident that, with proper caution and half the attention required in many other operations, these fatal results might have been averted.

I should rather be led to consider the case one entirely of simple congestive coma, in which the previous ill-health of the boy had much more to do than the brandy, the great bulk of which must have somehow or other walked off elsewhere,—perhaps, on its own feet (for we often find this curious article invested with strange properties).

The interest and importance attached to the subject of alcoholic poisoning, is my only apology for the above remarks, which I trust may tend somewhat to its further elucidation, and the establishment of practical views regarding its history.

CASE OF STARVATION.

By W. PHILPOT BROOKES, M.D., &c.; Fellow of the Royal Medical and Chirurgical Society; Surgeon to the Cheltenham General Hospital and Dispensary; and Visiting Medical Officer to the Cheltenham Division of County Lunatic Asylums, &c., &c., &c.

As cases of starvation, in a civilised country like our own, are, happily, rare and unseen, I consider the *post-mortem* examination of the following subject may prove of interest to the members of the Profession. I shall, with your permission, claim a space for its insertion in the pages of your Journal.

I was requested by Mr. Gabb, Surgeon, of this town, to be present at the examination of a child, upon whom a Coroner's Inquiry was sitting, and whose death had occurred under circumstances requiring investigation, no medical man having been called in by the parents during the life of the child. On entering the house, the aspect of it altogether struck me as most miserable and uncomfortable; no bedding or covering for the family, and the whole of the house exposed to currents of air through the floorings and walls, with the roof of the house mostly uncovered. I found two of the children who were living in this wretched abode, looking pale, bloodless, and emaciated, evidently exhausted from want of proper food and warmth, and one suffering from an affection of the scalp.

Post-mortem examination of the boy, who died on Sunday, Jan. 7, 1849, took place on Friday, the 12th; aged four years next April.

General appearance of the body emaciated, great pallor of the skin and eyes. Much putrefaction had taken place, and the body gave out a most offensive odour.

On cutting through the skin, we found very little adipose tissue; eyelids open, conjuctivæ white, pupils dilated; tongue and throat appeared dry and much parched; heart small and flabby, of a pale colour, containing very little fluid; pericardium healthy, having a small quantity of serum in it; lungs of a light colour, collapsed and healthy; gall bladder nearly full of bile; liver larger than natural; healthy spleen and pancreas; healthy abdominal region; stomach collapsed, contained one teaspoonful of fluid, its coats tinged with bile; intestines collapsed, pale, and empty, of a yellow colour, from the bile; rectum and bladder empty; kidneys natural; mesenteric glands larger than natural, appeared quite healthy; brain, for the age of the boy, large; sinuses contained but little blood, and the substance of the brain was pale and bloodless, otherwise in a natural state.

It will be remarked, in the above case, that no signs of disease sufficient to cause death were discovered on a *post-mortem* examination; and, from the general aspect of the body, and the following facts, we came to an opinion, that death had been the result of starvation. There was absence of adipose tissue, want of red blood in the brain, which was many degrees paler than usual, contracted lungs, absence of food in the stomach, and fecal matter in the intestines, which were also contracted, no signs of poison in the stomach, its mucous lining being natural and healthy.

I regret to say, this gives another melancholy instance of what the vice of drinking will lead to; for the parents of the unhappy child, although in the receipt of upwards of one pound weekly, had allowed their unfortunate offspring to starve.

Albion-house, Cheltenham, March, 1849.

POISONING BY LAUDANUM.

DETECTION OF MORPHIA; ABSENCE OF MECONIC ACID IN THE FLUID CONTENTS OF A STOMACH WHEN LAUDANUM HAD BEEN TAKEN FOR THE PURPOSE OF COMMITTING SELF-DESTRUCTION.

By H. OSBORN, Esq., Southampton.

A woman residing in this town took a portion of laudanum, with the intention of committing suicide. The surgeon in attendance administered a full dose of sulphate of zinc; but no effect being produced, the stomach-pump was applied, and about twelve ounces of fluid, containing a small portion of solid matter, was removed. After this had been drawn from the stomach, the emetic took a copious effect, but unfortunately the vomit was thrown away.

The woman having recovered, the contents were handed to me for examination. I found no smell of laudanum, but the presence of morphia was readily detected in the filtered liquid. I examined the whole very carefully for meconic acid, but none could be detected, and I should probably have been induced to infer the presence of morphine only, had there not been evidence to show that laudanum had been taken. I suspected that the solid matter of the vomit contained an insoluble meconate of zinc, though I was not aware that the compound had been pointed out by authors on poisons; and there was no means of proving the existence of meconate of zinc, owing to the latter contents being rejected. I tried an experiment, by mixing thirty grains of sulphate of zinc with three drachms of laudanum, diluted with water. A precipitate fell, which was collected, washed, and divided into two parts; one was treated with hydrochloric acid, and the other with ammonia, thus forming soluble compounds of meconic acid, which gave the blood-red colour, with permuriate of iron. The filtered solution contained sulphate of zinc and sulphate of morphia, and resembling that which had been removed from the stomach, but differing in colour and smell, the latter being nearly colourless. I found the meconate of zinc soluble in hot dilute acetic acid, and slightly soluble in boiling distilled water.

The object of this communication is merely to show the necessity of examining the whole of the solid matter contained in the stomach for insoluble meconate of zinc, when a sulphate of that metal has been administered as an emetic after taking laudanum.

PROGRESS OF MEDICAL SCIENCE.

IRELAND.

(From our Dublin Correspondent.)

DUBLIN OBSTETRICAL SOCIETY.

(Continued from our last.)

Dr. Wilde read an interesting paper on the superstitions popular in Ireland, connected with obstetric practice. He referred to the opinion expressed by Dr. Montgomery at the opening meeting of the Society, that the advancement of midwifery as a science was proportional to the exaltation of civilisation; and he stated that this idea was borne out by the grossness of the practices which were current among the illiterate and ignorant of his countrymen. The learned author proceeded to describe some of the charms or philtres employed by peasant girls in the West of Ireland, for exciting the affection of those they loved. Some of these are of the most barbarous character, and manifestly of Pagan origin. For example, binding a piece of skin, torn from a recent corpse, round the thigh of the beloved, and removing it again without his knowledge. To effect this, it is manifest that a state of anæsthesia must have been in the first instance produced. To effect abortion the means used are similar to what are employed in other countries, but they are usually accompanied by a form of incantation. The Irish peasantry much dread the influence of charms in causing impotency. These charms are for the most part wrought by tying knots during the marriage ceremony, and repeating certain diabolical phrases. They are obviated by the married couple loosening the different parts of their dresses during or immediately after the ceremony, a process which is commonly pursued when the jealousy of a rejected lover is dreaded. Barrenness is occasionally sought after, and the means employed for obtaining it, consist in drinking milk boiled on a grass mouse, or, in the case of a parturient woman, the after-birth is buried under an elder tree, and covered with a wooden bowl, to prevent her again conceiving. It is believed that a woman pregnant, and dying in that state, is saved in virtue of her sinless offspring. This peculiar superstition appears to have descended from times anterior to the acknowledgment of modern polemical dogmas, for the Catholic Church does not receive unbaptised infants within the pale of perfect redemption. The belief of mothers' marks is not peculiar to the Irish; but when a pregnant woman sees a hare, it is always recommended that she should tear some part of her dress to prevent her child having a hare-lip; and if she has been struck with any kind of fruit, it is well for her to put her hand immediately on some part usually concealed, for it is there the mark will be on the child. No pregnant woman should wipe her feet on the grass of a church-yard, for in that case her offspring would certainly have club-feet. And if she passes under a mare's head, she will carry her child as long as the mare would a foal. Dr. Wilde then recounted the innumerable and amusing charms and operations that are had recourse to to shorten the time of labour and facilitate delivery. Among other applications, a cuckold's hat placed on the head of the patient is supposed to possess wonderful efficacy; and the learned doctor told an amusing anecdote of a woman, who, being told of its virtues, called out, during the pains, for Paddy's caubeen, which gave immediate relief; the cap was found to fit. It is impossible, in a report necessarily so brief as this, to allude to a tithe of the interesting superstitions collected by Dr. Wilde; but we hope soon to see them in a complete and more enduring form.

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THE MEDICAL TIMES.

SATURDAY, MARCH 17, 1849.

A little quiet manœuvring has been lately put into operation in the sister country, in order to secure the control over the Medical Charities in Ireland to the Central Board of Health of that Kingdom. The executive in this movement is composed of two young gentlemen, *protegés* of a Medical Baronet, who has hitherto been regarded as a sleeping partner in the Government Board; and the tactic practised is that of a circular addressed to certain select provincial practitioners, who, it is presumed, would not object to signing a vote of confidence which might give them a claim for those good offices which a metropolitan magnate can bestow in consultation. In Ireland, the oligarchy of the purse is much more felt than it is in this country. An aristocratic patient in that country, if he does not immediately get rid of his gout or dyspepsia, flies to the metropolis, and a word from Sir A or Sir B may very seriously compromise the reputation of the local Medical attendant. A movement such as we have indicated, on the part of the Board of Health, composed as it is of some of the principal Consultant Physicians and Surgeons of Dublin, is very likely to obtain an extensive countenance; for it is a direct *argumentum ad hominem* to each individual addressed.

We strongly advise our brethren in Ireland to avoid this snare. What has the Irish Board of Health done to deserve the confidence of the Profession? Is the insult of the five-shillings-per-day remuneration so soon forgotten? Is the taunt of mercenariness so soon forgiven? Was not the calumny which attributed political trickery to 1100 Medical gentlemen distinctly traceable to the Board of Health? Are the alternate threats and promises urged by the members of the Board passed into oblivion amongst the members of that Profession which they were employed to coerce? That temporary body has already displayed treason to the Irish Profession, from whose numbers it was drawn. Let not our brethren, then, be accessory to conferring on the Board permanent control over the Medical Charities of Ireland!

THE OUT-DOOR PAUPERS' BILL.

THIS Bill is intended to remove the evils incident to such abodes as that in which the Tooting tragedy recently occurred; and we think, that the measures proposed are highly calculated to accomplish the object. Such houses are, for the future, to be subjected to the Rules and Orders of the Poor-law Board, and to be placed, in all respects, on the same footing as ordinary Workhouses. Under the circumstances, we do not think that any more salutary arrangement could have been propounded.

It is a question, whether establishments, for the maintenance and education of children, would be better conducted by paid officials of the Boards of Guardians than by Contractors engaging for the due performance of these duties. The Tooting affair would seem, at first sight, to condemn the system of contracting for the maintenance of poor children, or of "farming" them out, as it has been opprobriously called. We must not, however, forget, that this system of "farming out" children is precisely that adopted by ninety-nine respectable parents out of every hundred, in regard to their own offspring. So soon as it suits the father's means he sends his boys and girls to boarding-schools, the managers of which contract to board, lodge, and educate them for a certain sum.

There are few men in England who would condemn this plan in reference to their private arrangements; most would highly approve of it. It is admitted, that these contractors generally perform their duties with kindness and

zeal; and why is this? Because their livelihood depends upon their character.

Then let the public contractor also feel the value of a character. Make him responsible. Let there be an adequate and frequent inspection of his establishment, and thus bring his conduct under the immediate eye of the public. Such inspection will make him vigilant and cautious, and, perhaps, just. We have no particular confidence in the watchfulness and integrity of paid officials. Their conscience is usually regulated by a certain official standard, and is peculiarly complacent upon the subject of *douceurs* from contractors for bread and beef. We have actually witnessed conduct in a juvenile establishment, under the immediate superintendence and inspection of a Board of Guardians, far more scandalous to the Master than anything that has been revealed in connexion with the Tooting Establishment. It was the horrible massacre at Tooting that awed the public mind, and this was, no doubt, partly attributable to epidemic causes.

The Out-door Paupers' Bill provides, that such establishments shall be visited by any Justice of the Peace at such times as he may think proper; and, at the same time, it authorizes him to appoint the visits of any Medical Man he may think fit; for this power being given by the 30th Geo. III., c. xlix., with regard to workhouses, and incorporated with the Poor-law Amendment Act, 4 and 5 Wm. IV., c. lxxvi., is also given with respect to the House in which out-door Paupers are to be kept. So satisfied are we that a stringent inspection is desirable, and that a Medical Man is the only competent judge of the hygienic conditions necessary to be supervised, that we are glad to find this provision for the appointment of such officers; and they being responsible to the Board, would, no doubt, be an efficient check upon the ignorance or avarice of the Superintendent. On the whole, we highly approve of the Bill, and we think that it exhibits great discretion on the part of the President of the Poor-law Board.

THE LONDON UNIVERSITY AND ITS GRADUATES.

We last week published an account of a General Meeting of the Graduates of the London University, held at Freemason's-hall, to receive the Report of a Committee appointed by them in June, 1848, with a view to the improvement of their academical position. The object sought to be obtained is an incorporation of the Graduates with the University itself. As the Home Secretary had been memorialized on the subject, and had expressed himself favourably disposed to the Graduates, it became necessary that some leading principles should be adopted, upon which the Charter of their Incorporation should be framed. The Committee in its Report proposes the following:—That the Graduates in future shall form part of the body of the University; that its Government shall consist of a Chancellor, Senate, and Convocation, the last to be composed of all Graduates of a certain standing; that eventually the Senate shall be elected by Convocation; that all alterations in the fundamental laws of the University shall require the assent of Convocation; and that while the general executive management of the University shall be confided to the Senate, it shall, in certain cases, be subject to a Convocation veto. These demands are just and moderate, and are intimately connected with the future prosperity of the University.

This Institution has been called into existence by the necessities of the times. It was founded by Liberal men to promote Liberal principles in the republic of letters. Oxford and Cambridge had failed to keep pace with the onward march of science, and by religious tests had excluded a large number from the supposed benefits of an Academical Degree. Yet "the two Institutions," though founded centuries ago, are based upon far more liberal principles, so far as relates to their Government, than the modern University of London. In the Charter of Incorporation, granted by Her present Majesty, no provision whatever is made for the exercise of the elective franchise by the future Graduates; but they are left, like the members and licentiates of our Medical Colleges, without a single tie, if we except their academical degree, to bind them to their *alma mater*. The highest office in the University is in the gift of the Crown, so that the Graduates are forbidden even to expect to indulge in the luxury of an academical election. We have a strong opinion, that Oxford and Cambridge would have been equally celebrated for producing hypochondriacs as *literati*, if the Charters of those venerable Institutions had not provided for a "poll" when the office of Chancellor became vacant.

The Senate of the London University is composed of a Chancellor, Vice-chancellor, and thirty-six Fellows. The first officer, as we have stated, is appointed by the Crown; the Vice-chancellor, by the Fellows; these latter, by the members of the Senate, whenever vacancies occur. They have "the entire management of, and superintendence over, the affairs, concerns, and property of the said University."

Now, it might have been argued, that in its first establishment there were no Graduates upon whom the elective franchise could be conferred, and therefore of necessity, the members of the Senate must be elected in the manner appointed by the Charter. This is true; but it was a sad defect in that document, not to provide that the Graduates, when amounting to a certain number, should enjoy privileges at least as extensive as those which the Graduates of the Old Universities possessed. We cannot wonder, therefore, that the London men feel their interests have been overlooked, and are loud in their demands for a new Charter, having for its basis the principles to which we adverted at the commencement of this article.

The success of the present movement will depend greatly upon the spirit and temper with which it is carried on; but we are sure the enfranchisement of the Graduates is closely connected with the future prosperity of the University. The Government, under the present Charter, is invested with powers which, at any time, may be used to act injuriously upon the Institution; these, we consider, ought to be considerably diminished, if not entirely abolished. We trust, also, that the Senate will exhibit a readiness to do justice to the Graduates, by seconding their efforts.

The London University should be inferior to no other in any respect; and those who have received its diplomas, in asserting their just claims, are using the best means of raising their *alma mater* to the first rank amongst learned corporations.

THE WAR MEDAL AND THE ARMY SURGEONS.

It has been a frequent matter of complaint that Surgeons, both Civil, Military, and Naval, have not received those tokens of public estimation to which they are entitled. The Civil Surgeon, holding any public professional appointment, obtains but a poor reward for his labours, and in some instances, as under the Poor-law, is barely remunerated. In the Navy, the Assistant is denied the position to which he is entitled as an officer and a gentleman. In the Army, the Surgeon's claims to honorary distinction, in common with the other officers of the service, have been but coldly recognised; and had it not been for the remonstrances of the Medical Press, would, in all probability, have been disregarded. Yet there is no class of officers in Her Majesty's service more important or more deserving when we consider the dangers to which they are exposed, and the duties they are called to perform. Without the Surgeon, the field of battle would present a scene of unmitigated horrors, and numbers of lives would be sacrificed, which by his skill are preserved, to be of future use to the country. Skilful Surgeons are as essential to the efficiency of an army as clever Generals; for a good Medical Staff in the field inspires men with a larger amount of courage to endure suffering, as they know the best means are at hand to afford them relief. In the recent conflicts in India, we learn, from the testimony of those who had opportunities of ascertaining the opinion of the Army, that the men more cheerfully entered into the field of conflict when they knew that the hospital establishments were efficient; while no small discontent was manifested when it was surmised that the contrary was the case.

We have ever denounced it as bad policy in the Government, to neglect the Surgical department of the Army and Navy; and we are not without hope, that the time is not far distant when a more liberal policy will be adopted towards the Profession than has prevailed in past times.

It affords us some pleasure to know, that in the distribution of the "war medal," the Surgeons of the Army are not to be entirely overlooked, and we have recently learned that the Commander-in-Chief has forwarded to several Peninsular surgical veterans the medal.

Within the last week, Samuel M'Culloch, Esq., of Liverpool, has received this honorary distinction for his services in the Peninsula and South of France, as a Medical Officer of the Royal Artillery. The medal is of silver, having on one side the bust of the Queen, and on the other Victory, in the act of crowning the Duke of Wellington with a wreath of laurel. On the edge is inscribed the name and rank of the officer to whom it is presented, and above the

medal are silver bars, each having inscribed upon it the name of the siege or battle at which he was present. Mr. M'Culloch was at the siege of St. Sebastian, the battles of Nivelle, Nive, Orthes, and Toulouse.

The awarding of medals to the Peninsular Army Surgeons is but a common act of justice to these deserving men. We claim for them also other honorary distinctions in common with the non-Medical Military Officers. Hitherto these have been denied them—a ribbon being a distinction which they now have no hope of obtaining. Our Government ought to follow the example of some Continental kingdoms, where the members of the Profession are considered sufficiently worthy to enjoy the highest distinctions which the Sovereign can bestow.

ON THE PRESENT SYSTEM OF STUDY FOR THE MEDICAL PROFESSION.

Various changes have taken place within the last few years, and many alterations have been made in our Colleges relative to the mode of study for the Diploma. Reform has been attempted, with a view to amend this system, but with little success. The alterations, strictly scrutinised, may have been beneficial to a few, but not to the public at large; and our present mode of study admits of great improvement. This is called for on behalf of Science, of the Rising Generation, and of the Profession. The Examinations by our Authorized Bodies should be conducted with greater strictness, more with a view to test the Candidate's practical acquaintance with the different branches of the Medical Art, and more calculated to expose his deficiency of knowledge. The students should be kept regularly at one particular branch of study for a sufficient time, and it should be so arranged that they may be compelled to attend to different subjects at proper and stated periods. It may be said, this is the case at present; but is it possible for the Student to understand the various branches of the Medical Profession, when he is required to attend four or five Lectures a day, often in succession, upon different branches of the Science? As soon as he has gained a little knowledge of one branch, it is succeeded by the study of another, until, at last, he gives all up in despair; attending (as he is often obliged to do) as a mere automaton, and satisfied if he procures his certificates. Then commences the cramming system, by which he is enabled to get through the examination. We maintain, that such a system is morally and physically wrong. Based upon artificial acquirement, it enables the student to pass his leisure time in idleness, and often leads to temptations which frequently end in ruin and disgrace. He delays making himself acquainted with either the theoretical or practical part of his Profession, until the last moment; and hundreds of instances can be pointed out, if necessary, where this delay has proved fatal. The four years which the College of Surgeons require him to study, are comparatively lost; and the habits induced by the useless and injurious regulations of the learned bodies hang like a millstone about his neck.

The remedy we consider simple, and not difficult to carry out. Why delay the examination until the end of the course? Why not have an examination at the end of each year? It is presumed that the student has a classical education. Let him, the first year, study Chemistry, Botany, Materia Medica, and Osteology, and let him be examined practically at the end of that time, that is to say, let him have some important chemical exercise to perform, and explain to the examiners. Let him have prescriptions to compound; and let his knowledge be well tested on the structure and anatomy of the bones. This plan would give him confidence, as well as an interest in and a zest for knowledge. The second year, let him attend Practical Anatomy, Dissections, the elements of Physiology and Medical Jurisprudence, and, at the end of that time, let him be practically examined upon these points, either by demonstrating a recent dissection, or by devoting a few hours to prepare a part which he should describe, and be examined upon; also, let him be required to discourse upon the use of the several structures. Third year, let him study the more minute anatomical textures, Physiology, and Surgery, and attend the Practice at an Hospital, with Clinical instruction. At the end of that time, let the examination be conducted in the same practical manner. The fourth year he should devote to Hospital Practice, taking Cases, both medical and surgical, attend to Midwifery, Surgery, &c., and let the examination be so conducted, that his knowledge be well tested by performing operations, —some one or two on the dead body. Let him point out to the examiners the anatomy and physiology of the different parts divided. Let him fully enter into the details of the cases he has taken, and be examined upon them practically; and let it be clearly tested, that his previous knowledge had been kept up. The last examination should be open to the Profession and to the public. This mode of education would benefit science, increase practical knowledge, improve the Medical Profession, and satisfy the Public at large. It would prevent the Pupil adopting idle habits, lead him into a more studious and regular mode of life, and do away with the cramming system, which has already lasted too long. What can be more inefficient, oftentimes, than the examination at what ought to be the leading College of England? Has it risen in public estimation? Is it universally looked up to with deference and respect; and do its present regulations tend to make the College appreciated, or increase its dignity? If a Fellow from one of our sister countries, having taken the highest degree, should wish to reside in London, the College will condescend to examine him as a Licentiate. Admitting frequently that the examination is nominal, Can this be just, or is it fair? There are instances where it has been regarded as an insult. Why should this distinction be made? Why should not the Candidate be admitted as a Fellow? The regulations of all the London Corporate Medical Institutions require complete revision, in this and in many other respects; and we maintain, that some such plan as we have laid down is absolutely necessary, and would prove highly advantageous. But it may be said that it would increase the labour of the Examiners. This, however, might easily be managed by an interchange of duty, or by increasing the number.

We protest that the present system is based upon a false principle. One great evil is, the capability existing of passing all the Examinations by only a few months' work, provided the certificate be procured. Is this a test of knowledge, or a proper mode of entering into a Learned Profession; or can it be said to be a test of the practical part of any one branch of Science?

MEDICAL LEGISLATION.

In all probability the present session of Parliament will not pass by without a renewed attempt at Medical Legislation. It may not, be amiss, therefore, to direct the attention of our readers to the subject from time to time. Even when nothing new is brought forward, the very effort to keep alive a question of general interest to the Profession is not altogether profitless. Wearied with want of success, after a long season of agitation, human nature is not without a strong tendency to settle down into a state of indifference.

The question naturally resolves itself into two branches; one of which relates to qualification, and the other to protection. Allowing the former, for the present, to remain in abeyance, we will advert to the latter, and offer two or three practical suggestions.

A legal Practitioner's claim to protection rests, then, we apprehend, upon two foundations —the nature of law, and the justice of the case.

A penalty, understood in its widest sense, is inseparable from the idea which we form of positive or statute law, or indeed of any law. Take away the penalty, and we have remaining a precept, counsel, or exhortation; instead of law, with its power to enforce obedience, there would be left a piece of advice, which might or might not be followed, at the option of the recipient. The two ideas of command and of penalty, united and blended together, are essential to the composition of statute law. A law without its penalty would be a solecism in language. To say of a Medical Man, that he is a *legal* Practitioner, should, from the nature of law, be equivalent to saying, that he is protected in the exercise of his Profession from the inroads of the whole herd of illegal Practitioners.

The qualified Medical Man is also entitled to protection, on the ground of justice. It is manifestly unjust that one man should be forced to comply with certain regulations in order to practise, and that another should be permitted to do the same in utter disregard of such regulations. This position is so self evident, that it requires neither proof nor illustration. The question, whether it is the duty of the State to legalise the practice of medicine, is here left untouched. But, assuming that it is, protection to the legally qualified necessarily follows, both from the unalterable nature of law, and from the justice of the case.

In the abstract, a law without its penalty we have shown to be an absurdity; yet it often happens that, on account of the difficulty with which a penalty is enforced, many a law is, to all practical purposes, as inoperative as though

it had not been armed with a penalty. In the framing of a new law for the Profession, care should be taken that its authority be strengthened by making the penal provisions easily available.

For this purpose, we would suggest that the legal proof of an offence should be simple and easy. One source of difficulty in the way of proof, under the existing law, lies in the exclusion of Surgery from the pale of protection. The sciences of Medicine and Surgery shade off, the one into the other, so gradually, that it is often a matter of extreme difficulty to determine to which of the two a certain disease belongs. The reasons for assigning a disease to the domain of the one science may be equally balanced by those for assigning it to the domain of the other. Under these circumstances, even in a case where the proof may be clear against a party, it becomes easy to raise a doubt whether the case be purely medical. In general, a Jury is but too ready to extend to an accused the benefit of a doubt, however slight. Let Surgery and Medicine, including Midwifery, be treated as one science, and made alike the object of a protective measure, and one important source of difficulty is thereby removed. The proceedings should be cheap; and the penalty, whether consisting of fine, imprisonment, or of both, should be such in amount that a party may have no very strong motive to repeat his offence.

Benefit Clubs, we believe, are very generally established throughout the kingdom. One of these may, by the voice of the majority, elect for its Medical Officer a druggist, a farrier, or any other person, equally devoid of qualification. To compete with a class of this description, a Medical Man has to make great sacrifices. Either he must attend Clubs on terms shamefully low, or suffer the loss of many good patients. At present, there is no law to restrain these Societies from engaging the services of an uneducated practitioner; nor is the fact of an engagement with such a society, on the part of an unqualified person, to be admitted as evidence of illegal practice. Would it not be advisable to render it penal in Clubs to employ illegal doctors; and also penal on these *doctors* for entering into a contract to attend them?

The system of registering deaths under the Poor-law may be made to yield good service to the legally qualified. Now, it is optional with the Medical attendant of a deceased person, whether or not to certify the cause of death to the Registrar of the district. The circumstances under which to grant or withhold a certificate of burial are left entirely to the discretion of the Registrar. We would suggest, that a Coroner's Inquest should be held in every case of death taking place without the previous attendance of a legal Practitioner. This may be easily effected, by prohibiting the Registrar from granting a burial certificate before he receive a certificate of the cause of death from a qualified Medical attendant. No Medical Man, we feel assured, would deem it a hardship, if the law should make it imperative upon him to write, without fee, a certificate of the cause in every case of death occurring under his care. The advantage would be clearly on his own side. Such a provision as this would tend greatly both to deter the public from seeking the advice of quacks, and to render quacks chary of giving their supposed assistance when sought. Neither party would much relish the idea of a Coroner's investigation staring him in the face.

CITY SEWERAGE.

At the late meeting of the Commissioners, the inspectors reported a vast number of houses and localities wherein they had served personal notices for compelling the owners to drain the same into the public sewers, according to the terms of the Act, and for arranging and improving the internal drainage and cleanliness thereof, and also for enforcing the laying on of water to the water-closets, &c. It was also stated that, the public companies and the Royal Hospitals of London being owners of considerable property in the city, it was desirable that such proprietors should receive notice of the compulsory power of the Board in regard to the drainage, internal and external, of the same.

It was ordered, that the clerk should write to all the persons interested, calling upon them to improve the drainage of all the property over which they had control respectively.

The Clerk read to the Court a letter from the Commissioner of Police, containing a list of the number of nuisances reported to him by the officers of his force as existing in various parts of the city; which was referrad to the Board of Health.

The letter of the Commissioner drew forth remarks from some of the members, disapproving the idea entertained by Mr. D. W. Harvey that the police were the most available channel through which the sanitary condition of the city could be improved; the objectors considering that the Commissioners of Sewers were, under the Act of Parliament, *alone* authorized to carry out the views of the Legislature in that respect. They at the same time expressed their feeling, that the police might be very useful in assisting the officers of the Court, by intimating what came under their notice in the course of the performance of their duties.

Now, it appears to us, that the notion of the Chief Commissioner of Police (Mr. D. W. Harvey) is most correct and praiseworthy. Is not a nuisance an offence? and who so efficient for reporting and putting down nuisances, as his policemen, whose business it is to prowl about and pry into the different holes and corners, courts and alleys, as well as appearing in the more public thoroughfares. We cannot but compare these "disapproving" Commissioners of Sewers to the dog in the manger; they will neither do the work themselves as it ought to be done, nor approve of the police doing it for them. But so long as we get good drainage and an abatement of nuisances, they may take their choice—we care not at whose instance—only let these things be done.

Since penning the above, we have met with the following paragraph, and as we like fair play, we insert it, merely premising that the great number of the complaints only proves the great extent of the grievance, and that we very much prefer the *preventive* to the remedial system. But finding, by the conclusion, that the Commissioners have even refused their dinner, we are satisfied—self-denial can no further go.

During the year 1848, there were 5,112 complaints entered on the books, being at the rate of almost 100 a week, or more than 16 every week-day throughout the year. Of these, 374 were from places not within the rated jurisdiction of the Commissioners, 287 were obliged to be deferred for the completion of the Ordnance survey, and the rest, 4,451, were attended to. This is but a small sample of the work of the Commission, which, as many of the ratepayers have a misapprehension on the point, it may be well to mention, not only abstains from dining at their expense, but is altogether unpaid, the Commissioners having declined to accept their legal "wages."

DEATH OF R. R. PENNINGTON, ESQ.

It is with feelings of profound regret that we record the death of R. R. Pennington, Esq., one of the most liberal-minded and successful Practitioners of Medicine that has ever adorned our ranks. Educated under Pott for the higher departments of surgery, he selected the more retired and toilsome paths of general practice, and eventually grasped an amount of business that, in this particular branch, had never before been equalled, and, we may confidently say, will never be surpassed. We have understood, that the receipts from his practice amounted at one period to 8,000*l.* a-year. What he earned hardly he spent freely. No man was more liberal in his donations to any cause which he thought was calculated to advance the interests of the Profession. He was the Nestor of general practice; for his understanding, unclouded up to the latest moment of his life, was not less judicious than his sympathies were frank, generous, and unbounded.

His perceptions were keen and just; his volition decisive and straightforward; he was a hater of guile and intrigue. His knowledge of men and manners was accurate and prompt,—slow to trust, his confidence was not easily shaken. He admired candour, for it was the reflex of himself. Courteous and friendly in his manners, he never forgot a certain quality of dignity, which lent a weight to his character, that enhanced his other claims upon our esteem. There was an expression of shrewdness in his eye, and a pleasant smile played upon his lips in conversation, that attracted confidence and regard. He was not a man of many words. In physical conformation, he was short and rather square, full-chested, and straight as a lance. His complexion was ruddy, and his hair white as a snow-flake. We believe that its venerable character owed some of its charms to the manipulations of art. His natural constitution must have been cast in iron, for, during the whole of his life, he worked harder than most other men, and was no stranger to those festive pleasures that test the springs and wheels that keep in motion the framework of humanity. Fond of society, he was its ornament; and delighted to show that age had not frosted his heart or paralysed his powers. His style of dress was peculiarly neat and gentlemanlike, verging somewhat towards the elegance of the *beau*. His coat was always buttoned close, and fitted his body with geometrical accuracy; his nether garments exhibited the graceful contour of his limbs with fastidious exactitude. This was in his latter life; formerly he wore breeches and silk stockings, and gloried in the honours of a well-turned and faultless calf.

He was an early riser, and on one occasion within our knowledge he had an appointment at eight o'clock, one cold December morning, at Bayswater, a mile and a half from his residence; and, to the surprise of the practitioner who came to meet him in his carriage, the veteran consultant was there before him, having walked to visit the patient, undefended even by a great coat, and attired in his usual black inexpressibles and silk stockings. There can be no doubt that he retained his robust health so long in consequence of this salutary habit, whilst, also, it enabled him to conduct the immense practice which fell to his share without undue pressure and fatigue.

His practice was chiefly among lawyers,—a shrewd set of men, and good judges of character. At one

time he attended the whole bench of judges, and counsellors innumerable. This fact is a high testimony to the prudence, ability, and tact of the great General Practitioner.

We hardly need add, that in his later years he threw himself boldly and zealously into the struggle to redeem the Profession from the injustice and oppression of the old corporations. He had no affinity for antiquated prejudices and corporate greed. He loved justice and fair play, and was highly indignant at the insults which the Council of the College of Surgeons heaped upon the members. He did not fail to exhibit this generous resentment on all becoming opportunities, and, although he was Senior Fellow of the College, he declined to attend any of the meetings of that body. The National Institute, over which he presided, had his entire sympathies, and he promoted its objects with all his efforts. His loss will be long felt by the General Practitioners, for who can replace him? In the conspicuous and honourable position in society that he occupied he was alone, and it is in vain to look about for another with such various claims upon our respect. Time was one great element of his eminence; he was eighty-five years of age at his death, and he had been sixty-two years in the practice of his profession.

The young practitioner always found a friend in him; and his counsel, the result of a long experience, was rendered without ostentation, and was of high practical utility. He advised General Practitioners, as they valued their own interests, never to be above sending out their own medicines; and we believe that, as a matter of policy, no man ever kept his patients in such utter darkness of the remedies he was giving them, or required a more implicit obedience to his edicts. This conduct might have been the secret of his great success.

He was fond of his order, as the following anecdote, which we have heard him relate, will testify:—When, late in life, he desired to relieve himself of a portion of his heavy labours, he confined himself to prescribing practice, and chiefly among the great and titled of the land. On that occasion, Sir Henry Halford suggested to him the propriety of joining the College of Physicians.

"No," was the proud reply; "I have acted as a General Practitioner all my life, and I will die a General Practitioner."

"In that case," answered Sir Henry, "we cannot meet you: the by-laws of the College forbid our calling in a General Practitioner."

"As you please, Sir Henry; but I shall not change my cloth."

A few months after this colloquy, Sir Henry was in attendance upon the Duchess of ————, who did not get better so speedily as was wished. His Grace intimated to Sir Henry his desire that Mr. Pennington should be called in. Sir Henry was horrified; he declared it was contrary to the etiquette of the College.

"It matters not to me," responded the Duke, "what your etiquette may be; but I have confidence in Mr. Pennington's opinion, and request that he may be consulted."

The result was, that Sir Henry for that occasion abrogated the by-laws of his College, and smiled away the indignity of consulting a General Practitioner.

A man of this character deserved to secure general respect, and he obtained it. It is a source of regret to think, that his life was not prolonged to witness the legal independence and advanced social status of the class of which he was the champion and the ornament.

His death took place on the 8th instant, and was owing to chronic bronchitis, associated with congestion of the liver and low fever. For a few days previous to his decease, he suffered from obstinate constipation, caused, if we are credibly informed, by stricture of the intestinal tube. The corpse was followed to the grave by a large number of friends, among whom were the Council of the National Institute, anxious to do honour to the memory of their chief. The vaults of the Foundling Hospital hold the revered remains. This remarkable and excellent man is now gone from the scene of his labours; but his high character, his unspotted integrity, and noble sympathies, will remain in our memory, and be an inspiration to many an aspirant to imitate his brilliant example, and to strive after his blameless success.

DEATH OF ANTHONY WHITE, ESQ.

This gentleman, so long and deservedly well-known and esteemed as Surgeon to the Westminster Hospital, expired on the 9th inst., at his residence in Parliament-street, at an advanced age. Mr. White was of a North-country family, and, after an extended preliminary education, was admitted a Member of the Royal College of Surgeons so long ago as September 2nd, 1803. In 1816 he became a Bachelor of Medicine of the University of Cambridge. Soon after commencing practice he was elected an Assistant Surgeon of the Westminster Hospital, an institution with which he was connected at the time of his decease. Mr. White speedily obtained celebrity for the dexterity and success of his operations in the most difficult cases in which surgical skill is required. He it was who first excised the head, neck, and trochanters of the femur, the patient surviving the operation twelve years, and then dying consumptive. The preparation illustrative of this interesting case is preserved in the Hunterian Museum. The following account is from the pen of the lamented deceased:—

"Four years and a quarter before the excision of the bone, the patient, a boy, at that time nine years old, was thrown down. The injury was followed by a disease of the hip, which was treated with leeches, blisters, rest, and other usual means. Large abscesses formed, and burst around the joint, with extreme pain and copious discharge of pus; and the head of the femur was dislocated far on the dorsum ilii. The patient was reduced to a very debilitated state; and during the two years and a half in which the discharge continued, became exceedingly emaciated; but for some months before the operation no fresh abscesses were formed, and the progress of the local disease appeared to be checked.

"Mr. White 'removed the head and neck of the femur with a portion just below the trochanter minor, from the dorsum of the ilium.' 'The operation was effected by dividing and separating the integuments from a little above the point of lodgment down to that opposite the site of the acetabulum. At this point the bone was divided with a small straight saw about two inches below the top of the great trochanter, raised with a spatula, and then carefully detached from the ilium. The knee, which had long been immovably imbedded in the opposite thigh, was now with facility brought into a straight line, and the whole limb was secured with a long splint, and treated as a compound fracture. The wound quickly healed, the various sinuses soon ceased to discharge, and the health of the patient gradually improved. Within twelve months, a most useful compensation for the loss of the original joint was obtained. Perfect flexion and extension, and every other motion except the power of turning the knee outwards, were restored; but the femur did not grow after the operation.'"

A further account of the case will be found in Mr. South's translation of Chelius' System of Surgery, Vol. II. p. 979.

Mr. White acquired, at an earlier period than is usual in his Profession, a very extensive practice, and was not long in obtaining the recognition of eminence by election to a seat in the Council of the Royal College of Surgeons on the 6th of September, 1827, in the vacancy occasioned by the resignation of Sir Ludford Harvey, and in two years after, September the 10th, 1829, received an additional proof of the estimation he was held in, by his colleagues appointing him an Examiner, in the vacancy occasioned by the lamented decease of William Wadd, Esq., of facetious memory; in 1831 he delivered the annual Oration in memory of the immortal Hunter. On the 10th of July, 1834, he received the highest honour he could obtain in his Profession, that of President of the Royal College of Surgeons, to which high office he was re-elected in 1842. As a member of the various Boards at the College he was highly respected by his colleagues.

In consequence of repeated attacks of gout which speedily affected his hands, Mr. White was necessitated some years since to relinquish active practice as an operator, but continued to give the public the benefit of his experience as a consulting surgeon. His name is one which will be long recognised among the eminent men in the Profession, which he not only adorned by his talents, but in the practice of which he was distinguished by a remarkable benevolence. His skill was always at the command of men engaged in the pursuits of science, literature, or the arts, to whom, not unfrequently, his purse was as open as his hand in the hour of their distress. To Mr. White, surgeons are indebted for many of the important improvements made of late years in their instruments. Those ascribed to the Baron Heurteloup are said to have been introduced under his auspices.

Mr. White has been unable, from his extensive practice, to contribute any literary work to the advancement of Medical Science, if we except the publication of his Oration in memory of Hunter, and a pamphlet published last year, entitled "An Inquiry into the Proximate Cause of Gout, and its Rational Treatment."

DISSECTIONS OF EVIDENCE

TAKEN BY THE SPECIAL COMMITTEE OF THE HOUSE OF COMMONS, SESSION 1848.

TO THE GENERAL PRACTITIONERS OF MEDICINE.

GENTLEMEN,—When agitation is abroad and threatening to dislocate that happy concordance of opinions that has so long prevailed among us, it becomes necessary to revise our convictions, and to ascertain whether or not we have been deluded into a false union, or whether circumstances have so much changed of late as to make an alteration of policy desirable. I respect all men's opinions, and wish to accord to them their due weight. I cannot, however, remain a passive spectator of flatulent pretensions distended to a magnitude that makes truth ridiculous, and shocks common sense. Many schemes, like a spider's web, keep aloft, simply because they are too light to fall. A smart gust, however, will shatter them to pieces. We are prone to overvalue our own interests, and to make an idol of our private opinions. Each society is a microcosm to itself, and has its own standard of right. It measures the world without by its own

little rule, and dwarfs giants down to pigmies, fancying itself to be the great ogre for whose use all the rest of mankind were made. We must learn to extend our vision, and find a wider scale for the measurement of truth.

Thus it is in our Profession. He who has a Degree esteems himself a more oracular genius than he who has none; the mere member of the College reposes in self-glorifying ignorance beneath the shade of Hunter, and the licentiate of the Hall indulges in a peevish iteration of his legal rights, and endeavours to ennoble a lower origin by assuming the merit of a higher education. Yet we are one Profession, and ought to have united sympathies, equal rights, and a uniform denomination.

Let us, gentlemen, get rid of our sectional jealousies, and make common cause for an end that shall embrace the interests of all. Each man, at this moment, would make his particular College or Institution the head of the whole Profession; the physician naturally looks to Trafalgar-square, and repudiating the cares of government, desires only to maintain a titular dignity; the Surgeon believes that the structure in Lincoln's-inn-fields is the ark of our salvation; the Apothecary turns his back on Blackfriars, and looks about for a home elsewhere, but finds none. In this cheerless quest he is accompanied by the graduates from Scotland and Ireland, who are ready to enter the first open door that neglect or hospitality may leave ajar.

During these last few years, however, a new Institution has risen into consequence, and desires to dictate terms to the whole Profession. I allude to the London University. Its Graduates seem to think that the solution of the medico-political enigma is at last discovered,—that their edifice is the true temple of Esculapius,—and that all the rest of the Profession should accept, with gratitude, the privilege of being the subordinate Pariahs of so all-glorious a community. The terms are modest, and should be considered in a spirit of becoming humility.

Perhaps, Gentlemen, the evidence taken by the Committee of the House last year, may assist us in coming to some conclusion on this point. It would be a pity that the sagacious views of which some of our parturient Medical Reformers were *clandestinely* delivered in the *secret* recesses of the Committee-rooms of the House of Commons should be prematurely smothered, buried in a blue book, and laid up in the cold compartments of the catacombs under the old chapel of St. Stephen's. I presume to invade the sanctity of official print, to disentomb the corpse, and to make a dissection of the decaying material for your use and guidance.

This evidence will prove to us that the University of London has been the most noisy, factious, and arrogant of all the parties that have recently claimed an interest in the progress of the public affairs of the Profession. As an educating body, I respect its services, and would promote its reputation. It is an honour to our Institutions, and the more it prospers the higher will the General Practitioners of Medicine rise in public estimation. It must not, however, forget its mission, and mistake its duties. Let it not affect the position and rights of a College governing the practice and interests of a special Profession, whilst it is, in fact, and can be nothing else than an educational establishment for instructing students in Greek and Latin, arts and laws, philosophy and fisticuffs.

Yet this University has presumed to throw impediments in the way of a wholesome and necessary reform of the Profession, has aped the manners, and claimed a participation in the collegiate bigotry and the pernicious privileges held fast by the older Universities. With a blundering logic worthy of the scholastic casuistry of a worse age, it affirms, that two wrongs may make one right; and because no existing power is strong enough to strip the older institutions of the obsolete relics of their medieval constitution, that therefore it is justifiable in a modern University to assert pretensions to the same antiquated right of misrule. What a piece of folly is not this! Corporations have a natural tendency to corruption. They are prone to make evil their good, to spurn principle for privilege, and they are envious of every immunity in others, of which, in the spirit of a higher enlightenment and a purer public justice, they have been wisely deprived.

The evidence given by Dr. Billing, the University's representative, before the Special Committee, will furnish us with the proof of these views. The University claims for its Graduates an independence of all professional discipline, and abjures the right of any Medical Corporation to decide upon the qualifications of its Graduates for practice; and it founds this claim upon similar immunities enjoyed by Oxford and Cambridge. We could not appeal to stronger testimony to prove the inherent wrongfulness of such a system. The medical qualifications received from those Universities are the very lowest in the Kingdom, and they have become so because there has been no adequate professional check upon their indolence and remissness. The public and the Profession demand that the qualification for practice shall be maintained at a competent standard; and unless some Professional Board be invested with this power, there is no guarantee that the London University may not eventually mimic the ignorance, as it now apes the pride of its more ancient rivals. Such matters should not be left to the disposal of chance, nor to the inspiration of a transitory public spirit, or of a more ignoble fashion. The best securities should be obtained that the wisest system can afford. I can already see abundant indications for inferring that the Medical Degree of the London University will, in a few years, be dragged through the mire of public contempt; and when that period arrives its standard of qualification will rapidly fall. Men are already trafficking with this degree in an odious and degrading manner, and under its sanction commit acts which a strict collegiate discipline would exert itself to forbid. The exemption, therefore, demanded by the London University would be unwise and injurious, and ought not to be granted.

The vials of Dr. Billing's wrath were poured forth, however, upon the proposed New College of General Practitioners. Here is the evidence:—

"Mr. Wakley: Do you consider, that there being *already* in London a College of Physicians and a College of Surgeons, the new Institution would be deemed one of an inferior description?

"Dr. Billing: Decidedly: it is *third*; and, *as* third, *it must stand below the other two!*"

This is a charming specimen of London University logic. It is highly amusing. It could not have been made more diverting if the facetious *Punch* had cudgeled his brains for an argument. Because the new College will be third in point of time, it must necessarily be last in point of rank! All improvement upon the ignorance and misgovernment of our ancestors is rebuked by this answer. The learned Doctor indirectly degrades the dignity of his own pet University; for, if there be any truth in his notions, it must hold a very contemptible place among our altars of learning and science. The Doctor should remember, that age is not necessarily distinguished by good sense and knowledge, and sometimes fails even to command respect. Again:—

"Mr. Wakley: Are you aware what is projected as the Constitution of that College?

"Dr. Billing: *No.* I have seen a number of formulæ; there are Presidents and Vice-Presidents, and so forth,—that is all!"

Here Dr. Billing distinctly declares, that he knows nothing about the constitution of the projected College, and yet he comes as a witness against it! He then harks away at the old cry of the inferiority of the proposed College; the Chairman, therefore, cross-examines him as to what he means:—

"Chairman: Does not that, (the practice of dispensing medicine for profit,) as partaking, in some degree, of the nature of a trade, rather indicate an inferior order, and an inferior mode of practice?—*I think that is the reason they have been so considered hitherto.*"

The Doctor afterwards admits, that the Graduates of the London University will be obliged to adopt that practice which will constitute them members of an inferior order; and says, moreover, that such an order of General Practitioners must necessarily exist. He goes on to say, also, that "this circumstance *explains* the recent distinction made among the members of the College of Surgeons, who are now divided into fellows and members!"

Now, Gentlemen, let me ask any sensible man among you, if there is any degradation or disgrace, such as the word "inferiority" is intended to imply, in faithfully discharging those duties which a man's station in life imposes upon him? And, if not, why, then, should he be ashamed of his order? I am a General Practitioner, and, far from confessing any dishonour in the performance of my necessary duties, I accept the position with all its obligations; and, instead of seeking to dignify myself by a reflected lustre, such as the permissive association with another denomination might bestow, I should feel far greater pride in being raised to a higher rank and consideration by the universal elevation of the order to which I belong. I have no craven fears about the inferiority of the new College. If the members prove true to themselves and their destinies, it will, in a few years, be the first Medical Corporation in the country. I have not yet done with Dr. Billing's evidence, but must now defer the dissection to another opportunity.

I am, Gentlemen,
Your most obedient Servant,
V. V.

TRAMP MASTER.—The person selected to fill this office, in Warwick, is Robert Bennet, at a weekly salary of fourteen shillings, with a cottage rent-free. He will wear a policeman's dress, and all applications from vagrants for relief will be made to him.

DEATH FROM QUACKERY. — WESTERN CIRCUIT, WINCHESTER.—John Parfitt was charged with feloniously killing Ellen Miller. The prisoner, a labourer at Amport, near Andover, was in the habit of preparing a decoction of hellebore for such of his neighbours' children as were thought to be afflicted with worms. On the 7th December he was applied to by the mother of the deceased, and for threepence supplied a quantity sufficient for three doses for the deceased, a child of six years of age, which was administered. The child became severely convulsed, and expired the following day. The prisoner, in his defence, said he had supplied the hellebore as an act of kindness. He had prepared it for other neighbours, and they were satisfied it had done their children good; and had also given it to his own children. Chief Justice Wilde having stated to the jury what constituted manslaughter, they returned a verdict of "Guilty," with a strong recommendation to mercy. His Lordship said it should be attended to, and told the prisoner he should discharge him on his recognisances to appear to take his sentence if he should ever again resort to the practice of administering his medicines.

REVIEWS.

An Inquiry into the Actual State of our Knowledge of Cholera, with Practical Directions Regarding its Prevention and Treatment. By ALEXANDER KNOX, M.D., Surgeon to the Strangford Dispensary, &c. Dublin: James M'Glashan, 21, D'Olier-street; London: Wm. S. Orr and Co., 147, Strand; Belfast: Lamont, Brothers.

The Cholera in Malta in 1837. From the Italian of GIUSEPPE STILON, M.D., &c., Physician to the Cholera Hospital in Valetta. By SETH B. WATSON, D.M. London: John Churchill, Princes-street.

Cholera Gleanings, &c. By Dr. J. GILLKREST, Inspector-General of Army Hospitals, &c., Gibraltar.

Practical Remarks on the Prevention of Cholera, &c. By R. B. RICHMOND, M.D. London: Nissen and Parker, Great Tower-street, City.

A Sketch of a Popular and Novel Treatment for Diarrhœa, Dysentery, and English and Asiatic Cholera, &c. By EDMUND SKIERS, M.D., &c. London: Samuel Highley, 32, Fleet-street.

The Leading Phenomena of Epidemic Cholera, &c. By AMBROSE BLACKLOCK, Assistant-Surgeon, Madras Medical Establishment, Madras.

A Treatise on the Cause, Nature, Seat, and Treatment of Cholera. By JAMES SHAW, C.E.L.L. London: Simpkin, Marshall, and Co.

The first book on our list is one of the most useful and comprehensive that has yet issued from the Press on the subject of cholera. It evidences a very wide research and a careful philosophic judgment, and deserves a prominent place in the library of every medical man. It is supplied with several Tables, collated chiefly from Dr. Graves' papers in the *Dublin Journal of Medical Science*, showing the period of advent, the number of attacks, and mortality of the disease in various parts of the world, and especially in Great Britain and Ireland. The facts recited in these Tables present matter for scientific investigation, and might be made subservient to the development of important results in reference to the laws of cholera. The Author has not attempted to subject the facts to analysis, and seems disposed to intimate that statistical returns from facts are "of little practical value." We are ready to grant that they are liable to error, and require great circumspection to secure correctness; but unless some practical or scientific end is attempted to be deduced from them, of what use are they, and how can they be considered valuable even as Tables? A mere Table is a toy, a game of figures, a theme for mental exercitation, but unproductive of ideas. Unless it be decomposed and re-arranged, it is unfruitful, and tends to limit knowledge by throwing it into conventional forms rather than to aid its development. We do not, therefore, like to see an analysing spirit discouraged.

The Author has employed most talent in the two Chapters of his Book devoted to the object of proving, 1st, that the cholera is not a new disease; and 2ndly, that it is not contagious. The 1st Chapter abounds in recondite research, in which he has been anticipated by Dr. Chambers and others; nevertheless, he has handled his learning in a masterly style. He regards the mordexim, (*mort de chien*,) as described by Bontius, Van Linschoten, Zacutus Lusitanus, &c., which prevailed in the seventeenth century in different parts of the East Indies, as genuine cholera. He also quotes Hippocrates, Celsus, Paul of Egina, Serapion, Avicenna, Sydenham, Morton, and a host of other Medical worthies, to demonstrate, that the genuine malignant cholera has been a well-known disease from the remotest times. The words of Franc, referring to the intestinal discharges, are as strong as any that can be quoted upon the matter. He says: "Et vomitus et fluxus alvi effrenes sequuntur. Primum aquæ similia dein ac si recens caro lota esset, nonnunquam *albæ* et nigræ." We are ready to admit, that, during the prevalence of bilious diarrhœa, forms of disease might have occurred, indistinguishable from the epidemic cholera. Every modern observer must have witnessed such cases. The old writers, however, seem to have generally considered these modifications as mere occasional varieties of an old and well-known malady, not occurring often enough, nor sufficiently fatal, to demand distinct and express notice, but still happening with sufficient frequency to arrest observation, and to furnish a diagnostic element flattering to the sagacity of the practitioner. It even appears, that a similar disease has prevailed in particular localities in India for a long period, but even there it was considered endemical. Any epidemic, however, like the wide-spreading, devastating pestilence that has scourged all the earth since 1817, was not known. We cannot conceive that so formidable a disease could have occurred in any country, where Medicine has been cultivated, without commanding a separate and important place in its nosology; nor could we imagine, that, had it been a frequent visitant, the Medical Profession over the whole world would have been so utterly ignorant of it as they avowedly were when it burst forth with such sudden and uncontrollable violence in 1817. If we study the subject as a scholar, with our heads mystified with Greek and Latin, we are inclined to admit the correctness of Dr. Knox's view,—the description of a single case is so exactly like the description of a hundred thousand; but, when we rise from our books, and look abroad upon the realities,—upon the deadliness and universality of an unknown epidemic,—we grow into the opinion, that the Doctor has proved too much.

The scanty descriptions in the older writers do not warrant a very conclusive opinion, and certainly do not refer to any epidemic disease of the fatal character of that of 1817. Supposing, however, that it was settled that occasional cases have occurred ever since the days of Hippocrates, or from the first generation of man, we have no historical evidence of the epidemic cholera until 1817; from which date its true history must commence. The enigma of its epidemic character must still be solved. We have no space to enter into this question, and we only desire to indicate the trains of thought which this book is qualified to evoke.

The chapter relative to the contagious character of cholera is elaborated like the former one, and, although we do not agree with the loose manner in which, in accordance with general custom, the author has confounded two distinct facts and ideas; viz., communication by contact and communication by gaseous exhalations, yet we know of nothing more lucid and complete upon the subject in the circuit of our literature.

The itch is a disease communicated by contact and not by gaseous exhalations, typhus by gaseous exhalations alone, and small-pox by both. When such a wide difference in phenomena obtains, it is absolutely necessary that a phraseology representative of the specific facts be employed. There cannot be scientific correctness without it. Dr. Knox decides against the contagiousness of cholera, and leans to the opinion that it is purely epidemic, a quality which it owes to a specific virus.

In making these comments on the Doctor's book we have shown the highest appreciation of its value. It is calm, painstaking, judicious, and complete, and can hardly be excelled as a hand-book on this disease. It has our warmest recommendations.

Dr. Stilon's little Treatise, translated by Dr. Seth Watson, is the record of the experience of an acute and benevolent man. The author is an advocate of large doses of calomel, repeated at short intervals, until the evacuations become green, or acquire a certain consistence. He condemns the use of opiates and stimulants, stating that the former cause the patient to pass from the mild to the grave state of collapse; and the latter produced very painful sensations in the mouth and pharynx. As the work of a practical man, it is of great value.

It is difficult to give a succinct description of Dr. Gillkrest's Pamphlet. It is composed of official statements from all countries, with the Doctor's commentaries on points of interest. These are numerous; but the weight of the Doctor's criticism falls on the Quarantine-laws, which he exposes and condemns in comminations "not loud but deep." Dr. Gillkrest is engaged in a noble undertaking in the endeavour to reform this system, and we wish him success.

Dr. Richmond's pamphlet is chiefly occupied with recommendations for the prevention of cholera, and he enforces the expediency of drinking good port wine as a remedy in a relaxed and low inflammatory state of the bowels, and as a preventive of spasms. He has so high an opinion of this remedial agent, that he closes some remarks with the sentence, 'God help those who cannot afford it; for neither porter, ale, nor gin will supply its place." From this sentiment, he will not be likely to find many dissentients. This gentleman also shows, that the disease was known, by symptoms, to the ancients, by whom it was regarded as a modified form of ordinary bilious cholera. Celsus, indeed, treats of the two diseases as one. Dr. Richmond's pamphlet is, altogether, a judicious commentary on the disease.

Dr. Skiers deserves special commendation for his vigorously written and useful work. He regards the sporadic and epidemic forms of the disease as distinct, and the latter new to science. He advises as remedies the warm vapour bath, with the feet of the patient placed in hot salt and water, with ice and cold water in sufficient quantities as a drink. He also prescribes what he terms a "monster epithem," composed of all kinds of stimulating medicaments, in which nearly the whole body is invested. Human warmth is another important means of restoring the natural heat of the body, and may be considered as "the idea" in the Doctor's book. When we say, that Dr. Skiers was rewarded with the Cholera Medal for the cholera in Paris, in 1832, we offer the best testimony of his acquaintance with his subject.

We will now extract "the idea" from Mr. Blacklock's work, which is, that "the remote occasion of cholera is the continual use of a diet deficient in the sulphur required to assist in forming sulphuretted hydrogen to preserve the colon, or part of the body requiring sulphuretted animal matter, in its normal electrical condition, and so giving rise to morbid ganglionic excitability." He has constructed a dietary table of the various nations of the earth, with the view of proving his proposition. The Author further regards the bowels as a galvanic battery, and explains all the phenomena, by a reference to the processes of galvanic action.

Mr. Shaw's little pamphlet is occupied with a species of galvano-pathological reasoning similar to the preceding. He does not look upon electricity as the actual nervous stimulus, but conceives that nervous matter is endowed with *irritability*, and that "the ganglionic nervous system is the seat of irritability,—vital force." There is nothing new in these notions. Cholera is, according to Mr. Shaw, dependent on the enfeebling of the ganglionic nervous system.

A Treatise on the Cure of Ulcers by Fumigation, &c. By GEORGE ALFRED WALKER, Surgeon, Member of several Learned and Scientific Societies, and Author of "Gatherings from Graveyards," &c. London: Longman and Co.; and Highley, 32, Fleet-street.

We are always glad to see the exposition of any new mode of treatment of an intractable disease. Ulcers are the opprobria of surgery. There are few practitioners who have not been puzzled, baffled, and defeated in their attempts to cure an obstinate old ulcer. Various plans have been recommended. Poultices, unguents, cautery, balsams, blisters, washes of all kinds, pressure by rollers and strapping, rest and exercise, have respectively commanded their votaries, and been employed with more or less discretion. We do not imagine that any single plan will be universally applicable; and the book before us, although strongly urging the efficiency of fumigation, advises the employment of other means as secondary agents. Mr. Walker certainly offers strong evidence of the utility of his plan of treatment, and has substantiated his views so far as to command for them the consideration of the Profession. The plan must be tried extensively, and we have very little doubt that this powerful agent will answer satisfactorily to the test. The book is clear

and demonstrative, and when known, will obtain careful perusal among all persons desirous of advancing the healing art.

Mr. Walker's physiological principle is the healing of the ulcer by scabbing, instead of by granulations,—a process said to be accomplished by fumigation. He denounces the doctrine and practice of the present day, by which it is attempted to heal every ulcer by encouraging granulations. He thus describes the difference of the curative processes:—"According to one plan, a new material, viz., granulations, is thrown up from the surface of the ulcer, and gradually supplies the loss of substance produced by ulcerative absorption of the tissues; according to the second plan, we have little or no growth of adventitious structure; but the cavity of the ulcer is effaced, partly by contraction, and partly by the same process of interstitial nutrition, which ministers to the growth and support of the body in a natural state. To the former of these modes belongs granulation; to the latter, scabbing, the process by eschar, and the modelling process of the late Professor Macartney."

The treatment is fumigation with sulphur and iodine, (regulated to the proper temperature by dry air or vapour), to the surface of the ulcer, and to the adjacent tissues by means of a proper apparatus. Mr. Walker appears to have constructed a kind of box, with a round hole for the reception of the limb, having at the bottom a plate of heated metal, on which the powder of iodine and sulphur is placed. The volatilisation of the powder is thus necessarily effected. Two or three grains of iodine, and half a drachm of flowers of sulphur are generally sufficient for the purpose. Mr. Walker seems to have perfected this apparatus by attaching it to the machinery of his baths; but we conceive that a simple apparatus could be easily framed for private practice, and arrangements might, without difficulty, be made in our large hospitals, for carrying out the treatment. If the plan be a good one, it ought to be tried, and made as extensively beneficial as possible. Mr. Walker deserves thanks for having urged upon the notice of the Profession a mode of treatment that promises to be of such great utility in the most obstinate and painful forms of disease.

THE DAWSON PAMPHLET AND THE *MEDICAL DIRECTORY*.

The Editors of the *London and Provincial Medical Directory* present their compliments to the Editor of the *Medical Times*. Their attention having been drawn to a Pamphlet, entitled, "The London and Provincial Medical Directory Unmasked," they beg to state, that it is true Dr. Tyler Smith was one of the originators of the *Medical Directory*, in 1845, and took part in the compilation of the volume for that year; but on the 10th of April, 1845, he disposed of his share in the work, and since that time he has never, in the slightest degree, interfered with, or been concerned in, the production of the volumes of the *Directory* for 1846, 1847, 1848, and 1849.

The omission in the *Directory* for 1849, of which Mr. Dawson complains, arose solely from the desire of the Editors to be correct. As his return was not found to correspond with the list of the College of Physicians, a letter was addressed to the Registrar, inquiring into the matter. The reply of Mr. Sedgwick, the Secretary to the College, is subjoined, and at once affords a vindication of the care of the Editors to be as correct as possible, and gives, at the same time, the *true and only reason* for the omission of the qualification adverted to by Mr. Dawson.

11, Beaufort-buildings, Strand, March 14, 1849.

(COPY.)

College of Physicians, Nov. 15, 1848.

Mr. Sedgwick presents his compliments to the Editors of the *Medical Directory*, and, in answer to their note addressed to the Registrar, begs to inform them, that there is no such name, either as Richard or Samuel Dawson, on the College list.

There was, a few years since, a gentleman of the name of Richard Dawson, an *extra licentiate*, but his name *was struck off the list*.

Mr. Sedgwick thinks that the Richard and Samuel Dawson mentioned by the Editors, are *one and the same person*.

[To the Editor of the Medical Times.]

SIR,—In reference to a pamphlet which has been extensively circulated, and which contains the most false and odious insinuations, I lose not a moment in writing to declare, so far from there being any collusion between Dr. Tyler Smith and myself, that we were, in consequence of family matters, upon which it is unnecessary to enter, on unfriendly terms from the beginning of 1846 till the commencement of 1848, the time within which the statements of Dawson refer. During this period, no communication of any kind whatever passed between us. I write this in justice to Dr. Tyler Smith and myself. It is, however, very evident, that the purpose of Dawson is to puff his pamphlet on "Seminal Discharges," "Nocturnal Pollutions," &c.; and that the absurd charges against Dr. Smith are merely a transparent feint to form an excuse for addressing himself to the respectable members of the Profession.

I am, Sir, your obedient servant,

JAMES YEARSLEY.

Saville-row, March 13, 1849.

[To the Editor of the Medical Times.]

SIR,—A pamphlet has been sent to me, bearing the signature of "R. Dawson, M.D.," in which a most unwarrantable use is made of my name in connexion with that of Dr. Tyler Smith. I beg to say, emphatically, that *in no one particular* is the statement true which relates to myself and Dr. Smith.

I am, Sir, your obedient servant,

WM. HARVEY.

Soho-square, March 13, 1849.

THE COLLEGE OF PHYSICIANS AND DR. CRISP.

[To the Editor of the "Medical Times."]

SIR,—I make no apology for asking you to insert the present communication, as the subject is one that must interest many members of the Profession. My only object is to elicit the truth; and I trust, if any unfounded suspicions have arisen respecting those connected with my examination at the College of Physicians, that I shall, by the course I am pursuing, allow the party or parties to set themselves right with the Profession. I have delayed this communication, as I heard indirectly that the College intended (in some manner) to answer my Pamphlet. I pass unnoticed all the idle and unfounded reports that I have heard, and proceed at once to that which is *tangible and positive*.

A gentleman, who I believed to be a friend of mine, but with whom I had had no private conversation of any kind respecting my examination, a few days after my rejection, sent a message to Dr. Todd, which was not very complimentary to the President and the rest of the Examiners. Dr. Todd begged this gentleman to suspend his judgment until the Pamphlet appeared. At Dr. Todd's request, two interviews took place, and the gentleman (perhaps naturally enough, after Dr. Todd's statements) came to the conclusion, that Dr. Todd was right. This gentleman, however, forgot to communicate with me, although his opinions were freely and extensively circulated in other quarters. A friend, to whom the statements were named, at once made them known to me. These gentlemen again met, Dr. Todd's statements were repeated, and I immediately wrote the following letter. I would gladly publish the whole correspondence, but, as some of it is of a personal nature, it would not be interesting to your readers.

"19, Norfolk-street, Strand, Jan. 24th, 1849.

"My Dear ——,—You have read my Pamphlet, and I learn that you have had two interviews with Dr. Todd at his request; that Dr. Todd has gone over the history of the Examination with you, and that he made the following statements:—

"1st. That he had always shown kindness towards me, as evinced by his first letter, &c.

"2nd. That, through my application to him, and through his interest, or intercession with Sir James M'Grigor, he procured my brother, Henry, his appointment in the Army.

"3rd. That the questions respecting insanity were put to me, because I was about to take, or thought of taking, a Lunatic Asylum in Suffolk.

"4th. That Dr. Todd prolonged the examination to assist me.

"5th. That I floundered (or something to that effect) in the *practical* examination.

"6th. That my account of the case in the Appendix is a 'garbled' one.

"7th. That through Dr. Todd's intercession I was saved from rejection in the Latin examination.

"8th. That Dr. Todd had forgotten the case of rheumatism altogether.

"9th. That the four questions mentioned in the pamphlet (page 50) were not put by Dr. Todd, but by the late Dr. Glendenning, and that Dr. Todd had nothing to do with these questions directly or indirectly.

"10th. That Dr. Todd had read over the verbal examinations to you, and that some or several of the answers were wrong. Please to point to them, page, and line.

"11th. That the papers were burned quite accidentally.

"I know you too well, I hope, to believe that you would encourage the system of stabbing in the dark, and I am sure you are anxious to do what is right towards both parties. All I have done is fair and above board. I have not accused Dr. Todd of being instrumental to my rejection (see page 23), although I confess that I thought the circumstantial evidence much against him. Those who were examined with me, and some of my friends, know that I said "I was afraid of one of the examiners." I am sure, as an old friend, you will not hesitate to answer these questions at once, and in writing, (without consulting again with Dr. Todd). My object is to elicit the truth; and if I have wronged Dr. Todd, or any of the examiners, I hope I shall have the manliness and honesty to avow it publicly.

"Believe me, my dear ——,

"Yours very truly,

"EDWARDS CRISP.

"P.S.—To save trouble, perhaps, you will return this, with such remarks against the questions as you may think proper. If I have omitted anything, pray state it."

Before I answer these statements, I must tell the reader that there is substantially no difference in the reply I received from this gentleman, but that the following statements were confidential.

4. That lenity was shown by a lengthened examination, through Dr. Todd's intercession.

5. That I failed in several practical points, which were pointed out to this gentleman in the pamphlet.

7. That I might have been rejected upon my Latin.

9. That the questions on the paper for June were placed by one since dead.

11. That the burning of the papers was unfortunately accidental; but he adds: "I did not press for further explanation."

These five statements, as I have already said, were confidential; but I do not hesitate for a moment to publish them, as I think (even if true) they should not have been made; and the reader must recollect that they had been told to two gentlemen, and that the opinion of the examination, which was so extensively circulated, was chiefly formed from these confidential statements.

Answer 1. I knew but very little of Dr. Todd; I never entered his house; I never had any private conversation with him; and on the three occasions only on which we met we were at variance. The case already published, and at two meetings of the South London Medical Society. At these meetings I advocated the use of the lancet in the first stage of pneumonia and pleuritis. Dr. Todd did not approve of general bleeding, and contended that pleuritis could not occur without pneumonia. I maintained that in many instances the pleura only was inflamed. What proof can Dr. Todd give of having shown kindness to me?

2. I have not the slightest recollection of applying to Dr. Todd to get my brother, Dr. Henry Crisp, the appointment in the Army. My brother was a very industrious pupil of Dr. Todd's; and I presume that Dr. Todd, by writing to Sir James M'Grigor, did for my brother what he or any hospital physician would have done for any industrious pupil. My brother had to thank other of his teachers for the same kindness, but he had especially to thank the Duke of Richmond, General Wemyss, Sir Horace Seymour, the Duke of Manchester, Lord Rendlesham, Dr. Clutterbuck, Mr. Rusbridger, Mr. Garrett, Mr. Chesterton, and others, for his appointment.

3. I should sooner think of following the plough, or of taking the office of Secretary to the College of Physicians, than of becoming the proprietor of a lunatic asylum; such a notion never occurred to me, and, therefore, I could not have mentioned it to any one. Mr. —— thinks that Dr. Todd said, that "he had heard it from myself;" but this affair, I suppose, had been talked over by the examiners, and hence the impertinent questions put to me by the President. Can you believe, Sir, that the censors of the College of Physicians would pass as a licentiate the *proprietor* of a country lunatic asylum?

4. Dr. Todd did not intercede for me; not a word was spoken by him, nor by any of the examiners; and were Dr. Todd's questions, let

me ask, the kind of questions to save a friend, and would a *friend* have prolonged the examination as Dr. Todd did?

5. There was no floundering, or hesitation, during any part of the examination; some of the questions, perhaps, were too quickly answered.

6. The account of the case in the Appendix is a true and faithful one. Dr. Todd adds, the difference of opinion was not upon the heart, but brain. Let me beg of the reader to peruse this case again; and let me especially ask Dr. Todd, why he, when lecturing to the gentlemen of his class, and when he knew that the doctrines he inculcated might affect the lives of thousands, entirely misrepresented the case in question, as well as the statements of Bouillaud, and was not this very lecture corrected by Dr. Todd before publication?

7. "That I might have been rejected upon my Latin." Of course, I might; but I believe not fairly. Before I presented myself, I could read any Latin Medical Author without difficulty; occasionally, cramped passages would require investigation. Do my written translations show ignorance of the language? My Greek I could easily have prepared; but before leaving England I was expressly told by the Secretary of the College that I should only be required to translate verbally some Latin Medical Author; and what other interpretations could I put upon the following:—"If he declines this, he is at any rate expected to construe into English a portion of the works of Celsus, or Sydenham, or some other Latin medical author." This was sent to the "London Medical Directory" by the College, although, when I quoted it, Dr. Paris said, in an angry tone—"We have nothing, sir, to do with the Directory." I had told Dr. Alderson before the written examination, that I did not suppose that I should have been called upon to answer questions in Latin, or even to give a written translation of the Latin. Dr. Todd knew (see his letter) that I was admitted under the by-law affecting those beyond forty years of age; but when questions were put to me in Latin his friendship did not allow him to interpose, although, when I asked the President a question respecting the unanimity of the examiners, he rudely interfered.

8. *I call upon Dr. Todd to state publicly that he had forgotten the case in question.*

9. I said I knew not by whom these four questions were put; the coincidence, I thought, was a curious one.

10. The gentleman in question refused to allow the practical errors to be put down in writing; but Dr. Todd, I am sure, will do this.

11. The accidental burning of the papers must be explained. Who burnt them, and by whose orders were they burnt? And perhaps Dr. Todd will state whether a ballot took place, and whether the Lunatic Asylum was talked of before my final condemnation, and whether he had reason to believe that some of the examiners intended to reject me from the beginning? Likewise, what the nature of the communication was that Mr. Sedgwick was ordered to read to me? I think, Sir, you and your readers will agree with me, that, although Dr. Todd has hitherto been advised by all his aristocratic friends not to notice my pamphlet, that he cannot now, as a gentleman and a man of honour, refrain from giving a full and explicit reply, and that I am acting the part of a friend, in affording him an opportunity of doing so.

I am, Sir, your obedient servant,

EDWARDS CRISP.

19, Norfolk-street, Strand, March 13, 1849.

Note.—As the late Dr. Glendenning's name has been alluded to, I may mention a circumstance which should teach all Insurance Offices that it is to their interest to pay their medical referee. A young gentleman of consumptive family, whom I had attended for some years, was anxious to insure his life. I refused to answer the questions, as no fee was sent. Dr. Glendenning, who was the medical referee, passed him, but the gentleman died of pneumonia and tubercle a short time after. The Directors complained that Dr. Glendenning had not detected the tubercular deposit. Dr. G., who was a stranger to me, wrote for my account of the inspection; I sent it, and stated at the same time that if the most experienced stethoscopist had seen the patient when Dr. G. did, he would probably not have detected the presence of tubercle. This part of my letter was read to the Directors. I had the advantage of knowing this gentleman's constitution, and on this account should not have considered his life eligible for insurance.

IMPORTANT SUGGESTION.—UNION MEDICAL OFFICERS.

[To the Editor of the Medical Times.]

SIR,—Allow me to make known, through your columns, a suggestion to all who, like myself, are interested in the endeavours now making by Union Medical Officers to obtain redress for their grievances. It was well observed by Lord Ashley, at our late meeting, "that he felt he could not do better, in seeking to ameliorate the condition of the sick poor, than direct *public attention* to the position of Union Medical Officers." There must be many among our body, who have sufficient acquaintance with Editors of local papers, to justify the request, that they would notice the subject of Medical Relief. The request would, no doubt, be acceded to, and thus one great object, *publicity*, would be gained.

I beg to remain, yours obediently,

HENRY W. LIVETT.

Wells, Somerset, March 12, 1849.

ON THE USE OF COD LIVER OIL.

[To the Editor of the Medical Times.]

SIR,—Permit me to refer "An Old Subscriber, M.D." (who, in your last number, seeks for information as to the "curative power, or medical essence, contained in the cod-liver oil") to a paper on this subject in the *Medical Times*, June 13th, 1846. The author remarks that "it possesses stimulant and demulcent properties, and operates upon the skin, kidneys, intestinal canal, and liver, and, by virtue of the iodine which it contains, on the whole urinary apparatus and sero-fibrous membranes."

But "An Old Subscriber" will, no doubt, reply, that iodine might be administered in a much more agreeable manner. This argument would be of most weight if the presence of iodine were the only recommendation of cod-liver oil; but I would suggest, that in this remedy we possess another valuable property,—its oleaginous nature; for Dr. Hughes Bennett states, "In tubercular diseases the albuminous compounds are in excess in the economy, while the oily compounds are diminished. The most rational method of treating this state, especially as the assimilating organs are generally in a feeble condition, is by the direct administration of an animal oil; and my experience points to cod-liver oil as the most practically useful."

Thus, then, the administration of cod-liver oil (in phthisis, for instance) would not appear to be so purely an empirical proceeding as your correspondent represents it.

But even supposing we were still more ignorant than we are respecting its properties and *modus operandi*, yet I sincerely think that we should be justified in giving it a fair trial in tubercular disease, when we recollect the accumulation of evidence which has been recorded in its favour; and, further, when we remember that those who cavil at it have literally nothing to offer as a substitute for it.

I would not, on any account, be an apologist for empiricism as a general rule; but if there be any justification for it, it is in the treatment of those sad diseases which have hitherto baffled all the efforts which have been made to subdue them.

I am, Sir, yours respectfully,

WILLIAM BRAITHWAITE.

Plymouth, March 12th, 1849.

THE BANDAGE IN MIDWIFERY.

[To the Editor of the Medical Times.]

SIR,—Every tyro in the practice of Midwifery must have observed how rarely that useful appliance, the bandage, fulfils its desired object, owing to the difficulty of retaining it in its proper position, and of maintaining the requisite degree of pressure. Now, I have found that elasticity, at present so usefully employed in surgical practice, can, with equal advantage, be employed to remedy this defect. One or more pieces of vulcanized India rubber being let into a bandage of the ordinary width, &c., (which may be fastened with buttons, strings, or buckles, according to fancy; I prefer the latter,) retains it in its proper position, maintains an equable support to the abdomen, and also can be more easily applied than the one in ordinary use. The great comfort which patients have derived from the use of this bandage I think sufficiently justifies me in recommending it. Hoping that this suggestion may prove useful to some of your readers,

I remain, Sir, yours obediently,

CROSBY LEONARD,

Medical Pupil, Bristol Infirmary.

Bristol, March 12th, 1849.

POST-MORTEM APPEARANCES OF THE BRAIN IN TETANUS.

[To the Editor of the Medical Times.]

SIR,—You having favoured me so often by kindly answering any question about which there was a considerable degree of doubt, and if the following be found worthy of a corner in your valuable Journal, I shall be gratified. I have lately made two most careful *post-mortem* examinations of subjects, who died of that awful and hitherto incurable disease, Tetanus. I found that the grey matter of the brain and spinal marrow were tinted with a pinkish hue. In both cases I found it precisely similar. I have not heard of this being noticed by any one but myself; but, if I am wrong, I shall be very glad if you will state so in your next Number. I believe the pinkish hue has been noticed to occur where there has been great nervous excitement by a German, but not in Tetanus. We ought to do all we can to throw some light on this disease, Mr. Editor; and as facts or observances tend to find out cures, I thought this might be useful.

I am, Mr. Editor,

A subscriber to the *Medical Times*,

"ANATOMY, REPTON."

London, March 9, 1849.

THE PENAL CLAUSE OF THE APOTHECARIES' ACT.

[To the Editor of the Medical Times.]

SIR,—In your Number for March 10, I see a letter from "An Old Subscriber and a Member of the National Institute." I am both; and I beg the favour of a small space in your next Number for a few remarks. Your Correspondent speaks of the Apothecaries' Act, as a measure adapted to a bygone day; but admits that legitimate Medicine owes much to that body, and appears to think, that the power of prosecuting (or, as he calls it, persecuting) illegal Practitioners, does not, or ought not, to extend to any member of any Licensing Body within the United Kingdom.

Sir, *I* will not yield to any one in liberal feelings; but, allow me to ask, is there any one of the illegal Practitioners, calling himself a General Practitioner, who, before he commenced his career, was not fully aware that he would be infringing the Apothecaries' Act, and that the law does not compel him to pass any other examination? With much more honesty and truth might a Licentiate of the Apothecaries' Company style himself an M.D.

If I had been a young man, I should have felt deeply the injustice done to myself as well as the Apothecaries' Company in *this district*: for, in the circumference of twelve miles, we have seventeen General Practitioners, NINE of whom are illegal.

Believe me, Sir, very sincerely,

ONE WHO DESPISES A FALSE TITLE.

March 13, 1849.

THE COLLEGE OF PHYSICIANS AND PHARMACY.

[To the Editor of the Medical Times.]

SIR,—In your "Notices to Correspondents" in the Number for the 24th February, you say, that "The London College of Physicians forbids any of its Fellows or Licentiates to practise Pharmacy, on pain of expulsion." I shall be glad to know what is Pharmacy in the sense there intended. Will the College, indeed, expel any member who practises as an Apothecary or General Practitioner? or will it notice any complaint against a member who does so, and likewise uses a variety of dishonourable and unprofessional means to gain patients, and bring himself into notice as a general practitioner?

Your constant reader and subscriber,

L. A. C.

GOSSIP OF THE WEEK.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, 8th March, 1849:—Francis Fawcett Welsh, Saffron Walden; Henry Payne Leech, Bury St. Edmunds; Frederick Oughton, Camberwell; William Henry Johnson, Weymouth; Frederick Montgomerie Davenport Davidson, Dawlish, Devon.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members

of the College at the last meeting of the Court of Examiners:—Messrs. Peter Allen, Smarden, near Cranbrook, Kent; William Cooke, Gainsborough; John George Gibbs, Baker-street, Portman-square; George Frederick Gwyn, Long Stratton, Norfolk; William Reynolds Hayne, Sussex-terrace, Camden-town; William Henry Johnson, Weymouth, Dorset; and John Smith, London. At the same meeting of the Board, Mr. Mark Hamilton passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College, his diploma bearing date June 2, 1842.

Royal Medical and Chirurgical Society.—The following is the list of the officers of the Society for the new session:—President—Thomas Addison, M.D. Vice-Presidents—Henry Davies, M.D.; George Burrows, M.D., F.R.S; George Macilwain; Samuel Solly, F.R.S. Treasurers—James Alderson, M.D., F.R.S.; Benjamin Phillips, F.R.S. Secretaries—William Baly, M.D., F.R.S.; Fred. Le Gros Clark. Librarians—John Hennen, M.D.; James Dixon. Members of Council—Robert Nairne, M.D.; William Sharpey, M.D., F.R.S.; Leonard Stewart, M.D.; Seth Thompson, M.D.; Charles J. B. Williams, M.D., F.R.S.; Sir B. C. Brodie, Bart., F.R.S.; James Bird; William Fergusson, F.R.S.; Samuel A. Lane; James Paget.

Obituary.—On the 23rd ult., at his residence, Canonbury-lodge, Canonbury-square, Islington, Mr. Edward Roe, surgeon, in the 49th year of his age.—On the 8th inst., at his residence in Portman-square, Robert Rainy Pennington, Esq., aged 84.—On Thursday, the 9th inst., at his residence, No. 5, Parliament-street, Westminster, Anthony White, Esq., surgeon.—Drowned, on Saturday afternoon, caused by the upsetting of a boat upon the river Lea, at Upper Clapton, Mr. John J. R. Robertson and Mr. Thomas W. C. Hairby, students at St. Bartholomew's Hospital.

City of London Hospital for Diseases of the Chest.—The first anniversary festival of this Charity took place on Saturday at the London-tavern, when a splendid entertainment was provided in honour of the occasion, the dining hall being hung with banners and otherwise suitably ornamented. The friends of the Charity mustered to the number of 250, and the chair was very ably filled by the Earl of Carlisle, supported by Mr. S. Gurney, Mr. Alderman Sidney, Mr. Alderman Farebrother, Mr. Masterman, jun., and many other gentlemen of influence.

University of Oxford.—The degree of Bachelor in Medicine has been conferred on Chas. W. Eddy, University College, one of Dr. Radcliffe's Travelling Fellows.

Cholera in Scotland and Ireland.—In Edinburgh there have been only 3 cases reported since this last week, with 7 recoveries. In Glasgow the number of cases daily vary from one to four or five, so that the disease may be said to be gradually disappearing. In Grahamston, near Falkirk, one fatal case has occurred. In Stornoway the disease has made its appearance, 7 cases having occurred, 3 fatal. The disease throughout the country generally is happily so much decreased as to render detailed reports unnecessary, the number of cases being so trifling. In Ireland it appears to be gaining ground, as the number of cases up to Saturday in Limerick amounted to 115, and the deaths to 62.

The Cholera in Norway.—The cholera, which has commenced at Bergen, is making serious havoc among the poor fishermen on the coast, and in the Fiords. On some of the farms whole families have been swept off; in the city 901 cases have already occurred, of which 501 cases have been fatal; and upwards of 10 are occurring daily. This is a large number out of a population not exceeding 24,000. The papers state that at Espevar the fishermen are dying so fast that they have been compelled to carry the bodies to an uninhabited islet, and merely cover them with a few planks, where they are now rotting and being devoured by the birds of prey.

Medical Missions.—The Committee of the Edinburgh Medical Society have resolved on a course of lectures on Medical Missions. The subjects of lecture are of great interest, embracing the objects, past history, and present condition of Medical Missions, and the duties of the Medical Missionary. The first lecture was delivered by Professor Miller. The eminent professional knowledge, and high religious intelligence of this gentleman, qualify him to treat with interest a subject in itself of such vast importance and interest.

Curious Epitaph.—The following singular inscription is placed on the grave of Dr. Newton, a physician, descendant of the celebrated Sir Isaac:—

"Here lies, alas! poor Doctor Newton,
Whose sudden death was oddly brought on.
Thinking one day his corns to mow off,
The razor slipped and cut his toe off;
An inflammation quickly flew to
The toe—or rather, what it grew to:
The part then took to mortifying,
Which was the cause of Newton's dying."

Warwick Board of Guardians and their Medical Officers.—The Board of Guardians of this Union having been memorialised by their Medical Officers to make their appointments permanent, at a recent meeting they resolved that the officers should continue to be elected annually.

Sewerage in Liege.—The Belgian Government has granted a subsidy of nearly 1,000*l.* to the city of Liege, to assist the inhabitants to defray the expenses of the drains now constructing, and other means about to be taken in the most densely populated and unhealthy localities, to improve its salubrity.

The Bristol Infirmary and Jenny Lind.—An unfavourable reply has been received from Mdlle. Jenny Lind, in answer to the request to her to aid the Bristol Infirmary funds.

Quacks in America.—Dr. Edwards, of Ohio, one of the regular doctors we take it, has got himself Chairman of a Committee on adulterated drugs and quack medicines. He will bring out a report, telling, from the Patent-office, what all the patent medicines are made of, which will be considerable to take.—*Boston Chronotype.*

Public Lodging-houses.—The President of the French Republic has given 2,000*l.* for the erection of lodging-houses for poor persons, destined to replace those that now exist, which have been proved to be in Paris, as in London, hot-beds for the propagation of infectious diseases.

Advertising Doctor.—We strongly recommend the following for the imitation of the advertising fraternity. North America has frequently been called, *par excellence*, the land of Charlatanism; but the following advertisement of a Doctor, on his arrival in the Brazils, seems to us likely, in this respect, to beat even a Yankee from the field:—"Estimable Brazilians! generous inhabitants of Rio Grande! the celebrated Doctor ——, who, in different years, has visited Rio Grande, Porto Alegre, and San Francisco, has returned to your beautiful province with the firm determination to live and die among you! Generous inhabitants of Rio Grande! do not forget it is the same Doctor who amputated so many arms at Cassapara, so many legs at St. Gabriel, who excised so many jaws at Allegrete, extirpated so many testicles at Rio-Pardo, so many breasts at Bargé! And, what is more, if you ask how many deaths followed these colossal operations, ask those who best can tell, and they will answer, Not one! Remember, also, that it is the same Doctor who has enlarged the calibre of so many hundred contracted urethræ without one relapse! Here, then, here I am! hasten to come to me! In less than seven days, I will make those who urinate in a stream small as a hair, pass their water the size of a cable; I will cure your fistulas without cutting; I will treat homœopathically those who desire it; I will accept no money when patients die;—in a word, I will especially treat all diseases," &c., &c.

Unwholesome Food.—It is stated that, from the 1st. June, 1848, to the 1st February, 1849, the meat inspectors of Liverpool seized 23,499lb. of beef, mutton, veal, and pork, unfit for human food.

A Skilful Dentist.—"Noggs," in the *Boston Chronotype*, tells of one Dr. H., a dentist in Worcester, Mass., so clever, that he will take out an offending molar quicker than a common doctor can let it alone.

MORTALITY TABLE.

For the Week ending Saturday, March 10, 1848.

Causes of Death.	Total.	Average of Five Winters.
All Causes	1,047	1,169
Specified Causes	1,040	1,164
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	243	221
Sporadic Diseases:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	45	54
Tubercular Diseases	172	203
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.....	104	141
Diseases of the Heart and Blood-vessels.....	25	40
Diseases of the Lungs, and of the other Organs of Respiration	223	243
Diseases of the Stomach, Liver, and other Organs of Digestion	62	67
Diseases of the Kidneys, &c.	15	13
Childbirth, Diseases of the Uterus, &c.....	5	9
Rheumatism, Diseases of the Bones, Joints, &c.....	4	7
Diseases of the Skin, Cellular Tissue, &c.	2	1
Malformations	3	3
Premature Birth.....	35	23
Atrophy	16	15
Age.....	39	73
Sudden	10	14
Violence, Privation, Cold, and Intemperance	37	37
Causes not Specified	7	5

TO CORRESPONDENTS.

We must apologise to Dr. Turley for the delay in publishing his letter. It is in type, and shall certainly appear next week.

"Dr. Tripe's" article on Scarlatina shall appear next week.

"Omicron" might go to Paris, Montpellier, Strasbourg, or Edinburgh.

"A Subscriber, M.D."—The possessor of a diploma from the Faculty of Physicians and Surgeons of Glasgow, is not a legally qualified practitioner in England.

"Chirurgus."—The candidate must be unmarried, not beyond twenty-six years of age, nor under twenty-one.

A Correspondent informs us that he has used the tannate of Quinine with success in intermittent fever, in cases where the sulphate caused but little improvement. The dose was the same of the tannate as of the sulphate.

"Senex."—A German diploma confers no legal title to practice medicine in this country.

"A Student."—Either of the schools named will suit our correspondent. The first mentioned is rather the less expensive of the two.

"M. D., Lond."—We are not aware of any changes alluded to by our Correspondent.

"Lector Juvenis."—Sedillot's Pills are prepared with three drachms of strong mercurial ointment, two drachms of Castile soap, and one drachm of liquorice powder, beaten up together, and made into pills weighing four grains each.

"B. J."—Our Correspondent is a duly qualified Medical practitioner, but is not qualified, under the regulations of the Poor-law Commissioners, to become a Union Medical Officer.

"Tyro."—Sulphuric Ether will remove the oily principle.

"M. B."—If a *bonâ fide* student he may compete.

"F. Y."—All who hold diplomas from British or Irish Colleges are legally qualified practitioners; although, in some cases, corporate rights interfere to restrain their practice within certain limits.

"Anti-Humbug."—The insertion of the letter would be productive of no good.

"Amicus."—No examination will be held till next May.

"An Old Subscriber."—A Surgeon can recover payment for a surgical operation as for work done.

"Mr. A. H. Robinson, Fintona."—We are not aware of the case having appeared in the *Medical Times*.

"Mr. J. Postgate, Kilham," is thanked for his communication, which shall receive an early insertion.

"Mr. J. Clarke, Lynton."—Communication received.

"L. S. A."—Communication received.

ORIGINAL LECTURES.

THE GULSTONIAN LECTURES.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS.

By W. W. GULL, M.D.,

Fellow of the College, and Fullerian Professor of Physiology at the Royal Institution of Great Britain, &c.

[Reported expressly for the "Medical Times," and revised by the Lecturer.]

Lecture II.

PARAPLEGIA.

One of the chief objects of this inquiry into the phenomena of paraplegia which I propose to myself, is to show that there is, according to its different forms, a different degree and kind of anæsthesia,—in some cases the loss of motion being nearly complete, with but little and always less affection of the nerves of common sensation; in others, the loss of sensation preponderating over that of motion.

That in paraplegia, resulting from local lesion of the cord, *whether situated in the anterior or posterior columns, or affecting the whole substance equally*, there is more paralysis than anæsthesia. That when there is preponderating affection of the nerves of sensation, we may not anticipate that a *post-mortem* examination will show any limited lesion of the cord in any segment; for in such cases the disease often arises from peripheral changes in the nerves, or from conditions of the central organs not recognisable by our usual methods of investigation, yet often associated with morbid accumulations of fluid in the ventricles of the brain, sub-arachnoid space, and opalescence of the membranes.

Paraplegia, arising from injury to the cord through mechanical violence, is extremely common. For the most part, the effects of the injury are immediate, motion and sensation being, for the time, greatly affected, or entirely lost. If the lesion be less than to produce division or disorganisation of the whole cord, although there may be considerable anæsthesia immediately following the accident, yet the sensitive nerves, after a time, recover their function, though the paralysis may continue; and this mode of recovery is, in such cases, universal.

Before giving the records of the simplest cases of paraplegia which prove the positions I have laid down, I shall quote the experience of Mr. Earle, whose excellent article on paraplegia, (in the 13th Vol. of the Med. Chir. Transact.,) I shall again have occasion to refer to. "In spinal affections," says he, "sensation will often remain perfect after a total loss of the locomotive powers." So Sir B. Brodie, "When recovery takes place the restoration of insensibility usually precedes that of the power of voluntary motion, so that the patient may be quite sensible of external impressions while he is still incapable of employing his muscles for any useful purpose. The last observations apply equally to all cases, whether the spinal cord has suffered from concussion or from the pressure of displaced vertebræ."

One of the great causes of our little advance in the study of nervous affections seems to me to have arisen from a tacit assumption that the phenomena were too uncertain and varying to admit of any general expression. Dr. Abercrombie seems to have striven to place, side by side, cases which should set at defiance all law, nor has he attempted to reconcile the discrepancies. But all will admit, that to rest satisfied with this would be to take too narrow a view of the subject, for here, as elsewhere, there can be nothing variable; the order and relation of the phenomena must be as definite as in the inorganic world, though the conditions may often be so complex and interwoven as to elude our explanation. What is true of one case must be equally true of another like it; yet this truism has hardly been admitted in nervous pathology. My endeavour, therefore, to establish some general laws, if fruitless, must still, I think, be in the right direction.

In paraplegia arising from lesion of the cord, whether the anterior or posterior columns, or the cord generally, be affected, there is greater loss of motion than sensation. In proof of this, I shall refer to several well-known cases of disease of the columns. I may be allowed to premise, that it did not seem to me necessary to give cases in the full details with which they have been recorded by their various authors, for other purposes, although I have been careful not to omit any particulars which could bear upon the question here in consideration. In the Medico-Chirurgical Transactions for 1842, Dr. Webster gives a case of paraplegia, arising from inflammatory softening of the cervical portion of the medulla spinalis, affecting generally the whole structure of the cord and its membranes; although from minute investigation of the diseased parts subsequently, by Dr. Todd, it seemed that the posterior columns had most suffered. The individual affected had been, for many months, *totally deprived of the power of motion* below the seat of the disease, *yet his sensation was perfect throughout the entire surface of the body*, with the exception of an over-sensibility of the affected parts, towards the end of the malady, which, together with many subjective sensations of heat and cold through the surface, although there was no change of the temperature of the external medium, excited the curiosity of those who watched the case, expecting to find some particular portion of the cord alone affected. As the writer tells us, in his remarks on the case,—"This instructive and interesting example of disease of the nervous system excited, as it well might, much attention in all those who witnessed its progress; and they, along with myself, *confidently hoped* that the pathological appearances met with on dissection would be such as to explain satisfactorily the rationale of the peculiar symptoms which the malady exhibited during the patient's protracted and severe sufferings, more especially in regard to those remarkable features characterising the case, namely, that whilst sensation remained unimpaired, voluntary motion was totally suspended; because, should these anticipations be realized by the *post-mortem* examination, some important physiological truths would have been elicited. It is clear from these observations, that an impression existed in the minds of those who witnessed this case, that the columns did subserve to motion and sensation; but the result of the *post-mortem* examination by no means favoured such a theory, for not only were the posterior columns greatly diseased, but there was a general affection of the whole cord and its membranes.

James Plumm, æt. 58, a farm-bailiff, was admitted into Guy's, under Dr. Babington, in the year 1845. He had enjoyed very good health until the autumn of the year previous; it now being spring, he then began to complain of weakness in the legs, and spasmodic constriction of the abdomen, as if a cord were passed tightly round the waist; he never had a fall, nor any other injury to the back. On his admission, there was not entire inability to move the legs, but they were very weak, the degree of the paralytic affection varying. One of the points of most obvious remark was, the tendency to spasmodic action of the diaphragm under emotions, or on touching the abdominal walls. *There was no perceptible diminution of sensation.* He was treated by nervine tonics as zinc, together with counter-irritation by the ferrum candens, and the progress of the case was marked by variable improvement and relapse, the power over the legs becoming entirely lost, but the sensibility not being, to any marked degree, affected; and, on a *post-mortem* examination, there was no lesion of the brain, nor of the parts about the spine. The entire substance of the cord in the middle of the dorsal region was soft and diffluent, and of a dull opaque white colour.

The case recorded by Mr. Stanley, and which has been so often quoted, may be adduced here in proof of the assertion, that disease of the substance of the cord uncomplicated, produces greater loss of motion than sensation.

The patient was a man, aged 44; the disease had begun gradually without any previous injury, and resulted in complete inability of motion, whilst there was, at the same time, not the least discoverable impairment of sensation. The substance of the cord through its posterior half and columns, and in its entire length from the pons to the lower end, had become of a dark brown colour, and was very soft, whilst the anterior part had its due colour and consistence. The membranes were healthy, with a slight excess of the rachidian fluid. Mr. Stanley remarks:—"We cannot, in the present state of our knowledge, satisfactorily transfer the same view of the distinctness of function of the corresponding columns of nervous matter composing the spinal cord (as obtains for the roots of the nerves)." It is the object of these remarks to show, that such a law does not hold.

Dr. Budd has recorded the following case:—

R. H., sailor, aged 17. In August, 1837, received a severe blow on his back from the boom of his ship, which did not, however, disable him; he continued his work as usual. From that time he suffered occasional pain of the loins, and weakness in the back, especially when stooping. This continued, without other complaint, until the beginning of December, when he began to experience difficulty in running.

On the 8th of January, he was admitted into the Seaman's Hospital. On admission, his lower extremities were observed to be in extension and very rigid, with sensation unimpaired, except slight numbness of the thighs.

In the beginning of April, profuse hæmoptysis took place, and was soon followed by other symptoms of phthisis. His intellect had continued unimpaired, the lower extremities quite deprived of voluntary power, but *with sensation unaffected.*

On examination after death, the curvature of the back was found to be formed by prominence of the dorsal vertebræ, from the fifth to the ninth inclusive.

As soon as the laminæ of the vertebræ were divided, a small quantity of yellow pus oozed from the right side of the spinal marrow, exterior to the dura mater.

The dura mater, for the space of an inch and a half corresponding to the most projecting portion of the spine, had a dark greyish stain externally, and was much more vascular than the portion above or below the curvature.

The diameter of the cord was considerably smaller in the portion corresponding to the curvature than in any other part throughout its whole length.

There was no pus in the sheath.

The cord was of natural size, and a portion, about two inches in length, corresponding to the curvature, softened in the posterior columns. The tissue was not diffluent, but became flaky, and partially dissolved, when a small and gentle current of water was poured on it. This did not happen when a like current was similarly directed on other portions of the cord. This breaking of the tissue was *much more marked in the posterior* than in the anterior columns, which were scarcely, if at all, softened, and resisted considerable traction.

Under the heading, "Undefined Suppuration of the Cord," Abercrombie gives three cases, in neither of which is there any mention of the state of the sensation, although, in his other reports of similar affections, he is careful to note when the anæsthesia has been to any degree marked.

I might go through every case recorded by this Author, and show, that there is not one in which, from lesion of the substance of the cord, sensation was alone affected, or in which the anæsthesia prevailed over the paralysis. And here I would remark, that whilst the cases I have given have been detailed, in some instances, to show that the posterior columns were not for sensation, no general deduction has, so far as I am acquainted, been drawn from them.

The following cases illustrate the same principle with variable seat of the lesion.

A man, aged 36; paraplegia from fall; complete loss of motion in lower limbs, without loss of feeling. *Post mortem*—extensive ramollissement of body of cord, affecting anterior columns chiefly; the posterior columns softened in many places, though in smaller degree. (Abercombie, 129th case.)

In a case by Ollivier—Gradual palsy of lower extremities; patient bed-ridden for seven years; legs

drawn up to the body, entirely motionless, but preserved their feeling. *Post mortem*—extensive ramollissement of upper part of cord, especially in the anterior pillars and corpora pyramidalia.

In a case by M. Rullier—Gentleman, aged 44; curvature of spine, paralytic flexion, and at length complete palsy of arms, which became rigid, contracted, and entirely motionless; sensibility of parts not affected. *Post mortem*—six inches of cervical portion of cord entirely diffluent, so that, before membranes were opened it moved upwards and downwards like a fluid. This case is given by Abercrombie.

Man, aged 20; complete paraplegia; no diminution of sensibility. *Post mortem*—disease of third, fourth, and fifth cervical vertebræ; tuberculous disease of membranes at this part; ramollissement, chiefly of anterior columns; posterior slightly softened. Abercrombie, sect. v. case 3.

Gentleman, aged 18; perfect paraplegia, without loss of sensation. "There never had been the least attempt at motion of the lower extremities, but the sensibility remained." There is mention of numbness in this case; but the quotation is in Abercrombie's own words, and this affection of the sensation will be subsequently considered.

It might not appear necessary to quote cases of affection of the anterior columns, as they have been regarded as normal when the power of motion has been most affected; but they equally bear upon the question I am considering with those in which the posterior columns were the seat of the disease, forasmuch as both being accompanied by the same symptoms, neither can be regarded as proof of the special functions of the parts. And whilst it must be admitted that paralysis existed beyond anæsthesia, when the anterior columns were affected, it cannot be inferred that this was because the anterior columns were for motion, inasmuch as the same occurred when the posterior columns were the seat of the disease.

The following case from Dr. Bright's reports may, I think, be adduced as bearing on this question, although he refers the paraplegia without anæsthesia to the position of the lesion; but the preceding remarks appear to me to show that such is not the explanation.

William Browne, aged twenty, was admitted under Dr. Bright, into Guy's, August 18, 1844. About six weeks before, without any cause of which he was aware, he began to feel pain in his neck, close to the head, which had increased, with some stiffness of the part. At the time of his admission, his head was bent forward, so that the chin approached the upper part of the sternum; there was almost complete hemiplegia on *the right side, and some* flying pain which he called rheumatic. He complained of pain when the vertebræ of the neck were pressed, and there was an apparent displacement or slight irregularity in the spinous processes of that part. Leeches were applied, and local applications made to the nape of the neck.

At the end of November (three months) the other (the left) leg became much affected.

In January (five months) he was unable to walk without assistance. He complained that his legs *felt asleep, but they retained their sensation*. He died on the 8th of February, the report stating, that on the day previous, though quite sensible, he was unable to move any part of his body.

The principal *post-mortem* appearances were confined to the processus dentatus, which, by its enlargement and displacement, had contracted the foramen very much. At a point where the pressure was made, the medullary matter of the spine had assumed a darker colour, to the extent of about a pea, and was apparently vascular. It is to be remarked, says Dr. Bright, that whilst motion was destroyed sensation remained perfect,—a fact which may be easily accounted for, when we consider that the processus dentatus was the part chiefly diseased, and necessarily made pressure on the anterior part of the cord.

But, inasmuch as sensation remains perfect when the disease is general, or on the posterior part, this case cannot be adduced in favour of the columns having especial functions.

In the ninth volume of the "Med. Chir. Transact.," Dr. Bostock has given a case of universal paralysis, of which the following is an outline; and I quote it for the purpose of showing that general affection of the cord in this, as in the other cases quoted, manifests the same law in regard to anæsthesia and paralysis:—

M. H., a middle-sized and well-formed man, between 30 and 40 years of age. Had enjoyed good health. Applied for medical advice in consequence of a pain which he experienced in one of the lower extremities. Its seat was on the outside, and a little above the knee, but it sometimes shot up to the hip. He mentioned, that he had had a slight fall, but it seemed so unimportant, that he attached little to it.

After two months, the power of moving the limb was perceptibly diminished, and, in the next two, the complaints continued slowly to increase. The limb possessed its full share of sensibility, and was of the natural temperature, but he lost more and more the command over its motions. There was no pain in the trunk, nor could disease be detected in the spine. In two months more, the other limb was similarly affected; there was no numbness; but, shortly after this period, a new affection made its appearance,—a difficulty of the articulation of particular words; and, for the four next months, the affection of the speech and of the limbs continued to increase; so that he became unable to move without assistance, and his power of utterance was nearly lost. And, eight months afterwards, he first complained of pain in the back of the head and neck, and the paralysis of the upper extremities, and affection of the muscles of deglutition supervened. Notwithstanding this loss of voluntary power, there was *no numbness nor insensibility of any part of the body*, neither to mechanical impressions nor changes of temperature. All the external senses and mental faculties remained unimpaired. He dragged on a wretched existence for six months, and died exhausted,—his senses, special and general, remaining unimpaired.

Post-mortem.—We began by examining the brain, and every part of it was most minutely scrutinized, but without our meeting with any appearance which could be considered morbid. After a very accurate survey of every part, we thought we observed a slight furrow *across the spinal cord, as if it had* been compressed by a transverse ligature, and this in a place where it passes under the ring of the atlas; and, upon attentively noticing this part of the bone, it appeared a little thickened, and of a yellowish colour.

Very numerous cases are on record of pressure on the cord, from tumors, hydatids, &c., in all of which loss of motion accompanied loss of sensation, when this latter formed part of the symptoms; but I cannot find any cases of pressure or disorganization uncomplicated, in which the loss of sensation preponderated, or in which there was simple loss of sensation.

My attention has now for years been much given to *post-mortem* appearances; but I have not met with cases which controvert my position, nor are there amongst the numerous cases of lesion of the cord which are contained in the records of this Hospital, any which show that one part or column of the cord, when affected, is attended with anæsthesia without loss of motion, though, as we have seen, the reverse often happens.

If it is admitted that these facts warrant the conclusion that seems to me fairly to flow from them, we have therein another argument in favour of the zonal symmetry I advocated in my last lecture. If we admit that this spinal system, in its various segments, can act under the form of an excito-motor system, which necessitates continuity of action from incident to reflecto-motor nerve, we cannot, I think, even suppose in these segments two centres; one, namely, for receiving the impression from without, and the other for exciting the movement in the muscles. Nor does there seem to me any stronger grounds for admitting separate centres for motion and sensation in the brain than in the cord. How fallacious soever these remarks may be, yet the facts seem to oppose the assumption that there are such sensory and motor centres, distinct from each other.

In pursuance of my subject, I have next to call attention to those cases of paraplegia in which there is much greater loss of sensation than of motion; and, far from finding them contradictory of the former, or anomalous, they seem naturally to arrange themselves into distinct classes. Before treating of the two great divisions of such cases, I would observe, that in paraplegia from disease about the spine, the nerves, as they pass to the cord, are sometimes implicated, and we find, on a *post-mortem* examination, sufficient explanation of what, carelessly observed, might seem to be an exception to the rule laid down. Thus, in the case of the Count de Lordat, mentioned by Abercrombie, a paralytic affection of the left arm followed an injury to the neck from a fall, and the opposite arm became numb. On a *post-mortem* examination, together with induration of the cord, there was a *compact and tendinous condition of the cervical nerves, owing to thickening of the membranes covering them.*

In some cases of disorganisation of the spinal centres, numbness or other affection of the sensation may precede or accompany the disorganising process, and yet, even as the paralysis increases, the state of the sensation shall improve, and become quite normal. It would seem, from the similarity of such cases to the results of concussion of the spine, in which the sensibility returns after a few days, as if the onset of the local disorder produced the condition of concussion, destroying for a time the power of feeling, which, so soon as the first shock of the inflammation is over, returns again. This is strikingly exemplified in those gradually extending affections of the cord in which anæsthesia is the precursor of paralysis, and then disappears.

The first class of paraplegic affections, with preponderating anæsthesia, are peripheral, beginning as impressions on the extremities of the sensitive nerves; the muscular movements suffering subsequently. The efforts of modern physiology have been directed to the elucidating and setting forth the functional value of each particular part of our bodies; and its success has nowhere been greater than in regard to the nervous system. We no longer regard nerve as a mere conductor of an influence received from the spinal cord; it is in itself as active, according to its particular function, as the centre to which it is attached, or the muscle with which it is connected. The prevailing views in physics will find their way into every branch of natural study; hence we talked for a time of the nervous fluid, and there were theories to show that the nervous fluid has probably a highly subtil one, allied to the electrical. But electrical fluids expressed no more than an hypothesis; and we now regard the conducting wire as so conducting by virtue of its active molecular forces. We alter its physical state, and we alter its power of conducton, and this reacts through the series. This great advance in physics has gone hand in hand with the discoveries in neurophysiology. Nerve has the power of exciting muscle by virtue of its proper state of nutrition; this is proved by exhausting a nerve; after leaving it at rest for a time, it recovers itself, although previously divided from its centre.

[To be continued.]

ORATION

DELIVERED AT THE ANNIVERSARY MEETING OF

THE LONDON MEDICAL SOCIETY,

MARCH 8, 1849.

By W. HUGHES WILLSHIRE, M.D. Edin.; M.B.S., Physician to the Royal Infirmary for Children, &c.

[Reported expressly for the "Medical Times." and Revised by the Orator.]

(Continued from page 394.)

It believes, that our disregard in thus meeting a peculiar kind of danger, not so affecting the avocations of other men, has, in a great measure, its origin in *custom*. It believes, that our education at the bed-side of the sick, our discipline in the

dead-house and the hospital, make us *callous* in approaching the sources of the most deadly pestilence and infection,—that the fear of danger which would appal other men, in us is smothered by the force of habit.

That we are often paid for such risks is abundantly the case, for again may I say, "*Il faut vivre;*" but that we are remunerated for it always, I need scarcely remark, is not the case. But even the payment, when we get it, goes but little way in liquidating the debt of obligation which ever is the due of a conscientious and sympathizing practitioner,—a practitioner who does, as it has been remarked, at least, half his duty because it is his duty, and not because it is productive of his fee. It was once said in the presence of the late Dr. Hope, that a patient owes no more to his medical attendant, than he does to his baker, when he pays him for his bread. Need I say, that such an assertion failed not to call forth his sorrow and regret, or that it but proves that he who made it was ignorant both of the nature and of the dignity of our art? The practitioner, it is true, is paid for his prescriptions and his drugs; but how is he remunerated for his *interest* in any particular case—an *interest* never made the object of the barter, or avowedly entering into the supposed contract? Does the fee remunerate him for any feelings of benevolence? Does it pay him for his *sympathy* for the sufferings of the sick? Is it for the fee that he experiences the glow of delight when his patient emerges from a state of great danger to one of comparative and long wished-for hope? Does the fee reward him for all those painful and often-felt fluctuations of feeling which, when conscientious, he experiences as his patient wavers in the balance between life and death? And how often do we not find that, when there is no gilding of the palm in prospective, no temporal, no tangible appearances of remuneration even when the "*faut vivre*" may be cut in the deepest letters, that the same untiring watchfulness, the same disregard of self, and the like moral and physical courage are abundantly exemplified. Where was the golden honour that led Louis and Trousseau to leave Paris, and reside amid the infection of the yellow fever of Gibraltar? Where was the recompense that induced M. Chervin to follow in their train? Whence came the remuneration to those of our countrymen who, when the choleric pestilence of India hung like a storm-cloud on our land, went forth and lived amidst the dying and the dead? But need we go so far back as this to seek for patterns of moral heroism? Not so, indeed. The records of the duties, and the fatality attendant on the profession lately in Ireland, present us with such a picture, the unhealthiest climate and most precarious avocations fail to produce. 178 medical practitioners, not inclusive of students and army surgeons, who suffered too, died of fever in 1847, while no less than 500, at the lowest computation, suffered from one epidemic cause or another. And how this fatality was produced let Dr. Stokes and Mr. Cusack tell: — "One-fifteenth of the entire medical community of Ireland have died during the year 1847, from disease contracted in the discharge of their public duties. Moreover, the residences of the practitioners are sometimes so far apart from each other, that when one of our brethren has been himself overtaken with the pestilence, he has actually died without having received any professional aid. Few, if any, of the Medical Profession escape typhus in Ireland; many have had it twice, some even three times; and this disease from which they suffer so severely is contracted in attendance upon sanitary institutions, or in the miserable, ill-ventilated, and dirty dwellings of the poor." And is it—as it has been asked—for golden honours that our brethren in Ireland are thus hurried by hundreds into the common grave of their countrymen? is it from the promise of some high reward that thus is given them the privilege to range an infected city? or is it for some great temporal munificence that their wives and children, afterwards widows and orphans, witness the husband and the father leaving them to spend his hours of needful repose in the squalid hovels of pestilence and disease?

You know for what this is done—you know for what they worked; most of them for nothing. But to some the State did stretch forth its hand and rewarded them—perhaps, some may think, too generously. What were the heavy ingots rolled forth to reward them, those men of our devoted ranks who were officially recognised in condescension whilst striving to stop almost a second plague of Argos? It gave them, whilst they worked, until they died, £1 15s. a week to live upon. And did it stop here, then, after their servants' dissolution? Far from it; for when a petition of a Relief Association besought it to throw some grains of mercy on 17 widows and 194 children, entirely unprovided for, left desolate from the loss of him who had spent his hours in untiring watchfulness on the sufferers of a desolating disease, it replied, First give them money yourselves, and then, whatever you choose to give, we will *double it*. Were golden showers, then, the prospective of actions such as these? Far, indeed, from it. The latter must be sought for in the contemplation of the moral aspects of Medical life, in the conscientious belief and satisfaction of those that performed them, that they were their duties, and that they were done.

"Ay, there are homesteads which have witnessed deeds
That battle fields, with all their bannered pomp,
Have little to compare with. Life's great play
May, so it have an *actor* great enough,
Be well performed upon a humble stage."

I will turn to another example I have before touched upon, in illustration of a different kind. In those instances I have mentioned we see exemplified the courage that walked freely in the shadow of death; in this I have to mention, we find the heroism that proceeded on its duty unimpeded, unaltered by the taunts of man.

A duty, a solemn duty, appeared necessary to be done, and silently was it commenced—commenced a project of unlimited responsibility, but a purpose of unfathomed interest and scope. The system of treating the man whose mind had fallen otherwise than as an animal; the substitution of moral and mental remedies for the instruments of physical coercion and of force; the adaptation of skill and kindness in lieu of leg locks and muffs, were the so-called "dreams" of a man's ambition, as he scattered the records of cures by chains and fetters to the wind.

But a vast field of duty indeed it was; arduous and responsible if the heads and hearts of all men had been upon his side; but alone, almost alone, had he to cut away the tough and climbing lianas that choked his path. The novelty of the endeavours he had carved out, their fatal consequences if unsuccessful, the complete up-rooting of the old remedial management, of the means by which hundreds got their living, and the dire effects to himself and, perhaps, the 600 patients beneath his charge, should his efforts fall short of their promised end, caused the laugh and the ridicule of those to echo around him who, at the least, should have known better.

It was asserted, that his views were Utopian, absurd, impossible,—the dreams of a wild, if even a philanthropic man—that the suffering wretches whom he thus desired to ameliorate were passed beyond all bettering—all redemption,—that the experiments alone would entail an expense and an outlay that, in the attempt to fully carry out his measures to the benefit of all, would be shown to be futile in the extreme; nay, it was further asserted, they had been tried and proved of no avail. But, amidst all this opposition, the duty, the endeavours remained to the moral eye as clear, as decisive as at first, and the laugh and the ridicule were met by a spirit opposing them with firm decision. And, when the firm, decided spirit became recognised, it was strange to see how the space cleared around the man, leaving him room and freedom for all his actions. The disposition to interrogate, to dictate, and banter, began to preserve a respectful and politic distance, judging it not unwise to keep the peace with one of so much energy and decision; a conviction, that he both understood and willed with extraordinary force, gradually silenced the conceit that was intended to perplex or compassionately instruct, and the malice was intimidated that was disposed to attack him. And what have been the results. Are they not—that of the scourge that was formerly so rife there is now lost all trace of, and that the hand alone remains ready to resuscitate the apparently dead in intellect. Instead of the chain which formally rivetted the maniac to the block, there exists simply the feeling, that kindness must ever be the attendant on misfortune. But, what can better teach them than the words of the Professor of Göttingen, who, after returning to his country from a journey to our shores, thus speaks of his visit to Hanwell:—"Here is practically shown man's power over man, when wielded with humanity." And where does he, who has accomplished all this, find his remuneration? I will tell, in his own words, given to us in his latest writings:—

"All is now passed," says he, "and I thank my God with a deep and unfeigned humility, who has permitted this great experiment to proceed for full seven years without one accident calculated to bring discredit on it, and with a general result on the Institution best known to those who knew that Institution before, and on all others, in almost every region of the globe, and which never can be entirely lost, I trust." Here, then, is seen another of the *moral aspects* of our professional career; and, indeed, of them it is a noble illustration. A page in the life-history of him who, rising up with a new mission amongst his brethren,—not to "break the bruised reed or quench the smoking flax," but to whom a power was given "to move, dove-like, over the troubled waters, and hush them into quietness."

But how numerous and varied are others we could find, if that we searched for them amid the every-day duties of our sphere. In some respects less prominent, it is true, but not the less important on account of their subordination for us to profit from, and to learn how much will often lie at our door beyond the mere alleviation of human disorders. In those departments of the public service, as the Army and Navy, which claim the service of the Medical Profession, we may find abundant proof how ready, at all times, have their medical officers been to assume other duties and obligations completely opposite to their usual and allotted sphere of action, whenever they were demanded from them by the necessities of the case. It is true, that often their own personal safety, as well as that of others, depended upon their performance; but no one can believe that the former circumstance alone was the only one which impelled them so to act, whilst, in other cases, not the shadow of a doubt can remain, but that their actions were dictated by a motive of the purest humanity. Slightly altering the words, let me make a quotation from one of the periodicals of the day. There are few but must remember the melancholy impression made upon our minds when the disastrous results of the expedition to the river Niger were made known through the papers at the time; and none who remember can forget that pathetic passage in its story which represented the noble conduct of the Surgeon and Geologist of the expedition, amidst the difficulties of the case. Left alone, amid the far recesses of the Niger, with their companions stricken to death by the fatal fever of the place, they knew that the safety of the few which yet remained depended alone on the quick removal of their ship from that river of death. Then did the Surgeon take upon him the office of its navigation, steering and piloting the vessel through all the intricacies and dangers of their fatal path, whilst his companion, the Geologist, worked the engine below. There is something truly affecting—one will not say sublime—in the picture thus presented to our imagination, of these two solitary men of science assuming offices so foreign to their kind, stripped of all external cognisance of their class, standing as workmen at the furnace and the helm, toiling by day, and watching by night. Through their aid the paddles swept their bark along the many dangers of their unknown course, freighted with their dead and dying companions.

From the peculiar spirit in which the services and varied duties of the Surgeons of our Army and Navy are regarded, they are considered alone as

members of the Civil Staff, and are rewarded in a diminished manner accordingly. They are constantly denied, or considered at least incapable of receiving, some of those temporal honours which often fall so lavishly to the lot of their fellow-officers. And yet, on inquiry into what their duties are, we find them to partake often of a purely military character,—nay, not only are they civil and military, but often even of a religious character too. Of the bearings of the former and latter duties to the subject of my discourse, I need scarcely offer proof; but, in thus instancing the purely military functions our brethren have been often summoned to assume, I do so,—not that these functions in themselves can hold a relation to the *moral aspects* of our life, but as proving how their performance, when demanded from them, has been undertaken, under circumstances which forbad all hopes of those honours and emoluments, those stars and those crosses, which flow in such profusion for the performance of similar actions by other men. It is this unselfish, unprospective nature of these acts of danger that stamps them with characters such as no seeking of the bubble reputation even at the cannon's mouth can ever hope to bestow. And how numerous are the instances in which, during war, has the Medical Officer been called upon to act in such capacities? "On many occasions," says General Campbell to a distinguished Surgeon in the Burmese war, "during the sickness and absence of officers of your regiment, you did duty with it in the field; and, in one instance in particular, there being no commissioned officer present, when engaged near Prome, you most ably and gallantly executed my commands, in covering the retreat of a detachment of infantry."

Did not Dr. Lord, when the army of Bombay was met with desperate resistance, and it became necessary to secure the services of all, take his sabre, fall into the ranks, and drop mortally wounded, in a charge of Affghan cavalry, fighting side by side with his men? Have we it not on record that Napoleon, the Emperor, despatched in haste his aide-de-camp, on the field of Waterloo, with orders to Baron Larrey, the chief surgeon of his army, to lead on a company about being resisted at its onslaught by a troop of Prussian Lancers. Did not the chief surgeon, force with sword in hand, a breach through their ranks, and his company pass through? Are these civil duties? Are these the offices for which the surgeons of the services are sunk down upon the Civil List. Covering, at the request of a senior officer, a retreat of infantry; falling into the ranks, and fighting like the men; heading a company of foot-guards against a charge of Lancers. Besides, are we not told, that, when a man falls in front, the surgeon is called there; that he too accompanies the storming party to the breach; and that his place in a siege is in the gorge of the trenches? But is it only in the duties of the medical or military officer that our brethren are thus engaged? Far, indeed, from that; a still higher and loftier character than even the former can endow, has marked their avocations in the time of need. Even the office of the regimental chaplain has been allotted them to perform. I have seen it stated, that, during the Burmese war, the medical officers were required to check the feelings of the deepest despondency which took possession of the men, and to encourage them both by countenance and example,—to raise up the drooping spirits of the remnant of an army, whose fearful loss had exceeded thrice that of Wellington's during the most active period of the Peninsular campaign. And how was this duty accomplished—a duty of the most distressing form? It is said that it was at all times carried into effect with cheerfulness and energy of character. And how great must have been the amount of moral worth with which Napoleon regarded Baron Larrey, when he chose him from his army as the bearer of new colours to the Regiments of the *Haut Pyrenées*! "I am pleased," said the Emperor, "to send you these colours by your compatriot Larrey, who adorns humanity by his bravery and disinterestedness. He has saved numbers of our soldiers in the deserts of Lybia by sharing with them his little stock of water and spirit which he so much needed for himself." This was a noble instance of generous acknowledgment by him who knew certainly as well, if not better than most men the true value of his servants' services. It was an acknowledgment, I will say, worthy of the nation over which he ruled; and which, when the late Mr. King having been successful against the most rising young surgeons of France in obtaining by *concours* the office of second *interne* of the Hotel Dieu, thus replied to those who cavilled against the confirmation of his appointment because he was a foreigner, "The Council, being influenced by motives of a high national order, have in their wisdom declared that France was the country of all the talents that would honour and serve her,—Mr. King is, therefore, to retain his honourable position in France."

Those, Sir, of our Fellows who are acquainted with the histories of the various Arctic voyages and overland expeditions to the Frozen Seas, must have often rejoiced over these passages in their history, in which are proved how much always has been owing to the aid and instrumentality of our brethren, quite otherwise than as relates to their mere professional aids. The late Sir John Barrow thus speaks of Dr. Richardson in his account of Sir John Franklin's expedition to the Polar Sea. "Franklin always acknowledged, that to his energy of character and promptitude of action are to be ascribed the safety, not alone of himself, but of the surviving party of the first expedition; to insure which he risked his own life, and made a sacrifice of the best feelings of his benevolent nature." How he risked his life Franklin himself shall tell us. "In this hopeless condition, with certain starvation staring them in the face, Dr. Richardson, actuated by the noble desire of making a last effort for the safety of the party, and of relieving his suffering companions from a state of misery which would only terminate, and that speedily, in death, volunteered to make the attempt to swim across the stream, carrying with him a line by which the raft might be hauled over. When he was about to step into the water he put his foot on a dagger, which cut him to the bone; but this misfortune could not stop him from attempting the execution of his generous undertaking." One of the party complaining of cold, this kind-hearted and amiable man gave him his shirt, and the former exclaimed, in the warmth of his heart, "How I shall love this man, if I find he does not tell lies like the others." The gratitude and attachment here expressed, were returned, says Sir John Barrow, in full measure to Dr. Richardson, not only by the commanding officer, but by every individual employed on the two voyages, and also by the natives with whom they had intercourse, and by whom his uniform kindness and humanity were duly appreciated. But how did others appreciate them? Still let Sir John Barrow tell:—"By some *unaccountable accident*," says he, "this excellent officer was not honoured with that distinction which was conferred on his companions, Sir John Franklin and Sir George Back. But, whatever the cause of the omission may have been, it has at length been rectified by an application of Lord Haddington to Sir James Graham, to solicit Her Majesty to confer on him the honour of knighthood, which has been graciously granted."

But the field I have ventured upon is co-extensive with the practice of our art; in its theatre of action stand numberless votaries for our praise; past or present, wherever the foot of the Medical practitioner has trodden, or now is, are stamped the undying symbols of humanity and peace. From along the hollow chambers of the Bicêtre and Salpêtrière, come yet to us the *jubilatès* which carry down the name of Pinel in eternal praise. From the sand-plains of Egypt and the plague-hospitals of Jaffa, yet break upon our ears the voices that shout in honour to the memory of Desgenettes. Amid the crash yet lingering upon the air of the throne of the 16th Louis, we hear the words of consolation offered by Hallé to the death-devoted Malesherbes; and we see, bright as a page of light, amid the blood-stained records of the Reign of Terror, the memorial of that physician who, at his own peril, attempted to save the head of Lavoisier from the block.

But these things are not alone those of the past and of the present; they have, with their counterparts, to be written upon the pages of the future,—pages which even have to tell us of the subjugation and civilisation of unchristianised communities; and how the pathway has been cleared by the practitioner of our art—not by bayonets, cajolery, or bribery, but by his endowment of the skill of restoring sight to the blind. "Behold," says Dr. Macgowan, "Dr. Grant, armed only with his needle for the removal of cataract, forcing mountain passes, and, amidst ferocious warriors, winning his way to their homes and to their hearts, enabled to traverse in safety regions heretofore untrodden by civilised man, and in whose defiles an army would perish in effecting an entrance." Yes, it will have to be recorded, that in the civilisation of China the voice that has whispered from the fane of Æsculapius has done more than that which has thundered from the temple of Mars. But what are these in the moral aspects of our life in comparison to that great and glorious privilege of which it is the high and honourable right that we can boast,—a privilege by which the practitioner of the healing art has been made the means of the propagation of Christianity in regions of the globe where no foot but his own dare step or rest in safety,—a privilege that enables us to affirm, that at this moment there are to be found in India, China, Syria, and the Islands of the great Pacific, no less than fifty medical missionaries from France, England, and America,—men living in security and honour where, to all before them, death or expulsion were the inevitable results,—living protected by their skill to help from misery and to save from death,—living upheld from on high as ambassadors, at the same time, of all a Christian's love and hopes. The limits, then, are no narrow ones, within whose circuit lie the manifold illustrations of the moral aspects of medical life. Nor are the names few or unhonoured of those who have been as living witnesses to their truth. Of these some have received their due recompense so far as office and emolument could yield it, during their life; whilst others have passed beneath the dark foldings of the eternal curtain, unrequited and without reward. But there, in darkness, they cannot always rest; some hand will yet burn incense upon their pyre, whose light shall kindle up the gloom; and the grave which closed over them in darkness, with no funeral lamp left them, as the echo of the *vale in æternam vale* was left them in their solitude, shall become radiant with the scintillations from the torch of Truth. Then, along with all of those who have been scorned, sported with, nay, trampled on, shall their names—

> "Claim
> The patent which the great paternity
> Of Heaven assigns them, as its elder born;
> And walk before us in the march of Time."

But, great as our prerogatives are, we cannot assume to stand alone in their enjoyment, nor can we take the flattering unction to our soul, that we have always thus listened to their importunities. Did Sydenham, when our city was overshadowed by the dark tempest of the plague, remain calmly at his post, succouring and comforting the heavily afflicted? or did he not rather fly, leaving them forsaken, not forgetful of his own, but of their great welfare? Alas! it has been said to every one, even great like Sydenham, is given his share of the frailty which is the natural heritage of man; the brightest stars have been dimmed in their lustre,—the most noble-minded have fallen from their high estate. Like the great Wolsey, how many, in all the avocations of life, stamped even with the signet of Nature's own nobility, have fallen

> "Like a bright exhalation in the evening,
> And no man saw them more."

But from those noble ones among our own ranks who have thus "touched the point of all their greatness, and from that full meridian of their glory have hastened to their setting," I have turned our path,

and have called up in lieu remembrances of those whose memories must ever, *amongst ourselves*, at least, obtain all

"Honour, love, obedience, troops of friends."

I say, amongst ourselves, at least, they must ever be thus honoured; for, with whatever value *we* may choose to stamp the recollection of their names, we can scarcely expect that those not amongst our ranks can link them to the like honour of our own. Let us not, then, urged and bound alike by truth, philanthropy, and self-interest, waver in thus pressing forward to the day the more pure and noble aspects of our art. Let us not forget those things which are behind, and fail to reach unto those which are before; or that confidence, without which "we cannot exercise our benign vocation," will assuredly pass from us.

Let us shroud, then, in calm forgetfulness the failings of the best, and gaze alone on those bright gleams upon the picture, unto whose brilliancy, though we may not be able to attain, yet can we offer all homage and respect,—homage unto those whom we have thus found bowing to the dictates of the moral law,—laying all passion and vexation of spirit at its feet,—approaching their duty with minds so calm and void of littleness, as to be ever ready to receive and act upon the dictates of humanity and of truth,—men half raising the Art of Medicine to a divinity, and approaching her with feelings of religion and of love. To these let us turn with ever-growing profit, and gaze with admiration into such minds as theirs,—

"In whose calm depths the beautiful and pure
Alone are mirrored."

They leave a weight upon our waking thoughts;
They take a weight from off our waking toils;
They do divide our being,—they become
A portion of ourselves as of our time,
And look like heralds of eternity.
They pass like spirits of the past,—they speak
Like Sybils of the future; they have power;
They make us what we were not—what they will;
They teach us—what we should be.

[We add the request of the Author of the Oration, who has examined our report previous to its publication, that "it should be stated, that its appearance in its present form does not admit of further references, &c., to the various writers from whom suggestions of thought or illustrations of facts may have been taken, and which otherwise should be given."—Ed.]

MEDICAL SCHOOLS AND UNIVERSITY TOWNS OF GERMANY.

By DR. BUSHNAN.

BERLIN.

(Concluded from Vol. XIX., page 375.)

The following is the mode of clinical instruction in Berlin; and, as I think, the professor at home who would adopt it would soon find he was instructing an overflowing auditory, rather than speaking to almost empty benches. The pupils are either listeners or practitioners. Every patient brought into the theatre is allotted to one of the last named, who examines him publicly, and gives his opinion as to the disease, and points out the mode of treatment. Those patients who cannot attend the klinic are visited at their own houses by students under the superintendence of the professor and his assistants.

The most important hospital for clinical instruction is La Charité. It is situated on the north-west side of the city, and consists of a handsome range of buildings, appropriated not only to surgical and medical cases, but also possessing a lunatic asylum and a lying-in establishment,—very bad and improper arrangement as regards the two latter classes of patients, but very convenient for the general clinical student. It contains 1,230 beds, and in it 10,000 to 11,000 patients are treated annually. Its deaths average 10 per cent. Its annual expenditure amounts to 150,000 dollars arising from its own property, and 10,000 dollars contributed by the Government. About 1,000 patients are yearly gratuitously received by the hospital; others are paid for, if poor, by the parishes; if servants, by their masters; if prisoners, by the Government. Persons in easy circumstances pay a small weekly stipend for admission and treatment; and prostitutes defray their expenses by needle-work.

The two medical klinics are under the superintendence of Professor Wolff for acute cases, and Professor Schonlein for chronic; but, unfortunately, the nomination of the latter, who is considered to be the cleverest diagnostic in Germany, has not been so advantageous to the University as was anticipated. His appointment of Physician to the King, and, perhaps, his own indolence, or, as some say, his delicate health, prevent him from filling his Professor's chair with the zeal and energy it requires.

Professor Jungken presides over the surgical klinic at La Charité; and here the treatment of diseases of the eye is the only branch of surgery worthy of notice; in other respects, the klinic is only remarkable for its spirit of pedantry, antiquated practices, and dearth of intelligence. The syphilitic klinic has only lately fallen into clever hands. It is now consigned to the care of Dr. Simon, who stands very high in medical literature from his microscopical examination of skin diseases.

Professor Ideler is at the head of the klinic for lunatics, a department of La Charité which has been much criticised, and on which I shall find occasion to speak in an early notice of the progress of German medical science.

The lying-in klinic has, since the death of the lamented Klugé, been confided to the care of Professor Schmidt, who is indebted for his appointment more to the patronage of the ex-Minister Eichhorn and his own *peitistichen* principles, than to personal merit. His close connexion, however, with the present Minister for Public Instruction and Medical Affairs, may, perhaps, be the means of obtaining from the Government a medical reform, which has been often petitioned for but always refused. There are about 430 births annually in this department of La Charité, most of which are illegitimate. As soon as labour commences, the students are summoned and have an opportunity of assisting in the operation. The institution, however, is not remarkable either for its medical or economical proprieties.

The great fault in the system pursued at La Charité, as it appears to me—while it offers, in other respects, so many resources—is, that while young men qualifying for *military* surgeons, are obliged, like the Parisian internes, to visit the patients in the hospitals regularly during a year previous to their examination, the *civil* students are deprived of almost all opportunity of profiting by this very necessary regulation, having only allotted to them in the klinic, according to their number, a few patients, whom they are allowed to visit and prescribe for under the superintendence of a Professor. Opportunities, too, of assisting at operations are very difficult to find, these being chiefly monopolized by the regular assistants.

There are but two klinics attached to the University, one for midwifery, the other for surgery. The first, under the care of Professor Busch, is comfortably fitted up, and contains thirty-six beds. The women are usually admitted fourteen days before their expected time, and are discharged fourteen days after their confinement. Students here receive theoretical and practical instruction in midwifery; and after the course they are permitted to practise in the town and to attend women at their own abodes, under the superintendence of the Professor and his assistants. The number of births average from 600 to 700 annually.

The University Surgical klinic in the Spiegel Gassé, formerly conducted by Professor Graefe, and afterwards by Dieffenbach, has already been described by me in the *Medical Times*, in the account of my visit to that great surgeon in 1847. It is now confided to the care of Professor Langenbeck, a very skilful operator, although he does not possess the peculiar talent of my lamented friend; and, if this be considered as a reproach, it is one that may be addressed to every living European surgeon, for he has not left his equal. I am not sure, however, but that the students, and especially the younger ones, may not have benefitted by the change; for Langenbeck, although not possessing the same inventive genius—and who does?—is, undoubtedly, a professor of great science and perseverance; and, under him, surgical pathology, which was formerly much neglected, is now very carefully studied, Dr. Virshow taking the more immediate charge of the department.

Among the other hospitals to be noticed, that appropriated to the army and to clergymen, called "*Bethanien*," and containing 130 beds, is the most remarkable. Its excellent, practical, and economical management, renders it a model for all others. It is said, that its patients are subjected to so strong a moral as well as physical regimen, that they leave it not only with health, but with an exaggerated religious tone; but this, when the state of morality in Berlin, as shown in the present volume of the *Medical Times*, p. 269, is considered, is rather a matter for congratulation than otherwise; and, however much exaggeration and enthusiasm in all things are to be regretted, and especially in religion, these, when brought into contact with the matter-of-fact and common-sense habits of thought and of action necessitated by the spirit of these times, will soon subside, in the really anxious seeker for truth, into a pure and simple piety, unembarassed by mysticism and the dogmatism of the schools.

As regards the supplemendary branches of medical education, practical chemistry, numerously attended by pharmaceutical students, is taught by Mitscherlich and Rose. There is, however, no public laboratory, the one under Professor Mitscherlich belonging to the Government, and reserved for the exclusive use of the professors of the University; but, several private ones are to be found in Berlin, where students may manipulate at an expense of about 2*l*. a month.

Lectures on Natural History are read by Magnus, Dove, and Erman, with all the success that such high authorities would lead us to expect. The University possesses a cabinet of natural history, but not so rich as that belonging to Professor Magnus.

Physiological Botany is taught by Professor Schultz, and the practical branch of the science by Professor Kunth, the companion of Humboldt in several of his travels. Link treats of the pharmaceutical properties of plants, and all three make frequent botanical excursions. The Royal Botanical Garden, occupying about twenty-six acres of ground, is a mile from Berlin; it is open to the public every Friday, and daily to those who obtain a card of admission from Professor Link. For a monthly subscription of one dollar, persons are allowed to take away cuttings of plants. The garden, originally a nursery for trees, was laid out by the great Elector in 1660. It is much indebted to Wildenow, who increased its number of exotic plants from 1,200 to 6,000. At present it contains 20,000 species, and 21 handsome hot-houses. The collection of orchidæ, palms, and cacti, are the finest and most complete in Germany. It has an herbarium of nearly 60,000 species, a botanical library of more than 6,000 volumes, and a fine collection of fruits modelled in wax. The herbarium of the Pharmaceutical Society contains nearly 30,000 plants, and that of the University is also remarkably rich.

Zoology is ably taught by Professor Lichtenstein, and Comparative Anatomy by Professor J. Müller. The Zoological Museum, open twice a week to the public and daily to students, contains 160,000 insects, and a small collection of about 2,000 general specimens. There is also a Zoological Garden.

Mineralogy is confided to the care of Professor Weiss, a very able and talented man; no one is admitted to the collection without his order.

The Anatomical Museum is remarkably rich; it contains the great collection of Walther, purchased by Frederick William for 100,000 dollars. Students receive cards of admission, and the public may visit it twice a week.

The Royal Library contains more than 500,000 volumes and 5,000 manuscripts. It possesses between 40,000 and 50,000 medical books. It is open

daily, from ten to four; and books may be taken out, even by strangers, upon the responsibility of a Professor or public functionary.

Berlin possesses few inducements for an English family to make it their residence; it is notoriously immoral, dear, dirty, and disagreeable. Its immorality has already been mentioned in a former Number of the *Medical Times*, and need not here be reverted to. Articles of food—I am now speaking of family housekeeping, and not student-lodging-house living—and of clothing, are dear, and house-rent is much higher than at Paris, Brussels, or Vienna. Its dirt too is very great; for, placed on a plain, very little opportunity for sewerage is afforded, and the water, instead of running off, stops and stagnates in the streets, in one of which, the Friederichsstrasse, nearly two miles long, there is not one foot of descent. Hence it must necessarily be unhealthy. The town is situated in the centre of a great sandy flat, on the banks of the small and sluggish Spree; and, nevertheless, it might be rendered more healthy, and its disagreeable odours corrected, if, instead of raising statues to military heroes, who, if they could smell, would put their hands to their noses, rather than their swords, the money they cost was expended to raise water to a height from whence it might wash and circulate through under-ground drains. In summer the town must be most disagreeable; the heat of the sun, reflected by the sand and stuccoed houses, intolerable; and the sharp stones of the streets anything but agreeable. And thus, although the residence of a Court, easy of access,—especially to an Englishman,—the seat of an English embassy and one of the most urbane of ambassadors, and the abode of the great Humboldt, always so kind and attentive to those recommended to his notice or known in the walks of science,—and of Buch, the geologist, Ehrenberg, the naturalist, Grimm, the philologist, and many other European celebrities, Berlin has failed to attract foreigners as residents, except the few officially or professionally obliged to live there; one of the finest cities on the Continent, and possessing many *agrémens*, as relates to society, and opportunities for education and instruction, it is one of the few European towns where Englishmen do not congregate.

ORIGINAL CONTRIBUTIONS.

ON SCARLATINA.

By J. W. TRIPE, M.D., M.R.C.S., and L.A.C., London.

(Continued from page 303.)

Although the balance of evidence is somewhat in favour of a high temperature increasing the mortality; yet, although the difference between the mortality of the warm and of the cold months is so marked, yet, as the two months presenting the highest comparative mortality were only 0°·8 in excess of the mean temperature, and as we cannot trace any invariable, or even very frequent concurrence, between the increased temperature and the increased mortality, I cannot consider that the increased number of deaths from the malady in this month is much, if at all, dependent on the increased temperature.

Table B. c. β. 10. Sept.
FOR THE METROPOLIS.

	No. of Deaths from Scarlatina, corrected.	No. of Deaths to 100 in each preceding Month, corrected.	Mean Temperature.
			°
1840	139	120	57·6
1841	69	106	58·1
1842	151	109	56·4
1843	233	124	59·5
1844	371	108	56·9
1845	73	128	53·6
1846	64	·108	60·1
1847	147	177	54·3
1848	604	151	55·8
Mean.	211·6	125	56°·9

Taking the mean number of the deaths for the month at 211, we perceive that they were above this mean in three out of the nine months; and, allowing the mean of the temperature to be 56°·9, we find it to be plus four times, minus four times, and mean once. In the three years in which the mortality was above the average, the temperature was plus in one, mean in another, and minus in the third; and in the six that were below the average, the temperature was plus in three and minus in three. It is, therefore, evident that no necessary relation exists between them.

The comparative mortality was plus in three, and minus in six months, the temperature being below the mean in all of the former; above in four, mean in one, and below in one only of the latter. The number of deaths in the four cold months of September were 565, or an average of 141; whilst, in the same number of warm months, the number was only 458, or an average of 114.

The results of the comparison between the mean mortality and the temperature, and also between the number of deaths in the cold and warm months, show that but little if any doubt can be entertained (as far as the data go) regarding the injurious effect produced on the progress of scarlatina by an unusually cold September. We have seen that the mortality, although increasing over that of each of the preceding months, did not increase so rapidly in July and August, the two hottest months in the year, as it did in June and September, the increase being as follows:—June, 127 to 100 in May; July, 117 to 100 in June; August, 107 to 100 in July; and September, 125 to 100 in August. It is, therefore, obvious, that the extreme heat of July and August is not so favourable to its propagation as the colder months of June and of September.

We may, therefore, conclude, that a low temperature in September is attended with a greater increase in the number of deaths from scarlatina over that of August, than occurs in a warm September.

We will next proceed to compare the summer with the spring quarter:—

Table B. c. β. 11. Summer.
FOR THE METROPOLIS.

	No. of Deaths from Scarlatina, corrected.	No. of Deaths to 100 in preceding Quarter, corrected.	Mean Temperature.
			°
1838	492	150	61·1
1839	846	163	60·8
1840	613	101	61·6
1841	223	145	61·6
1842	449	200	64·1
1843	617	169	64·6
1844	1109	171	58·9
1845	208	123	57·1
1846	219	117	63·1
1847	321	181	61·3
1848	1560	192	59·5
Mean.	605	155	61°·2

The average corrected number of deaths for this the summer quarter is 605, and the number of deaths to 100 in the spring quarter is 155; that for England and Wales during the years 1838-42 being 119.

Taking these averages as our guide, three of the quarters under consideration present five that are above and six that are below the average corrected number of deaths; and, taking the mean temperature for the quarter at 61°·2, we find that seven are above, and four below the mean. In the five quarters that present an excess of mortality, the temperature was plus in two and minus in three, the three latter including the two years in which the greatest number of deaths occurred.

The comparative mortality was above the average in five of these quarters, and below in six; the temperature being plus in two and minus in three of the former, and plus in four and minus in two of the latter; or, to present the same facts in a tabular form,—

Eleven Summers.
Comparative Mortality.

	Plus.	Minus.
Six with high temperature.....	2	4
Five with low temperature	3	2

From this it appears, that, in six summers with a high temperature, the comparative mortality was below the average in four and above it in two; that in five summers with a low temperature, the comparative mortality was above the mean in three, and below it in two. The mean, however, of the six hot summers was only 146, whilst that of the five cold summers was 155 to 100 deaths in the preceding quarters. The absolute mean mortality for the six hot summers was 407, and for the four cold summers, 843.

These results may appear contradictory to each other, but the three summers in which the disease was epidemic, and had been so during the spring, were included in the five cold summers, so that a comparison of the absolute mortality with the mean temperature could only lead to erroneous results.

A comparison between the mean temperature and the comparative mortality, is a much more certain mode of determining the question, as it shows the increase in the number of deaths over that of the previous quarter. But an objection exists even to this mode of applying the statistics of the disease, viz., that the comparative increase is much greater for small, than for high numbers—so that when the number of deaths is much below the average, an addition so small that it would scarcely raise the comparative mortality when the disease was epidemic, will elevate it much above the average. An examination of these Tables will show, that although the number of deaths increase so greatly whilst the disorder is epidemic, yet the comparative mortality for any month rarely rises much above the average; whilst in years in which it was sporadic, an excessive rise in the comparative mortality takes place.

Taking all these facts into consideration, I think we may say that a temperature in the summer quarter below the average, is rather more favourable to the augmentation of the deaths from scarlatina, than a temperature above the average,—and that, therefore, a cold summer is more prejudicial, as regards scarlatina, to the health of the community, than a warm summer.

Table B. c. β. 12. October.
FOR THE METROPOLIS.

	No. of Deaths from Scarlatina, corrected.	No. of Deaths to 100 in preceding Month, corrected.	Mean Temperature.
			°
1840	194	99	49·6
1841	59	85	48·8
1842	195	107	45 4
1843	240	103	48·0
1844	389	105	49·5
1845	99	135	50·2
1846	119	186	50 5
1847	230	149	52·9
1848	697	115	52·1
Mean.	247	120	49°·6

The corrected mean number of deaths for this month, October, from scarlatina, is 247; the comparative mortality, 120; and the mean temperature, 49°·6, or 7°·3, less than that of September.

Although the disease was epidemic, in three of these years, we find the number of deaths to be below the average in all but two, viz., in 1844, and 1848; this arises from the great preponderance of the mortality for these years over that of any of the others, whereby the mean, for the nine years, is very much raised.

On referring to the next column we perceive, that the comparative mortality was in excess in three, and in a minority in six months. In all of the former the temperature was above the average, and the next highest comparative mortality and the next highest temperature occurred in this year; and, as the comparative mortality was 115 to an average of 120, and as the actual number of deaths for this month were so very large, we may be warranted in classing this along with the others. All the other years, save one, which presented a mean, were below the average temperature, as well as below the mean of the comparative mortality. The mean comparative mortality, for the four warm Octobers, amounted to 585, or a mean of 146; whilst, for the four cold months, it was only 400, or a

mean of 100. We may, therefore, safely conclude, that a high temperature in October is favourable to the continued increase in the mortality of scarlatina, and *vice versâ*.

Table B. c. β. 14. November.
FOR THE METROPOLIS.

	No. of Deaths from Scarlatina, corrected.	No. of Deaths in each month to 100 in preceding, corrected.	Mean Temperature.
			°
1840	151	77	46·3
1841	75	127	42·7
1842	201	103	42·8
1843	269	112	43·8
1844	293	75	44·0
1845	102	103	45·8
1846	112	94	46·0
1847	257	116	46·9
1848	507	73	43·2
Mean.	218	97	44°.6

The mean corrected actual mortality for the month being 218, it was minus in five and plus in four of the above nine Novembers, the temperature being above the mean 44°·6 in four, and below it in five months. With one exception, the mortality was minus in those months in which the temperature was plus.

The comparative mortality was plus the average (97) five times, and minus four times; the temperature for the former five being plus twice and minus three, and, for the latter four, being plus twice and minus twice. The four times in which the temperature was plus, the comparative mortality was in excess twice and in a minority twice; and the five times in which it was minus, the latter was plus three times and minus twice: or, to present it in a tabular form,—

COMPARATIVE MORTALITY.

	Plus.	Minus.	Mean of deaths.
4 Warm Novembers	2 ...	2 ...	97.5
5 Cold Novembers	3 ...	2 ...	98·0

We thus see, as far as frequency is concerned, the balance of evidence is rather in favour of the warm months being the most healthy. But the mean comparative mortality for four warm months being 97·5, and for the five cold months 98·0, would seem to prove that the mortality for this month (November) is not much influenced by the temperature, or rather by the variations which occur in it. These are two facts well worthy of notice, and which forcibly impress on my mind, that this conclusion is correct, firstly, that the greatest reduction in the mortality, as compared with that of October, happened in the three years in which the disease was epidemic, viz., in 1840, 1844, and 1848; secondly, that the per centage of this reduction was nearly identical, although the actual number of deaths were very different, and the mean temperature was also unequal. Thus, in 1840, the comparative mortality was 77, and the mean temperature 46°·3; in 1844, the former was 75°, the latter being 44°; and in the present year, 1848, it was 73°, the temperature being 43°·2. When this close correspondence between the mean comparative mortality for these three Novembers is compared with that of the others, we must be convinced, that the reduction of the temperature in November, below that of October, is not the cause of the reduction in the number of deaths from scarlatina during the month.

Table B. c. β. 15. December.
FOR THE METROPOLIS.

	No. of Deaths from Scarlatina, corrected.	No. of Deaths to 100 in preceding Month, corrected.	Mean Temperature.
			°
1840	108	72	35·4
1841	65	88	40·5
1842	164	81	45·0
1843	221	82	43·9
1844	185	63	33·0
1845	76	74	41·7
1846	86	76	32·9
1847	188	73	42·8
Mean.	137	76·1	39°.4

Taking the mortality for the month at 137, four presented an excess, and four a minus; and, assuming the mean temperature to be 39°·4, there were five months plus, and four minus the mean; and, taking the comparative mortality to be 76·1, three were above, and five below the average.

[To be Continued.]

RESEARCHES ON INVOLUNTARY SEMINAL DISCHARGES, AND THE DISORDERS ATTENDING THEM.

By H. J. M'DOUGALL, Surgeon, Fellow of the Royal Medical and Chirurgical Society; formerly House-Surgeon to University College Hospital.

HISTORICAL NOTICE.

(Continued from page 379.)

The work of Tissot, who practised at Lausanne, requires more ample notice; hence I have not taken it in its exact chronological order. It should have preceded Frank. Tissot was the first who devoted a special work to the subject of abuse of the genital organs, and although this work is exceedingly imperfect, still it is important as being the first attempt at a monograph. There is no notice of actual spermatorrhœa in the work of Tissot. He confines his observations to masturbation, the results of which he states to be—"1st, total derangement of the stomach, shown in some by loss or irregularity of appetite; in others, by acute pain, especially during digestion; by habitual vomiting, resisting all remedies so long as the bad habits are continued. 2nd, weakening of the respiratory organs, whence frequently result dry coughs, almost always colds, weakness of voice and sense of suffocation on slight exertion. 3rd, general relaxation of the nervous system. 4th, great debility of the organs of generation, almost all complaining of experiencing only imperfect erections, inasmuch as the semen escapes as soon as the erection commences, or ejaculation takes place the moment it is complete, or even that they have no longer desire, and fall into a state of complete impotence. Nocturnal pollutions are a terrible scourge to them, and often overwhelm those even whose organs are absolutely senseless when they are awake. When these patients have had nocturnal pollutions, they find themselves the next day in a state of depression, of discouragement, debility, *ennui*, misery, lassitude, with pains especially in the loins, the stomach, head, and eyes, rendering them truly pitiable; they become so changed as scarcely to be recognized." Tissot says nothing as to the mode in which diurnal pollutions occur at stool or with the urine; but he falls into the error of supposing that there can be a constant running of semen.

Wichmann published a work entitled "De pollutione diurna frequentiori, sedrarius observata tabescentiæ causa," at Gottingen in the year 1792. He examines the subject in a manner worthy of its importance, but is, notwithstanding, by no means free from errors in his conclusions. For instance, Wichmann admits the occurrence of diurnal pollutions, but he considers them always the effect of extreme relaxation of the organs of generation, and very different from simple or true gonorrhœa, which he believes to consist in a continual running of semen, drop by drop. Nocturnal pollutions he describes as an entirely different affection, which occurs, according to him, in the most vigorous temperaments, and arises from agitation of the blood, and too great abundance of semen. He admits that the descriptions of simple gonorrhœa, given by the best pathologists, are by no means satisfactory, but at the same time he does not offer any explanation of their errors. He mentions the general effects of spermatorrhœa, and asserts, that masturbation would not be followed by such serious evils in after life, if diurnal pollutions did not follow it. He states, that blennorrhagia, venereal excesses, and masturbation bring on spermatorrhœa, and he is the first to notice the irritation produced by ascarides, and by the application of the cantharis vesicatoria as producing the same effect. Wichmann, however, falls into the errors of Tissot: he describes a continual discharge of semen.

Sainte Marie, a physician of Lyons, and a man of considerable repute, translated Wichmann's treatise in 1817, adding to it some observations of high interest; among others the results of an attentive examination into the characters of the matter passed from the urethra, and into the special symptoms of the discharge, and also researches on the characters of the hypochondriasis common in such cases. Sainte Marie, however, considered diurnal pollutions as a distinct affection, arising from nervous debility of the organs of generation. All his treatment, therefore, being directed against what he considered as atony, consisted in the administration of tonics. As we proceed I shall show the fallacy of these views.

Serrurier, the author of the article "Pollution," in the "Dictionnaire des Sciences Medicales," cites many remarkable facts. He embraces the views of Tissot, however, and speaks of pollutions in both sexes, and admits the occurrence of a continual spermatic discharge.

Swediur (a) speaks of a blennorrhœa of the prostate to which he attributes all the characters and effects of spermatorrhœa.

Cullerier (b) describes two kinds of spermatorrhœa; in one of which there is, at the same time, loss of semen and of the prostatic secretion. In the other, the discharge is produced by constipation, and ceases on its being relieved.

Dr. Beddoes (c), in his fourth essay on Hygeia, has made some excellent remarks on the "grand source of unhealthiness in the male sex." These remarks are confined to the subject of masturbation; and, as they were intended for the public as well as for the Profession, and the author does not enter on involuntary discharges as a sequel to this vice, even if he were aware of the existence of such a consequence, they are necessarily imperfect. The Essay is, however, clear and well written, and cannot be read without improvement as well as interest.

Dr. Buchan (d), in 1822, published a small work on involuntary discharges, in which he treats the subject, as far as regards nocturnal pollutions, as a mental instead of a physical disorder. In the latter part of the book, however, he adds a few pages on diurnal pollutions, respecting which he says,—"Persons afflicted with this disorder are generally unconscious of its existence. The semen passes away immediately after the urine, or upon the slightest efforts to discharge the fœces, unattended with any sense of titillation, and mingling with the fœces leaves little or no stain upon the linen, and hardly any evident symptom by which the disease can be suspected." The only treatment he advises is low diet, relieving the rectum by means of enemata, and the local application of cold, together with sea bathing. Dr. Buchan does not add much to what was previously known on the subject.

Dr. Deslandes (e) published in Paris, in 1835, a work of considerable merit on the subjects of abuse and venereal excesses. This book is written in a philosophical and proper spirit, and, as far as it goes, is a good exposition of the subjects treated on.

In the year 1836 M. Lallemand (f) already a surgeon of European reputation, the author of several important treatises, and the Professor of Clinical Surgery at the University of Montpelier, published the first part of his elaborate Monograph on Involuntary Seminal Discharges. M. Lallemand did not hastily give expression to the opinions he had formed; fourteen years of experience had convinced him of their truth before he ventured to make them public. He had collected more than 150 cases, in which these discharges were so severe as seriously to derange the health, and in some,

(a) "Traité Complet des Maladies Syphilitiques tom. i.

(b) "Dictionnaire des Sciences Medicales," tom. xix.

(c) "Beddoes, Thomas, Hygeia or Essays Moral and Medical," &c., Essay 4, vol. i.

(d) "Venus sine Concubitu," 2nd Edition. London, 1822.

(e) "Deslandes de l'Onanisme et des autres Abus Veneriens," Paris, 1835.

(f) Lallemand: Des pertes Seminales Involontaires.

even to cause death. In most of these cases M. Lallemand had been consulted for supposed diseases of the brain or its membranes—affections on which he had previously published a series of letters of the highest interest. M. Lallemand entered on this new field of research with an enterprising and philosophic spirit; he accumulated observation on observation; compared symptom with symptom; and contrasted the results of different modes of treatment. He investigated the causes of the malady, he pointed out its consequences, and he discovered a mode of relief. By the application of the microscope he showed how the presence of the disease might be ascertained in cases where its existence was doubtful; he pointed out how frequently it was present without the knowledge of the patient or of his medical attendant, and he gave evidence that many affections of the nervous class, which had previously puzzled the practitioner, as to both their origin and treatment, depended on this cause, and might be relieved by the proper means. The second part of the first volume of Lallemand's book appeared in 1838, the first part of the second volume in 1839, the second part of the same volume in 1841, and the third volume in 1842. The first volume and the first part of the second volume are devoted to the consideration of the causes of involuntary seminal discharges. The second part of the second volume and part of the third to the symptoms of the disease, and the remainder of the third volume to its treatment. M. Lallemand in this work has reduced a most discordant mass of materials into order, and has arranged and classified the causes and the symptoms of the disease with great perspicuity. To him also is due the credit of having proposed an entirely new view of the origin of involuntary discharges, namely, that they may both arise and be kept up by irritation in the urethra; which irritation may extend itself along the mucous canals, leading from the urethra to the testicles and to the kidneys, implicating the bladder and seminal vesicles in its way, and at last producing serious disorganisation of these various parts. To him, also, is due, the still greater credit of having proposed and first practised a safe, and, in by far the majority of cases, an effectual remedy for this irritation, namely, the application of the nitrate of silver to the posterior part of the urethra,—a proceeding held in terror by the Profession before M. Lallemand proved its beneficial effects. Some of the complications of spermatorrhœa, and its connexion with diseased conditions of the urine, as shown by microscopic examination, and especially with oxaluria, have escaped the notice of M. Lallemand, and indeed of every other writer. My views on these important points, resulting from observations made during the treatment of cases of spermatorrhœa, it will be my duty to lay before the Profession, in their proper place, in future papers of this series.

Since the publication of the first part of M. Lallemand's work, Dr. Smyth, in a work entitled, "Miscellaneous Contributions to Pathology and Therapeutics," has made some correct remarks on spermatorrhœa. He entertains the same views as M. Lallemand, and to these he has added nothing.

In 1843 Mr. Phillips inserted a short abstract of M. Lallemand's views in the *Medical Gazette*. Mr. Phillips's remarks were contained in two papers published with some interval between them. In the second of these papers he takes occasion to state that his experience since the publication of his first paper completely confirms what he there advanced. He relates some cases of the disease which had been under his care, and expresses his confidence in cauterisation as a remedy. More recently, however, Mr. Phillips, in a paper published in the same journal, takes occasion to modify his views very considerably, indeed, almost to express his disbelief in the existence of spermatorrhœa. Mr. Phillips does not appear to have investigated the subject with the aid of a good microscope, which is, in my opinion, much to be regretted.

About the same period at which Mr. Phillips's first contributions on the subject of involuntary spermatic discharges appeared in the *Medical Gazette*, communications from Drs. Ranking and Dangerfield, and Messrs. Ryan, Chatto, and Dudgeon, were published in the *Lancet*. These gentlemen only produced short and imperfect abstracts of M. Lallemand's views, and the discussion got up on their correctness soon degenerated into useless, and, in one or two cases, not very creditable disputes on points of morality. Nothing more than M. Lallemand had published was contained in these papers.

In Mr. Curling's elaborate work on diseases of the testicle, is a careful abstract of M. Lallemand's views, in the correctness of which Mr. Curling appears to acquiesce; nothing new is added, however.

Professor Miller, of Edinburgh, in his work on Practical Surgery, has noticed the subject of spermatorrhœa, and describes the operation of cauterising. This is, as far as I am aware, the only notice of the subject in any text-book on surgery.

Since the publication of M. Lallemand's Researches, many works treating of spermatorrhœa have appeared on the Continent. None of these, however, advance the subject further than has been done by M. Lallemand himself. Many of these consist of inaugural dissertations, containing nothing new, and requiring no notice here.

An article by M. Civiale(a) deserves mention on account of the great experience of the author as a practitioner in diseases of the urinary and genital organs. M. Civiale dwells on the presence of organic alterations in the majority of cases of spermatorrhœa, and does not place so much reliance on the effects of cauterisation as M. Lallemand. In other respects, the views of these two great authorities are nearly similar.

I cannot here pass over a work which has been of great assistance to me in compiling this notice of the previous writings on this subject. The publication I refer to is by Dr. Naumann, (b) of Berlin. He has with great labour sought out many of the previous notices of spermatorrhœa, and cites most of the opinions which have been sent forth on the subject. The article is of little use in a practical point of view, from the strange mixture, without order, of opinions which it contains. As a specimen of erudition and literary labour, however, it is very remarkable.

In 1841 a work appeared at Christiania,(c) in Norway, which is remarkable for its clear views on the anatomy, physiology, and morbid anatomy of the seminal vesicles. This work I have been unable to obtain, and, consequently, can only refer to it at secondhand.

M. Raigé de Lorme (d) has given a good *resumé* of M. Lallemand's views in the Article Spermatorrhœa, in the French Dictionary of Medicine.

The same may be said of Professor Piorry,(e) whose opinions coincide with M. Lallemand's views.

Messrs. Vidal(f) and Valleix have also given faithful abstracts of M. Lallemand's researches.(g)

M. Donne (h) has exercised great assiduity in the application of the microscope to the study of involuntary Seminal Discharges. I shall avail myself of his researches, and give a faithful abstract of his views in a future paper, when considering the microscopic examination of the urine and semen in health and disease. At present, I need only mention his name as an eminent contributor to the advancement of our knowledge of the pathology of this disease.

Dr. Hermann Kaula, a pupil and assistant of M. Lallemand's, also published a Treatise on Spermatorrhœa, at Paris, in the year 1846. This work reproduces M. Lallemand's views, of which it is a faithful abstract. It contains no information on the subject, however, that had not been before made known.

My attention was called, at a very early period of my professional life, to the subject of disorders of the sexual organs, by two very remarkable cases, in both of which I was much interested. The patient, in one of these cases, was a near relative, who has since succumbed to the effects of the malady. In the other case, the patient was one of my most intimate personal friends, also a student of medicine. This gentleman, who was at one time reduced to the verge of insanity, has now, I am happy to say, completely recovered. My suspicions once awakened, an increased attention to the cases which came under my observation in the large field of practice I had open to me convinced me of the importance and frequency of these disorders; careful inquiries into the literature of the Profession showed me how little had been written on the subject; and conversation with my professional friends satisfied me that, if possible, less was generally understood than had been written. At this period, before I was aware of M. Lallemand's writings,—of which, in fact, he had then only just published the first portion,—I determined to investigate the disease for myself, and commenced collecting and analysing cases for this purpose. The danger of being ranked with the quacks who pretend to give advice in such cases, and some of whom are, unfortunately, degraded members of our Profession, did not deter me, although urged by some medical friends to whom I had communicated my intentions. My argument ever was,—a work written by a professional man, in good faith, and *addressed to his professional brethren*, divested of all charlatanism, and containing plain and unvarnished statements, even if unsuccessful, cannot be considered unprofessional, or be injurious to the reputation of its author. Holding these views, I became acquainted with M. Lallemand's elaborate work, which treated the subject more fully than I could hope to do from the results of my own experience, without many long years of careful observation and extended study. Having obtained the permission of the Author, therefore, I commenced my condensed translation, the appearance of which was delayed, by various causes incidental to printing and publishing, until 1847. The manner in which my translation has been received by the Profession in this country, together with its republication in America, has convinced me that I was right in undertaking the task, and has afforded me high gratification. In my translation of Lallemand, I purposely avoided even hinting at the results of my own experience on the subject; the high reputation of the gentleman who had committed his work into my hands demanded this; my sole object was to produce M. Lallemand's views, in which I perfectly coincide. If I can add any contributions to our knowledge of the pathology of spermatorrhœa, it will be my aim to do so in the following papers, after investigating its symptoms, causes, and treatment. The pages of a Medical Journal necessarily come under the notice of many members of the Profession, who have neither the time to read, nor the money nor inclination to purchase every work which issues from the Medical Press. For this reason, I have preferred giving my papers piecemeal in the pages of the *Medical Times*, to publishing them altogether as a separate work.

(a) "Civiale Traité Pratique sur les Maladies Des Organes Genito Urinaires," tom. 2, chap. ii. Paris, 1841.

(b) "Handbuch er Medicinischen Klinik," Berlin, 1837.

(c) Faye: Dissertatio de Vesiculis Seminalibus, quoted by Kaula. Christiania, 1841.

(d) Dictionnaire de Medecine; Art., Spermatorrhœa. Tom. XXVIII. Paris, 1841.

(e) Piorry: Traité de Medecine Pratique et de Pathologie Satrique ou Medicale. Tom. VI., Art. Angio-Spermopathies. Paris. 1845.

(f) Traite de Pathologie Externe. Paris. 1846.

(g) Guide du Medecin Practicien. Paris. 1846.

(h) Donne: Cours de Microscopie, Complementaire aux Etudes Medicales; Anatomie Microscopique et Physiologie des Fluides de l'Economie. Paris. 1844.

M. Isidore Geoffrey Saint Hilaire.—This distinguished individual has been appointed by the French Minister of Public Instruction and Health, Inspector of the Faculty of Medicine, of the Superior Schools of Pharmacy of Montpellier, and of a certain number of Preparatory Schools of Medicine and Pharmacy.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

[Paris Correspondence.]

This, the first of our budget of small talk and medical news, has no great pretensions to piquancy; for, notwithstanding our obliging readiness to find flaws, our illustrious Professors have offered us scarcely any points for criticism. The great battle between Messieurs Orfila and Bouilland threatens to be brought to a speedy termination, not, indeed, from want of pluck in the combatants, but purely from the anæsthetic influence of the absence of an audience; the most perfect indifference seems to prevail regarding the discussion, of which the only victim is the unfortunate *chef de clinique*, Monsieur Lefebre, who, through an exacerbation of quixotism, has thrown himself out of the school, and insured, for the remainder of his days, the ill-will of the magnates of the Faculty: and, let me tell you, that in Paris, whatever it may be in London, this is a result somewhat worse than hanging. So in the absence of gossip, let us turn to certain serious matters which have engaged our attention in the *Salle de Gande*, in which, however, since Monsieur Le Professor Piorry is concerned, you will say some little comedy is still going on among us. Well, then, the renowned defender of the doctrine of organopathy has just discovered a new epidemic; happily the cases are as yet few, and seem, to less acute discriminators, all to belong to the atactic form of typhoid fever. But judge yourself of the wonderful discovery. Monsieur Lionnet, Physician to the House of Correction of Petitbourg, found several of his patients were attacked with intense pain in the precordial region and spasm of the upper limbs, accompanied with acute headache; the other symptoms being those of ordinary typhus. Here, then, our Professor at once declared a case of *miningo-myelitis!* As usual in such circumstances, other physicians of the district asserted, they had all seen the like; and now it is the fashion to find, in every case of severe headache, fever, pain in the cervical region, spasmodic retraction of the neck backwards, and involuntary movement of the upper extremities attended with acute pain, a case of miningo myelitis. A case of this kind lately proved fatal on the third day after admission; and, on inspection, between the medulla and its meninges, a quantity of pus, amounting to about three spoonfuls, was found; no ulcerations were noticed in the laminæ of Peyer, which were, however, much swollen and tumefied. There are several similar cases in La Pitie; these shall not escape observation, and soon the readers of the *Medical Times* will be informed if miningo myelitis does exist in an epidemic form.

We have had, also, an interesting case of aneurism of the aorta, the details of which were presented to the Anatomical Society, by M. Turgan, one of the most distinguished of the "*internes*" of La Pitie. Four of the ribs were affected, the clavicle luxated, and, in addition, a second aneurism was seen as the vessel escaped from the heart, proving, manifestly, that the middle membrane had been absorbed, and not the internal, as Scarpa maintains. But "*paulo majora canamus;*" let us leave the portals of Science, and turn to Man, with his ambitious projects, his purposes, his passion, and his too often ignoble passions. Doubtless your readers are aware, that so strongly has the re-actionary current run, that our esteemed and much honoured Monsieur Thierry could not retain his post at the head of the Hospital administration. If a man does right, what matter his colour? That, indeed, is the question. They speak well, however, of the new Inspector, M. Davesne, and also of M. Vee, the new Inspecting Apothecary. Dumont, although *republican de la veille*, has still been made an Inspector; but then, indeed, he belongs to the *National*. The *internes* of the Hospital have suffered by the change; they have been deprived of some of the trifling, yet much loved privileges they enjoyed; the amphitheatre of Clamact is now at everybody's command, and they are no longer allowed "subjects" gratis as heretofore. But so long as they are not quite deprived of the various sources of information that have been placed exclusively at their disposal, they do not much complain, since, although their labour is very great, and their exposure to danger considerable, the advantages of their position are still above all price and all repinings.

The presumption of the Homœopaths has lately met with a slight check. Not satisfied with being forbidden the Hospital at Bordeaux, they actually demanded to have certain wards placed at their disposal. The answer they received was simply, that they had nothing to do but to become hospital physicians. They would not, if they could; the labour would frighten them; Homœopaths are not much given to hard work.

To conclude, our new Dean of the Faculty, Mons. Berard, has given a splendid dinner to the officials. Mons. Brelan was expected, but did not come; indeed, Orfila was the sole colleague of the host present. Achille Bouillard did not show; he is fond of truffles. "Timeo Danaos" even at the first Parisian *restaurant*. Why Andral should have absented himself no one can conjecture.

GERMANY.

[Berlin Correspondence.]

In a late Number of the *Medical Times*, the Holy Coat of Trêves was alluded to; and, when it was exhibited in 1848, and an untold multitude of the "faithful" induced to believe that, by beholding it, they would be cured of their diseases; that the halt would halt no longer, the lame walk, and the blind see, then it was the object of mockery and scorn in Berlin. But "*tempora mutantur et nos;*" and Protestant, philosophic Berlin, the centre of German intelligence, as it loves to call itself, has fallen from its high estate, and, to its shame be it spoken, is a prey to as gross a superstition as ever disgraced the town of Trêves and the banks of the Moselle. A girl, 12 years of age, poor, and belonging to a pietistic family, daily attracts hundreds of the sick to her house, imploring her assistance and miraculous cures. The delusion is, that a celestial being sits by her side, by whom she is inspired, and from whom she receives the gift of cure. In other respects, she seems harmless and innocent, as becomes her age. The sick apply to her personally, or, if the crowd be too great, by cards bearing their names, and a short history of their case. She exhorts them to pray, whether they be cured or not; and, absurd as it may appear, the street in which she resides is crowded, and the enthusiasm surpasses belief when she appears before her door and assures the multitude they will all be aided—"*Es wird Euch allen geholfen werden.*"

To her honour, however, be it told, that she takes no money, nor, further than asserting that she sees an angel by her side, does she act the charlatan. And this delusion, like everything else that, in the time of political excitement, creates attraction, has been brought into the vortex of party-spirit. A journal of the "red" Monarchy pretends that the matter has been planned by the Democrats, in order, should the police interfere, to create a riot. The Democrats, on the other hand, ascribe it to pietistic and re-actionary movements; while the real cause is to be found in religious insanity, superficial education, mysticism, and hopeless despair in the sick and poor.

Last year, several Prussian Medical Associations, thinking that opposition to the people's wishes had fled with Metternich, petitioned Government for Medical Reform, which was then refused on the ground that the time was not appropriate. Last week, however, by an Order in Council, the Government declared its intention of summoning to Berlin, from all parts of the country, qualified medical men to deliberate on the subject, and to frame a new code of medical legislation. Another radical improvement has also occurred, by the Town Council founding ten dispensaries for the poor; who have hitherto been supplied by the ordinary druggists, or by apothecaries, as we here call, and call truly, the dispensers and venders of medicines. A considerable saving will, certainly, by these means, occur in the city "budget." In 1840, the Poor's Board paid the Berlin druggists no less a sum than 20,593 thalers,—one thaler being equal to three shillings English. In 1847, 31,122 thalers, while, in 1848,—but here the cholera must be taken into consideration,—37,500 thalers, equal to 5,625*l.*, an immense sum in Germany. How much can be saved by similar arrangements is evidenced by the fact, that in Cologne, under the old regime, the annual expenses for drugs supplied to the poor averaged 17,116 thalers; under the new, or dispensary system, it is but 5,682 thalers; and, should a proof be required of its value, it is to be found in the great opposition made by the druggists to the reformed plan. These gentlemen, however, will not be ruined; they are amply protected by laws restricting their number, and the high prices they charge for their drugs.

A few days ago, an official hint was given the medical officers of the great Berlin Hospital La Charité, to abstain from taking part in the political movements of the day; and, in order to show that the recommendation was not mere words, two members of the Medical Staff have received their dismission; and a physician attached to the police, who had taken an active part in the late elections, has also been superseded.

IRELAND.

DUBLIN PATHOLOGICAL SOCIETY.

(From our Dublin Correspondent.)

At the usual weekly meeting of this Society, held on the 3rd of March, a number of interesting specimens of morbid anatomy were exhibited, and the most remarkable symptoms detailed.

Dr. Mayne showed a specimen of hæmorrhagic pericarditis, which occurred in a person who had suffered from previous attacks of rheumatism, and, as the autopsy revealed, had endocarditis at a former period; but, in the attack from the effects of which he died, the symptoms of pericarditis preceded the evidence of acute rheumatism affecting the joints; the disease of the heart was diagnosed twenty-four hours before pain and swelling occurred in the wrist.

Dr. Banks presented the lungs of a man who died of congestive bronchitis supervening on measles. In this specimen, the bronchial mucous membrane was of the most intense maroon colour as far as the ultimate ramification of the tubes.

Dr. Gordon exhibited a lung, in the lower part of which there was a large cavity, bounded inferiorly by the diaphragm to which its margins were adherent. The point of interest in this case was the cessation of the signs of cavity for some time before death; for several days the ordinary signs of a large cavity, including metallic phenomena, were very manifest, but suddenly they ceased to be sensible,—a circumstance which Dr. Gordon was inclined to attribute to the effect of pressure by the tympanitic abdomen, diminishing, or even, perhaps, obliterating, the cavity for a time.

A very interesting example of necrosis of the tibia was shown by Dr. Hutton. In this case, the sequestrum of the lower third had been prematurely discharged, before ossification had set in in the new bone, and, consequently, the limb was for a time flexible in every direction; but the specimen demonstrated that ossification had been ultimately perfected, the lower third, consisting of a slender shaft of bone continuous with the enlarged cylinder of the upper portion, still retaining its sequestrum. This case proved, that it was not necessary to amputate in every case wherein premature discharge of sequestra takes place.

Dr. O'Ferrall said, he had already drawn the attention of the Society to a series of preparations, illustrating the subject of obscure abdominal tumors. The specimen now presented was a mass of fibrous tumors surrounding the uterus; but so irregular in figure, and of such a magnitude, as to transgress the boundaries of the pelvis and become an abdominal tumor, having many of the characters during life, of a large schirroid growth.

A woman, aged 48 years, and mother of several children, died in St. Vincent's Hospital, a few days ago, of diffuse inflammation, following an extensive suppurating scalp wound. During life an abdominal tumor was detected, and recorded as follows:—"A large abdominal tumor, of extremely irregular figure and firm consistence, moveable, occupying the hypogastric and part of the umbilical regions in the mesial line."

The typhoid and exhausted state of the patient opposed any further investigation of the nature of this growth during life. On examination, *post mortem*, the parts now exhibited presented themselves. The os uteri, which was normal, and occupied its usual situation, was succeeded by a cervix of unusual length, measuring three inches and a half long. The cervix was now lost in morbid growth, which appeared to consist of two great masses, in neither of which any trace of the uterus could be seen. The first of those masses measured seven inches in circumference, and was covered with tumors of various sizes down to that of a large pea. These latter tumors were hard and gristly to the touch, generally globular in form, and movable in the subperitoneal areolar tissue. It was probable that this mass contained the uterus, as the fallopean tubes and ovaries sprang from it at either side. The ovaries were granular, white, and firm; they were not very large, and presented no trace of cyst. The upper, or abdominal portion of the growth was about eleven inches in circumference, and consisted of one large tumor, about the size of an orange, and seven others smaller growing around it, principally on its anterior aspect. They were all developed in the subperitoneal cellular tissue, and were covered by the peritonæum, which was smooth and polished on its surface. A straight staff, introduced through the os uteri, passed through the elongated cervix, and was arrested by the boundary of the first tumor described. Guided by the staff, an incision was made through the cervix and the mass of tumors into the cavity of the uterus. This cavity is not unusually capacious. Its lining membrane was slightly vascular. The latter, and the muscular substance of the organ, were of healthy consistence. The tumors were all developed under the peritonæum, and did not at all project into the cavity of the uterus. The section of the uterus, with its elongated cervix, resembled much that of a male bladder and urethra, when laid open in the ordinary way.

The tumors themselves, on section, presented the milky whiteness usually observed. They were freely moveable in the cellular tissue. The arrangement of the fibres was irregularly concentric. Under the microscope of Dr. Butcher, the sections presented the characteristics of this species of tumor, without any trace of cancerous elements.

Dr. O'Ferrall said, the interest of this case consisted, *First*, in the fact of an ordinary pelvic tumor acquiring such a size as to become an abdominal tumor. *Secondly*, this magnitude not being the result of any heterologous formation, but of elements more generally found to limit themselves to the proper region of the uterus. *Thirdly*, in the fact, that in its ascent towards the abdomen, the uterus did not bring with it the os uteri—the traction having only the effect of producing an hypertrophy of the cervix, which thus acquired the remarkable length of three inches and a half.

As a case of abdominal tumor for diagnosis, this presented many obstacles to its detection. Examination per vaginam would give little information, for the os occupied its usual situation, and the longer bulbus mass already in the abdomen, prevented the uterine portion from gravitating towards the inferior outlet, and from being palpable there. The very irregular figure and firm, consistence of the mass, felt only through the abdominal parieties, would thus rather suggest the idea of a malignant growth, than of a fibrous tumor attached to the uterus. There was no trace of malignant deposit in any organ in this case, and the tumors in question were good examples of the second variety of fibrous formation, described by that eminent pathologist, Vogel.

DUBLIN NATURAL HISTORY SOCIETY.

A meeting of this Society was held on the evening of the 2nd instant,

MOTIONS OF THE VORTICELLA.

Professor Allman described the mechanism, by means of which he believed the stem of the vorticella is enabled to assume the helix-like contraction, by means of which this little creature is enabled to withdraw from danger. The Professor exhibited a magnified drawing of the vorticella, which is a minute polyp, fixed by a stem on weeds growing in fresh water; this stem is frequently branched, and at the extremity of each branch is a little body similar to a bill; the open mouth of this organ being surrounded by vibratile cilia. When touched the bill immediately contracts into a ball, and the stem coils itself up like a cork-screw, so as to become very much shortened. To explain the mechanism of the latter action was the object of the Professor's communication. The stem is, for the most part, gelatinous and hyaline; but running down through it a thread can be detected. This thread does not occupy, however, the axis of the stem; but follows a spiral course outside the axis. Supposing this thread to be of a muscular nature, Professor Allman put the problem to Mr. Haughton, one of the Fellows of Trinity College,—What would be the effect of the shortening of a spiral thread surrounding the axis of an elastic cylinder on the form of that cylinder? He now presented to the Society, by means of diagrams, Mr. Haughton's solution of this problem, whereby it appeared that, in obedience to the law of the resolution of forces, an elastic cylinder would, under such circumstances, assume the form of a helix. He (Professor Allman) considered the above to be a beautiful application of mechanical laws to the elucidation of vital phenomena.

The Chairman said he felt a difficulty as to the muscular nature of the central thread. He was inclined to consider the whole of the stem as entering into the contractile act, as a function of its cellular organisation; and he was the less inclined to admit a muscular fibre in a being so low in the scale of creation, inasmuch as it was rare to find this tissue assume a spiral direction even in the higher animals.

Professor Allman did not think that the latter objection had much weight, when it was considered that spiral fibres were found in the walls of blood-vessels and intestines, and pre-eminently in the walls of the heart.

CHEMICAL CHARACTERS OF THE ELEMENTARY TISSUES OF ANIMALS.

Dr. Aldridge proceeded to read a paper on the above subject. He remarked, that it was fortunate that the discussion which had taken place should have happened at the time it did, for it would put the importance of the remarks he was about to offer in a very strong light before the Society. The members might have perceived that a marked difference of opinion existed between two eminent naturalists, as to the nature and functions of certain tissues that have been discovered in the vorticella. Mere sensible properties, even with the aid of the most powerful microscope, would not serve to decide the question which had been raised; but he thought he would be enabled to demonstrate to the meeting that every problem of the kind is capable of being solved by the assistance of chemistry. The application of chemistry to the study of the animal tissues could not be said to be of very recent date. Bichat has shown, in his work on General Anatomy, that he was fully impressed with its importance, and since his time the chemical properties of the various tissues have received more or less attention from physiologists; but, until the last few years, the resources of organic chemistry, and the employment of microscopes were so limited, that the results obtained were few and unimportant. Latterly, however, observations the most precise, and experiments the most accurate, had rapidly accumulated; so that, under the control of a careful generalization, the chemistry of the tissues is now acquiring the aspect of a science. Dr. Aldridge then proceeded to demonstrate the characters by means of which each of the elementary tissues can be chemically recognised. The fibres of the *ligamentary* tissues, such as those of the so-called cellular tissue, of tendons, in elastic ligaments, fascias, &c.; these form glue upon being boiled, a principle precipitable by tannic acid. They are also, under the microscope, easily known by being rendered transparent and swollen by acetic acid, the fibres coalescing. The fibres which are found in the cervical ligament, the yellow vertebral ligaments, the elastic laryngeal ligaments, the middle coat of blood-vessels, &c., and which, from their physical property, are called *elastic fibres*, differ from the former in *not* becoming converted into gelatine upon being boiled, as they remain unchanged even when boiled for forty hours, and in being unacted upon by acetic acid. Dr. Aldridge then proceeded to show that muscular fibre was capable of being distinguished chemically from both the former. He described the microscopic differences between the fibrilla of voluntary and involuntary muscles, but showed their real identity by the action of acetic acid obliterating the striæ on the fibrilla of the heart, which, before the application of this re-agent, exactly simulated the fibrilla of voluntary muscles. He then demonstrated, that muscular fibres of any kind, in common with all other albuminous or fibrinous substances, can be distinguished from the ligamentary and elastic fibres, by their becoming deep orange in colour, when treated alternately with nitric acid and water of ammonia. Then recurring to the anatomy of vorticella, he suggested the employment of the means he had described for determining the nature of the tissues in the stem of that minute polyp. Would the gelatinous-looking substance which constituted it become glue upon being boiled, or would it swell up and become transparent under the influence of acetic acid; then it might be regarded as being ligamentary tissue. Should the central fibre remain unchanged by either process, but become orange under the influence of nitric acid and ammonia, then it might be decided that it was muscular. But if, as he suspected, the latter re-agents failed in producing an orange coloration, the probability would be, that the observed thread was an elastic fibre. He was inclined to the latter opinion, which would be rendered still more certain by the slow action of a potash-ley, in consequence of the nearly constant connexion of ligamentary and elastic tissue. Dr. Aldridge then proceeded to describe the chemical properties of cartilage. The true cartilages, such as are found between the ribs and sternum, in the tracheal range, and covering articular surfaces, are composed of a hyaline homogeneous basis, containing cavities in which are mother cells. It might be remarked, that this was the first instance in which a tendency to cellular development was presented by the animal tissues. No doubt that ligamentary, elastic, and muscular fibres are produced from cells; but the immediate tendency in their development is towards the fibrous form. Cellular development, so common in plants, is rare in animals; and cartilage presents, perhaps, the only instance in the interior of organs where it takes place. And the Society would remark the resemblance which exists between the structure of cartilage and that of some of the lower vegetables; for example, the protococcus nivalis, in which endogenous cells are contained in a homogeneous gelatine. Cartilage not only differs in structure and mode of development from the other animal tissues, but also in its chemical characters. It is converted by boiling in water, not into glue, but into a substance called chondrin, which does not precipitate with tannic acid. The basis of cartilage is easily soluble in potash-ley or in sulphuric acid; but it is not acted upon by acetic acid, nor is it turned yellow by nitric acid and ammonia. The fibres of fibro-cartilage, such as it is found in the external and hard parts of the inter-vertebral cartilages, more closely resemble ligamentary tissues in their chemical characters than any other of the tissues. They swell in acetic acid, but not so quickly as ligamentary fibres; and they continue distinct. Besides, they are not converted into glue by boiling. Bone plates are composed of ligamentary tissue chemically com-

bined with earthy matters. This combination may be simulated by dissolving phosphate of lime in a solution of gelatine acidulated with muriatic acid, and then throwing down by ammonia, when the precipitate will be found to consist of one-fourth of gelatine, combined with three-fourths of phosphate of lime. Nervous fibre consists of a tube of ligamentary tissue (neurolema) containing the proper nervous matter, which is an emulsion of liquid albumen and fat. After death this emulsion separates; the albumen coagulates and lines the tube, and the fat collects into globules. Ether will remove the latter; acetic acid will dissolve out the albumen; and potash water will remove both. Dr. Aldridge concluded by saying, that time would not permit his entering into an examination of the chemical characters of the cell-formations which occur on surfaces in the animal organism; but subsequently, at the request of the Chairman and members, he promised to bring the subject before them at the next meeting of the Society.

SCOTLAND.

[From our Edinburgh Correspondent.]

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

Wednesday, February 21, 1849.

The PRESIDENT in the Chair.

MALFORMATION OF THE WRISTS AND HANDS OF A CHILD.

Dr. Alexander Wood exhibited a child of fourteen days old, presenting an unusual malformation of both wrists and hands. The thumbs were wanting; the other bones of the hands (both metacarpal and digital) were longer than natural, and the flexor tendons of the wrists were contracted so as to cause great deformity. The President and Dr. Simpson made remarks upon the case, and suggested, that the deformity might possibly be lessened by the operation of tenotomy.

CHOLERA.

The President then proposed, that Dr. Margulies' paper on the cholera of St. Petersburg (see *Medical Times* of the 3rd inst.) should be read; and the Society, having unanimously agreed to this proposition, the English translation, prepared by Dr. Duncan, was read by Professor Simpson. On the motion of Mr. Wood, seconded by Dr. Wm. Robertson, the President returned the thanks of the Society to Dr. Margulies for his able and interesting communication, and expressed a hope that it would be published in the Medical Journals among the Transactions of the Society.

PERFORATION OF THE STOMACH.

Mr. Miller gave a short account of a case of perforation of the stomach, which had occurred in the practice of Mr. Hill, and exhibited a preparation of the morbid parts. The patient had been long dyspeptic, and in the habit of using soda and magnesia; the perforation seemed to have taken place shortly after a dose of bicarb. potass. had been swallowed. The preparation showed a single chronic ulcer on the anterior of the stomach, two inches below the cardia, some thickening of the mucous or submucous tissues in the vicinity of the ulcer, and a sharply defined round perforation of the peritoneal tunic, which would barely admit a goose-quill. The patient died about twenty-four hours after the first symptoms of perforation; and for some hours before death was nearly free from pain. Drs. Simpson, Mackenzie, Gairdner, Myrtle, A. Wood, and the President, made observations on this communication, and related similar cases.

VARIOLA IN THE FŒTUS.

Dr. Simpson exhibited drawings of two cases of variola occurring in the fœtus, which had fallen under his observation in Edinburgh. In both cases the fœtus had been expelled *dead*, and both mothers had *modified* small-pox. Dr. Simpson entertained some doubts (theoretical) regarding the propriety of vaccinating a woman while pregnant, believing it possible that the mother might be *vaccinated*, and the fœtus *thereby* inoculated with variola.

SINGULAR SPASMODIC ACTION OF THE LOWER JAW.

Dr. Spittal communicated the case of a man aged eighty-eight years, he was nearly a pure negro, and had been in early life a weaver. He was first seen by Dr. Spittal on the 2nd February, 1848, and laboured under bronchitis to a slight extent, together with other ailments usually accompanying approaching dissolution from old age, under which he seemed chiefly to sink. He died eight days subsequent to the above date. On visiting him, Dr. Spittal was struck with a remarkably loud intermittent rasping noise, not unlike the croaking of a young raven; and not knowing whence the sound proceeded, Dr. Spittal inquired if any such bird were in the room, when he was informed that it was caused by the patient grinding his teeth. This, it was said, he could not avoid when awake, unless he forcibly kept his teeth asunder. To avoid the fatigue of this voluntary effort, he was in the habit of interposing different substances between the teeth, sometimes the edge of the bed-clothes; at other times small flat wedge-shaped portions of wood, or a small bone button depressed in its centre, which he placed between the canine teeth. The teeth were generally very much worn down and flattened on their surfaces. Dr. Spittal was informed that this habit had existed more or less for about sixteen years, and was said to have commenced with pains like those of rheumatism in the head. It was also stated, that a few years previous the patient had passed a large round worm, after which the grinding had diminished, but still continued. He had since been occasionally affected with abdominal uneasiness, but passed no more worms. His bowels were said to have been generally constipated. Dr. Spittal stated, that, as this was an affection of a peculiar nature, and such as he had never before met with or heard of, he had thought it might add to the interest of their meeting to lay it before the Society. Dr. Alex. Wood, who had also known the patient, thought that his disease was simulated. Dr. Spittal did not consider that the circumstances of the case warranted such a conclusion, as the man was evidently labouring under considerable suffering, and died, as before stated, in a week after his being first seen. Dr. Seller remarked that there could be no doubt that a convulsive action of the muscles of the jaw occasionally took place, and stated that he had seen a girl, in whom this followed acupuncture in the chin. A loud, uneasy grinding of the teeth was the consequence; to remedy which, she used to insert the steel busk of her stays and pull the jaw forcibly down.

MORBID APPEARANCES IN THE LUNGS.

Dr. J. W. Gairdner exhibited drawings illustrative of the morbid appearances observed in the lungs of a girl aged thirteen, who died in one of Dr. Paterson's wards in the Infirmary. The case was one of pulmonary disease supervening upon contraction of the left auriculo-ventricular orifice of the heart. Portions of both lungs were condensed irregularly, and offered all the characters of pulmonary apoplexy, as given by Laennec. Other portions, which were also condensed, much resembled some of the forms of grey hepatization; some of the grey portions were soft and almost diffluent. At one point, immediately subjacent to the pleura, the grey matter had broken up, and a cavity was left, containing dark green softened tissue of the characteristic gangrenous odour; at another point, a dense mahogany-coloured mass was observed, which, on a microscopic examination, was seen to contain angular bodies of a purple colour, and of almost crystalline transparency by transmitted light, much resembling the orange pigment lining old apoplectic cysts in the brain, and described by Virchow, in connexion with extravasations of blood in other situations; at another point a cavity was observed, lined by a smooth pseudo-mucous membrane, destitute of true epithelium, but containing abundance of the angular pigmentary bodies above described. Such cavities Dr. Gairdner believed were formed in consequence of ulceration or gangrene of the pulmonary tissue, and might, on superficial examination, be mistaken for dilated bronchi. All the appearances above enumerated seemed to illustrate the different steps by which hœmorrhagic exudations into the pulmonary tissue became resolved or disorganised; and in the course of his communication Dr. Gairdner directed the attention of the Society to the mechaniam by which pathological reasoning and the use of the microscope render it probable that these several changes are effected. The President and Dr. Paterson made observations on Dr. W. T. Gairdner's communication.

ANÆSTHESIA PRODUCED BY COAL TAR.

In the Edinburgh Surgical Hospital on Monday ast, the anæsthetic properties of light coal-tarl naphtha were fully tested, and the experiments resulted in complete success. Professor Simpson administered the naphtha to two patients (a man and a boy,) on whom Mr. Miller performed the very painful operation of extracting portions of necrosed bone from the tibia, by perforating the newly formed shell with the trephine, and removing the sequestra with the forceps. The sleep induced was deep and tranquil, and the breathing was less stertorous than when chloroform is employed; but it was remarked, that the effect of the naphtha upon the heart's action was much greater, the pulse becoming extremely rapid and fluttering, thus rendering it less safe as an anæsthetic agent than chloroform. It was afterwards given to a young woman, with like success, while an incision was made into her right cheek, in order to remove a dead portion of the ramus of the lower jaw. Sir William Newbigging, Professor Traill, and several medical gentlemen were present, and expressed their gratification with the successful results of the experiments.

Wednesday, March 7, 1849.

Dr. GAIRDNER in the Chair.

After the reading of the minutes of the previous meeting, Dr. Spittal requested permission to make a short statement in reference to the case which he had the honour of laying before the Society at their last meeting, which, he said, in consequence of the doubts expressed in regard to the reality of the affection then described, and in which he believed many of the members participated, he thought it due to the Society, as well as to himself, to make. No member seemed to have met with, or been acquainted with any similar case. Dr. Spittal's attention, however, had since been called to several cases narrated in Dr. Graves' Clinical Lectures, (p. 465, &c., Vol. I., Second Edition, Dublin, 1848.) The affection is described by Dr. Graves as "*an insuperable desire, on the part of the patient, to grind his teeth,*"—originating in "a disagreeable, uneasy sensation in the teeth themselves, which is for the moment alleviated by forcibly grinding them together, but immediately returns when the patient ceases to perform this action, which is therefore continued, when the disease is confirmed, during the entire day. When asleep, the patients no longer grind their teeth, the grinding being in all cases the result of voluntary motion." The first case stated, is that of the Countess of Egmont, in whom the grinding was so confirmed as to impel her to indulge in it continually; for when she desisted, the uneasy sensation in the teeth became insupportable; and consequently she had to give up all society for several years before her death. The grinding was strong and forcible, and the teeth were worn down to the very sockets. Second. The Rev. Mr. B. was driven from society by the same affection. The teeth were much ground down, and the incisors and canine, by being whetted on each other, acquired chisel shaped edges, which sometimes cut the tongue like a knife. The third case was that of a young clergyman, who was afflicted with tic douloureux of several branches of the fifth pair including the left dental nerve. In this instance, the teeth of the *left* side *only* were ground down. The disease ceased, after continuing two years.

The fourth case was that of Henry W——, aged 60, who, three years previous to the time of the Report, gradually got the habit of grinding his teeth, which he then did constantly while awake,

and "*so loudly as to be heard in the next room.*" He is said to be unconscious of it, unless when spoken to. The teeth, in this instance, also were ground down.

The fifth case,—a gentleman, aged 45,—after a severe wetting, was attacked with paralysis of the right side. He recovered, but, about a year after, observed in himself a tendency to grind his teeth, which gradually increased so as to prove a "*nuisance to himself and every one about him.*" He appeared to be relieved for six months by the actual cautery applied behind one ear, the use of mercury, and the extraction of one tooth. The affection returned, however, as bad as ever, when iron and other remedies were tried in vain. By pressing the tongue against the upper incisors, or by touching a certain point of one particular tooth, he could at any time arrest the grinding and suspend it as long as the pressure was continued. Dr. Graves is of opinion, that the irritable state of the dental nerves, which gives rise to this irresistible tendency to grind the teeth, depends chiefly on the existence of gout in the constitution.

Dr. Spittal trusted he had shown that such an affection as that under which his patient had laboured was really founded in nature. At the same time he did not mean to deny the possibility of the man, who was poor, and probably had found sympathy for, and, perhaps, profit from his disease, having simulated the affection on fitting occasions. The circumstantial evidence, however, connected with the history of the last week of the man's existence, appeared altogether at variance with the idea that the affection was feigned on that occasion.

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THE MEDICAL TIMES.

SATURDAY, MARCH 24, 1849.

A controversy having arisen between Professor Syme and Mr. H. Smith, respecting the operation of excising a portion of the thigh-bone in morbus coxarius or hip disease, we find ourselves impelled to enter the lists. We premise, however, that, while we knowingly will wrong no man, we are at all times disposed to break a lance on behalf of the young and rising Practitioner, assiduously and anxiously seeking the temple of Fame and eminence, when we find him unjustly opposed, and his progress impeded by those who, already having reached their culminating point, seek to monopolise its advantages, and to prevent the approach of others.

In the case before us, we think the attack made by Professor Syme upon Mr. Smith as ungracious and ungenerous, as it is paltry and unjust; and we had expected that the lessons the Professor must have learned, when he himself was the subject, as we think, of unmerited animadversion, would have impressed upon him the value of that great rule of life—to do unto others as he would that others did to him. Mr. Syme we do know,—who does not? Mr. Smith is only known to us as a young, enterprising, and talented Surgeon; and when we read the Clinical Report, we were then much inclined to take the part we now do; but we thought Mr. Smith might possess enough of the blood of "the Young England" Medical School to reply for himself. Well and ably has he done so; and now, since he has had his say, let us have ours.

And first, as regards the charge of youth, so unnecessarily brought against Mr. Smith, we will only say that the rest of Mr. Syme's attack is consistent with this part; and that he seems to think that nothing can be of any value which he does not himself possess. For ourselves, we laugh with the Roman Satirist at the man

"Qui redit ad fastos et virtutem aestimat annis;"

and, without considering what age Mr. Syme may require as a qualification for eminence, we may safely leave Mr. Smith to reply in the language of Mr. Pitt (we quote from memory), that the crime of being a young man he will neither attempt to palliate or deny; contenting himself with wishing he may not be one of those who become the more testy with age, the more intolerant of others, and the more bigoted in spite of experience.

But let us treat more seriously of serious things; and let us add that, should a second edition of our remarks be required, and that more serious still, we shall not be found backward in replying to the call. Mr. Syme states, that morbus coxarius "is not well suited for hospital practice, affording little room for active interference, and requiring a considerable length of time for any decided improvement." In its earliest stage, hip disease not only admits of active surgical treatment, but by it is often speedily and certainly cured. In this stage, no surgeon ought to refuse to admit a patient so affected into an hospital, as, generally speaking, in no other situation can a poor person command all the various means requisite to the successful treatment of such a case. This state of the disease we infer from the report of his Clinical Lecture, which we presume to be communicated by himself, is undeserving the attention of so eminent a surgeon and so "ardent an operator" as Mr. Syme.

In the event of suppuration taking place, the Professor informs us, "the result depends chiefly upon the state of the bones composing the joints. If they are carious, he (the patient) *must* die; if they are not, he *may* recover." We could adduce many cases completely disproving the dictum of our diffident Lecturer; while another of his assertions we know to be equally unfounded in fact, from cases we have ourselves met with. It is this. "If the articulating surface of the head of the thigh-bone be carious, it follows, as a matter of absolute certainty, that the acetabulum must be in a similar condition." Now, no such consequence exists; for we have seen the head of the femur lying on the dorsum of the ileum, the cartilage of the acetabulum being entire, and the round ligament remaining attached to it at the same time. Again, we are compelled to differ from the Professor when he states: "But, as the acetabulum does not admit of removal in the living body, with any prospect of safety or advantage, no benefit can be derived from taking away a part of the articulation, and, therefore, excision of the head of the thigh-bone for caries of the joint should be regarded as no less erroneous in theory than objectionable in practice." Now, is this way of putting the case honest? is it telling the whole truth? Is it not rather a shabby mode of keeping back part of the evidence, that he may better serve his own little purpose? Mr. Smith, as well as other surgeons, although they may not be Professors of clinical surgery in the University of Edinburgh, expect to effect much future good, not, indeed, by amputating the acetabulum, but by removing a diseased part, long since divorced from the acetabulum, located in an unnatural situation, and operating as a firebrand to all around. When the carious head of the femur is resting on the dorsum of the ileum, it acts as a foreign body, excites constant irritation and inflammation in the surrounding tissues, consequent suppuration causing at the same time febrile disturbance of the whole frame, and subsequent exhaustion. And this process repeatedly occurring, the texture of the neigbouring parts becomes changed, so that at length they assume almost a gristly character; and if in this state they are cut into, they are little inclined to bleed, and the constitution is much less inclined to sympathize with them; so that if an operation were performed for the removal of the head of the bone, the probability is, as in Messrs. White's and Fergusson's cases, that very little constitutional or local irritation, or even hæmorrhage would result. And this we consider to be a fact, which would not have been lost sight of by Mr. Syme, if, in his lecture, his object had been to benefit science, and some less generous motive had not taken possession of his mind.

We could adduce many arguments to prove—and, if necessary, we will do so—the propriety, and even the necessity of the operation under certain circumstances; but they are so obvious that they must be familiar to every reflecting Surgeon. Besides, what has succeeded, may succeed again; and Mr. Smith is quite right when he says, the difficulty and danger do not lie in the operation itself, but in "co-existent disease." It is more than probable that to this cause alone are the failures to be attributed; and, not to mention the successful cases of White and Fergusson, and an unpublished and successful case of Mr. Walton, which we hope next week to lay before our readers, it is not likely that such men as Dieffenbach, Schmalz, Kluge, Ohle, Oppenheim, and Textor, would advocate an operation if it was so much to be deprecated, so "erroneous in theory" and so "objectionable in practice," as Mr. Syme represents it.

Perhaps we may be told, that these are German authorities, and the heroic practices of "ardent operators." Anticipating the objection, let us, in conclusion, add, that many of the "new and original operations" which some of our British

surgeons from time to time recount to us, are in fact unauthorized and unacknowledged "translations from the German;" and, therefore, surely *they* will allow such authorities to be of some value. But since, in our forthcoming volume, we have arranged to offer to our readers a lengthened analysis of the "operative surgery" of Dieffenbach, upon whom most of these petty larcenies have been committed, we may, perchance, have it in our power to bring forward facts, if not, indeed, sufficient to "choke a daw withal," at least to enable us to "catch the petty rogues," to "pull their plumes," and let them stand as "crows without a feather."

THE MANCHESTER MEMORIAL.

THERE are many things in the Manchester Memorial of which we highly approve. To most of its statements we can give our support; it is its omissions that we shall feel ourselves chiefly called upon to condemn. We cordially unite with the men of Manchester in denouncing that iniquitous and shameful step by which the majority of the members of the College of Surgeons were virtually degraded to a lower rank in their own College, and a few favoured individuals raised above their heads, to enjoy all the privileges, honours, and advantages a superior corporate status might confer. This was a hateful measure, and has incurred the bitter and unappeasable resentment of the injured members. This wrong ought to be repaired as soon as possible, by placing the constitution of the College upon a more liberal and a sounder basis. We do not, however, think that the view taken of the case by the practitioners of Manchester is either wise or statesmanlike. It is one thing to state evils, and another to find their remedy. This difficulty seems to have struck the Manchester practitioners very forcibly, for they hardly suggest a single tangible remedial measure; and the only practical idea we can gather from their very long Memorial is, that the distinction between Fellows of the College of Surgeons, and *those who were members prior to the grant of the last Charter*, should not be made in the *Register* contemplated in the "Principles" issued by the Conference. Granting that the requisition may be right, we think that, standing alone and apart from any more comprehensive suggestion, it has rather a narrow and selfish aspect. For aught the Memorial intimates to the contrary, (for it must be understood that the Memorialists do not ask for any definite amendment of the Charter of the College of Surgeons,) the Memorialists would be quite satisfied that all future members should be outcasts from their own *Alma Mater*, provided only that the old members were admitted to collegiate rights and honours. Timid, half-measures of this kind will never answer their end: a practical mind would in a moment see their utter worthlessness. A Minister of State would never think of acting upon them; and so far as the practicability of the matter goes, every year makes it more difficult. As a measure of policy it hourly becomes more obsolete, because more insufficient. Every year adds 500 new members to the College rolls, who will soon begin to assert their claims to the suffrage, and increases also the number of Fellows, many of whom having purchased their privileges and undergone a second examination, will raise a formidable opposition to any invasion of their exclusive rights. For these reasons, then, we think that the position assumed by the Manchester Memorialists, though right in the abstract, is not likely to meet with much success.

We, therefore, deplore the more the opposition they have declared against a re-organization of the Profession upon the principles that have been recommended to the Government by the Delegates at the Conference at the College of Physicians. What is to be done with the Scotch and Irish graduates practising as general practitioners in England,—what with the licentiates of Apothecaries' Hall, amounting probably to four thousand in number? Are they to be admitted as members of the College of Surgeons, according to the views of the Practitioners of Manchester? Whether these gentlemen indulge such a Utopian scheme or not, we are quite sure that it would be realised as soon as the coinage of sunbeams into sovereigns. If the Manchester men are not prepared with any other plan providing for the legal acknowledgment and uniform status of all the duly qualified Medical Practitioners in this country, we think that they would have shown a wiser discretion in refraining to stigmatise the principle of establishing a New College of General Practitioners. Such a general measure is a necessity; and it becomes every man of liberal views to assist, by his counsel, in rendering it as little oppressive to individual or sectional interests, and as largely beneficial to the common weal, as it can possibly be made. The cross-firing of isolated interests can produce nothing but tumult and anarchy, and prolong a factious agitation, of which, we believe, the Profession throughout the country is thoroughly weary.

There are certain points in the Memorial which do not exhibit much familiarity with the practical difficulties of the Medical question. The proposition which it lays down, that every gentleman having only one qualification should undergo an examination before being admitted a member of the New College of General Practitioners, is highly imprudent, and would operate as an entire prohibition. What man in five years' practice would consent to a second examination? We can hardly conceive of any half dozen men putting their names to such an intolerant proposal, knowing that not one of them would submit to pass through the ordeal.

In the first instance, the fact of practice must be received as a qualification,—and, in the majority of cases, it would be a far better one than an examination itself could demonstrate. We hope the practitioners of Manchester will reconsider their views, or, at any rate, propound a distinct plan, that we may be able to deal with it in a practical manner. We assure them, that any well-considered and reasonable scheme will receive from us careful examination. One-sided views, as avowedly antagonistic to a general measure, cannot, however, receive our encouragement.

REGISTRAR-GENERAL'S REPORT.

IN the last Report of the Registrar-General, he states, that, "taking the increase of population into the account, the deaths are 2571 below the average of the deaths in the nine preceding years." Turning to two of the most densely crowded and populous places—Liverpool and Manchester; we find, first, in the district of St. Thomas, Liverpool, long noted as one of the most unhealthy in the Kingdom, the deaths are given at 276, "which (says the Registrar) is below the average;" and in the Islington district, (also in Liverpool,) well known for its unsanitary and crowded condition, we have—"deaths, 330; being ninety less than in the corresponding quarter of last year." Do we inquire, what is the cause of this advance in the prolongation of life? Let us look to the Returns, and there we shall find that it is attributed to the stricter enforcement of Sanitary Regulations, "removing the inhabitants from cellars, &c., and limiting the numbers allowed in lodging-houses." Next, as to Manchester, we observe the like result. St. George's-in-the-fields, which corresponds with our London St. Giles, being the quarter inhabited by the Irish, and distinguished for its squalor, its disease, and deaths. But, even in this locality, the remark is, "Deaths, 233; which is below the average." And here, too, the Registrar attributes the result to the same cause as at Liverpool, for he says, "The district is free from any epidemic, and has been so for some time. The Sanitary arrangements adopted by the Corporation are very good."

Observations and facts like these should serve to stimulate the Press, that great lever of the public mind, to persevere in urging upon the authorities in London and in all our large cities, greater activity and watchfulness in working out a sound and systematic Sanitary condition. Yes, and not only in our large cities, but in our smaller towns and villages; for not even in London do we know of a nuisance equally so obnoxious to health and decency as one we observed lately in the very centre of a small town in Essex; so disgusting, that we were compelled to cross the road to avoid it. Had these Essex calves possessed common sense as well as common olfactories, they would have found out a means

> "From seeming evil of educing good;"

and, instead of allowing this offensive matter to flow along their street, follow the course and fertilise the sides of an immense ditch, producing a most luxuriant crop of nettles and thistles and tainting the air for nearly a mile, (the town standing upon an acclivity, just fit for drainage,) they would have culverted its course, and employed its power in nourishing their fields and yielding food for man.

DISTRICT LUNATIC ASYLUMS IN IRELAND.

WE intend giving in our succeeding Numbers a Series of Articles, based on the Government regulations, and on Parliamentary documents, illustrative of the present condition of the District Lunatic Asylums in Ireland, considered as *Curative* Hospitals. These are without any resident Medical control or authority whatsoever to minister to the urgent

wants of their unhappy inmates, varying from 140 to nearly 400 in each. We frankly and unreservedly state, that it is not against *individuals*, but against *a system*, we enter the field; a system which we may venture to say only lingers now in an unhappy country united to the most powerful, most civilized, and most exalted nation in the world,—but which stands out, in her social condition, as the most painful *fact* of the Nineteenth Century.

Let us not be misunderstood. For all existing officers we will advocate the full and entire amount of their present salaries; and in the event of compensation being deemed desirable to superannuated parties, we will advocate justice to its fullest extent; but we loudly proclaim, as Scientific Journalists, that the great Institutions of Ireland should *at once* form an object of humane interest to the legislators and philosophers of Great Britain, who, by their own acts, are deeply responsible for the system which at present particularly marks their medical control.

Our first Article on the subject will probably appear in our next Number.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—March. 13, 1849.

Thos. Addison, M.D., President.

The President: On first occupying the chair of this Society, allow me to express the deep sense which I entertain of the honour you have done me, in appointing me to such an office. And, while I thus feel, I am equally well aware how little any merits of my own have had to do with that selection; on the contrary, I have a most painful conviction how largely your generosity must have been taxed to place me in the position in which I now stand before you. I cannot—I dare not—look back on the past without a sense of shame in the contemplation of the character and high reputation of those who have gone before me; and the only return which I can hope to make to you is, to endeavour faithfully, assiduously, and impartially to discharge the duties of my office, ever bearing in mind the character, constitution, and objects of the Society, and never forgetting that it comprises among its numbers a large majority of the ornaments of our Profession, and that it is expected to furnish to the world an example of that liberality and harmony so essential to the public appreciation of a noble and dignified science. (Applause.)

Dr. Moore: Before the regular business of the evening is proceeded with, I wish to make a few observations. I find that on Thursday, (on which occasion I was not present), an incident occurred with regard to the merits of which it is not now necessary to trouble the meeting; but on that occasion I understand that the party in authority declared that he would not permit a discussion to take place on a matter vitally affecting the interests of the Society. I speak not for the purpose of exciting hostility; but when I find (as the President very properly observed) this Society composed of the *élite* of the Profession, I think such a course of procedure not right. Dr. Moore was proceeding, when

Mr. Hawkins rose to order, and said: I hope our President will excuse the liberty I take in drawing his attention to the rule of the Society, which says, that at these meetings nothing shall be discussed but scientific matters.

The President: I must apologise for not interrupting the speaker sooner; but, as I fear that he is referring to matters which might excite some collision, and as an opportunity will be afforded him at the Special General Meeting, to be held on the 1st of May, I trust that Dr. Moore will excuse me if I ask him to do me the favour of deferring any further remark on the present occasion.

Dr. Moore: I was not aware that such a meeting was to take place; and only wished to enter my protest against such a course as that to which I have alluded.

Mr. Travers: You will pardon me, Sir, if I, too, join in the felicitations which have been pronounced on occasion of your filling that chair. But I cannot, at the same time, forget, that the Society lies under deep obligation to their former President. I may, perhaps, be allowed to state, that I have a sort of patriarchal feeling in connexion with this Society, being the only one now among its Fellows who is a survivor of those whose names appear on the list in its first published Transactions; and this leads me back to the circumstances in which the Society originated,—for I remember it in its infancy, when it met in Verulam-buildings, Gray's-inn. I knew it, also, in its early difficulties, and well do I remember with what strong feelings of ardour and energy, on the part of its principal friends, it was assisted; these gentlemen may be considered its founders, and undoubtedly they conferred a great boon not only on the community, but on the whole civilised world; and it must also be remembered how much individual and collective exertion had to be employed to carry through a Society till it has become organised to its present pitch of perfection. I feel now somewhat as the representative of these men,—proud of the high state of perfection to which the Society has arisen, and would breathe a pious wish for its long-continued prosperity. The choice of its officers, the selection of men to fill its various departments, to carry into effect the objects of its founders, has been most fortunate; and, without further intruding, I beg leave to move, that the thanks of the Society be presented to its late President.

Dr. Hodgkin having briefly seconded the motion, it was passed by acclamation.

Dr. Moore: Other changes, I believe, have taken place in the Council, and I know well the feelings of kindly respect entertained towards those who preside over the Society's affairs. Understanding that Mr. Quain has retired from the office of Librarian, and this being by no means a light or easy one, I think those present will be disposed to accord the thanks of the Society to that gentleman, and I therefore move accordingly.

This motion having been seconded, was unanimously adopted.

The Secretary then read the minutes of proceedings at the General Meeting, on Thursday, when the officers for the year were appointed (as given in our last, p. 406.)

A Paper was read, entitled:—

"*A Case of Apoplexy of the Cerebellum.* By Robert Dunn.

"The patient was a man 52 years of age, whose sight had, for some years, been much impaired from an amaurotic affection. The author was first called to attend him in June, 1843, when he was suffering from cephalæa and febrile disturbance. This attack left his sight more impaired. About two years ago he became unfortunate in business, and from that time his mind was weak and excitable. On the last day of April, 1848, he was seized during the night with sickness and faintness, and, getting out of bed, fell, as it was thought, in a fainting fit. The author found him in a low, exhausted state, and cold, but complaining of pain, heat, and uneasiness in the back part of his head. The latter symptoms continued for some days. There was no paralysis, but his mind was weaker, more confused than before, and his emotional excitability increased. Early in May, his wife mentioned that he had become the subject of a constant desire for sexual intercourse; that his conduct in this respect was very different from what it had been before his late attack. By the advice of the author, he left home for about three weeks without his wife. On his return, the desire of sexual intercourse was abated, and from this time was gradually lost. There was now observed an unsteadiness of gait, which increased; and, for some time before his death, was attended by weakness and stiffness of the left leg and foot. On the 6th September, he was seized with an apoplectic attack, and died in less than four hours.

"After death, the vessels on the surface of the brain were found turgid. The convolutions of the brain were shrunken, deficient in firmness, and of a dingy yellow colour. The optic nerves, shrunken and of a dingy colour, were, together with the substance of the brain around them in the cerebral part of their course, softened. The whole region of the meso-cephali had an unhealthy aspect. The interior of the right hemisphere of the cerebellum was a softened, pulpy mass, in the midst of which was an apoplectic clot, of the size of a pullet's egg. The softening extended inwardly beyond the centre of the median lobe, implicating the fibrous strands of the middle and inferior planes, and outwardly near to the surface of the hemisphere. The whole arterial system of the brain presented the diseased condition which results from cartilaginous and osseous deposit between the coats of the vessels. This state was remarkably apparent in the vertebral arteries, especially in the cerebellar branch, from which hæmorrhage appeared to have taken place.

"The author regards the state of the vessels as the primary cause of disease. He believes that the first attack in April was of the same nature as the fatal seizure. Around the first apoplectic clot, inflammation, he thinks, was set up in the cerebellum, and this terminated in disorganization. To the inflammatory state of the cerebellum he refers the exaltation of the sexual propensity; to the state of disorganization, the depression of that feeling, and the disturbance of the powers of locomotion, namely, the tottering gait from defective power of co-ordination, ending in a weak and stiffened condition of the left leg.

"He refers to another similar case which had come under his observation. He points out that the median lobe of the cerebellum is a primitive and independent part; and argues that it is the sensory ganglion of the sexual instinct, and belongs to the same category with the optic, olfactory, and auditory ganglia; while, he thinks, the two cases he has noticed afford pathological proof that another office of the cerebellum is that of a regulator and co-ordinator of the muscular actions, especially of those subservient to locomotion, and to the maintenance of the equilibrium of the body.

Professor Owen: The author having referred to certain facts in comparative anatomy, in order to bear out the conclusions he arrives at, I trust the meeting will excuse me for trespassing on their attention. I have very little more to say than what has already been offered upon the relation of the cerebellum to the enjoyment of sexual pleasure; but I must go against his conclusion, that there is a direct relation of the cerebellum to that particular function. One class of fishes affords the best test of that relation: if we are to judge of the extent to which the whole living being is affected by the size of that organ, it would certainly be in fishes, in which the testes of the male and the ovaries of the female are very large. Now the cerebellum in the cod and salmon is remarkably less in size, as compared with the cerebellum in the cartilaginous fishes, especially in sharks. With regard to irritation of the cerebellum, I do not think we can look to that organ as to a centre governing the sexual function.

Dr. Marshall Hall: From all that I have been able to deduce from my own observation, I certainly agree with Professor Owen. It is impossible that there can be an affection of the cerebellum, but that that affection, whatever it may be, must impress the medulla oblongata. Now, the symptoms in this case were, sickness, faintness, irritability, and, thereupon, sexual appetite. I remember the case of a butcher, in which some striking phenomena took place. He was affected with apoplexy, and, during his life, was most painfully excited to sexual gratification. On a *post mortem* examination there was found a small clot of blood occupying a place between the cerebellum and the medulla oblongata; and it therefore strikes me that we have reason to conclude that the centre of the sexual function has a seat in the medulla oblongata. Then there are those cases where the excitement to sexual intercourse is occasioned by constriction of a cord round the neck,—the culprit being said to have erection, and even emission of semen, is a great proof that the sexual sensation has its seat, like other propensities, in the medulla oblongata. Then there is another thing:—the author deduces that, because

there is weakness of the left side of the body, there must be a cyst on the right side of the cerebellum; but so a laceration of the cerebellum may produce paralysis on the opposite side of the body. The scope of my observations is, that there is much more reason to suppose that the seat of the sexual function is the medulla oblongata.

Dr. Carpenter: It is of great importance carefully to record cases of this description. With regard to the question before us, there are many aspects in which it may be viewed. I think that Professor Owen a little misunderstood the scope of Mr. Dunn's observations; I think his remarks were meant to be limited to the central lobe of the cerebellum. It is very important to draw a clear distinction between sexual propensity and sexual instinct; the terms are often employed as synonymous, while, I think, a distinction is needed; that is, to use the term "instinct" in respect to those actions which are purely automatic, in which action follows sensation. It is a fact that we have a sexual sense; and, believing that all sensation is situated in the encephalon, I cannot see any improbability of our having a centre for the sexual sense; and various phenomena, I think, place it somewhere in this position. Some years ago, Dr. Turley, of Worcester, mentioned a case strongly bearing out this idea. A gentleman, of a free life, at an advanced age, 65 or 70, became the subject of satyriasis. So strong was the sexual feeling, that he would practice masturbation even while his sister was in the same room. After his death, a small tumor was found on the pons varolii; there was not enough disorganization for its destruction, but enough to produce temporary exaltation. Many illustrations might be adduced, where the first stage of inflammation produces a high degree of activity, and great exaltation of power, and therefore I think there may be a state anterior to that, not enough to produce impairment, but as a source of irritation. I cannot but think that this explanation is feasible. If we can admit a centre in that locality of the sexual sense, and that undue excitement of that will excite the sexual propensity in such a degree as to overmaster the strongest motives of reason, I think we gain an important step in physiology, and towards that step this contribution of Mr. Dunn is a valuable one.

Mr. Travers: There is, on the records of the Society, a paper relating a case where there were just such symptoms as have now been narrated, in which a morbid change of the prostate gland was remarked. It seems to me, notwithstanding the statements in the paper, that there is yet a long link separating the facts stated from the conclusion drawn; and I believe that it may be shown, that there is this central organ in the brain, but that the organs of influence are far away from this.

Dr. Barlow: The case appears to me of equal interest in regard to our views in reference to the functions of the cerebellum. In the paper before us, the light which is thrown on the functions of the cerebellum is very trifling; but, in respect to the general views, it is a very important contribution, on account of the admirable manner in which the *post-mortem* examination was made. Referring to the point of pain preceding the paralysis, I will just mention a case of epilepsy ending in cerebral effusion. One night the patient retired to rest with violent pain in the head, and next morning had a fit, with pressure on the medulla oblongata. Shortly after my visit he died. On a *post-mortem* examination, there was an effusion of blood of the size of a sixpence pressing on the medulla oblongata. With regard to the cerebellum as being the seat of the sexual propensity, I knew a case of a young woman who suffered from extreme sexual desire, but was found to be without any cerebellum at all. The cases in which the sexual action may be completed, in which the cerebellum could not be involved, are numerous. At the time of the incubation of frogs, I removed the head of a small frog while in the act of copulation, and the act proceeded as before.

Mr. Streeter: I think the case brought forward in the paper has fully and fairly laid the question before the Society, whether the cerebellum has a connexion with the sexual organs. I cannot help thinking that Professor Owen has confounded the two actions—the psychical feeling which leads to copulation, with the organs which lead to the perfection of the act. If the argument derived from the observations on fishes is worth anything, it would go to show by analogy, that the woman with the largest cerebellum ought to have the largest family. This is the legal sequence; and I need not say that it is destructive of the principle with which the Professor set out. I have paid some attention to the subject, and however feeble one's powers are in coming to a right notion on such a point, I have arrived at the conclusion that the sexual propensity does reside in the cerebellum. I see no reason why the cerebellum should not have the white matter to convey its wishes to the organs. The complexity of the cerebellum will be found traced upwards, according to the complexity of the sexual act. A grand difference exists in the superficial anatomy of the cerebellum. It has been observed, that every localised part of the brain has its nerves connected with it, descending down to the various organs which it excites to action. The motive actions which take place under the sexual instinct are most nicely regulated; they are performed with a precision with which no other act takes place. All experiments with reference to the destruction of the cerebellum I look on with very great distrust; and that remarkable fowl which Flourens is said to have watched for ten months, I really think that such things are not worthy of the slightest attention. In conclusion, I would just mention a case of injury to the basis of the skull, causing it to press on the cerebellum, in which the sexual appetite was so exalted as to lead the man to invite his nurse to enter into cohabitation with him.

After a few words from Mr. Dunn in corroboration of the views stated in his paper,

The meeting adjourned.

REVIEWS.

DUBLIN QUARTERLY JOURNAL OF MEDICINE.

We have to offer an apology to our readers, that we have hitherto allowed this excellent periodical to remain unnoticed in our pages. The *Dublin Quarterly Journal of Medical Science* holds a high rank among its competitors. Ireland, unhappy in its political relations, stands prominently forward in medical science; and among her ably-conducted medical journals, that now under consideration is second to none, while it reflects the greatest credit on its talented Editor,—to whose exertions it owes the enviable position which it now occupies.

Let us take two Numbers as they lie nearest to our hand, and this for November contains the third portion of the Essay of Mr. Wilde, "On the Malformations and Congenital Diseases of the Organs of Sight." The first and second Parts which were given in a former series of the Journal, embraced the history of the various malformations and congenital diseases of the lachrymal appendages, the globe of the eye, and the cornea. In the present, the congenital peculiarities and diseases of the iris and the choroid are considered The nature of this paper does not offer much scope for an analysis, as it is restricted chiefly to the descriptive anatomy of the imperfections, or anormal conditions in the anatomical structure of these parts. Interesting as this branch of anatomy is, particularly as illustrative of the grand universal law of development throughout the whole animal creation, it is a source of no small obstruction in its progress, the almost protean form of the terminology employed by writers on these topics; for though we admit that new forms or new conditions of matter necessarily demand new names, we cannot understand why they should have two, or even more. Thus:—

Myosis,	*alias*,	Microcoria.
Corectopia,	*alias*,	Parastrophe.
Dyscoria,	*alias*,	Coremetamorphosis.
Atresia Pupillæ,	*alias*,	Synizesis Congenita.
Cordiform Pupil,	*alias*,	Coloboma Iridis Congenitum,
alias,	Iridochisma,	

and so forth. The last named signifies a deficiency in the structure of the iris, usually in the lower segment; giving the pupil that form which we see exemplified after the operation for artificial pupil. On the theory of this peculiarity in the form of the pupil, our Author observes:—"Several hypotheses have been put forward to account for coloboma iridis. By most authors it is believed to be an arrest of development, at a very early period of uterine life, when a cleft naturally exists, it is said, in the choroid, which occasionally runs on to the iris. In a case dissected by Ammon, not only was the iris cleft, but also the choroid, retina and the ciliary processes; and, externally, a bluish projection, corresponding to the line of the fissure, was observed on the sclerotic. This case seems to bear out the theory of Walther; but, Rudolphi and Udgin, who had likewise opportunities of dissecting cases of coloboma, were unable to confirm the observations of the Dresden author; though they found the lens deficient at the lower part, and the vitreous humour fluid. Moreover, we frequently find coloboma existing in situations where no fissure of the choroid has ever been observed, as on the upper and outer sides, "*query, of the pupil?*" Comparative anatomy, it is true, rather confirms the views of Walther and Ammon; for, in several fish and mollusca we find both the sclerotic and retina cleft. In birds, and also some amphibians there is a cleft in the choroid and sclerotic, and, it is said, in the iris of the sheep fetus also. Irregularity of the cornea, protuberance of the sclerotic along the line of the cleft, and congenital cataract are often found in connexion with coloboma. According to Gescheit, the iridochisma is owing to the non-closure of the choroid split. Seiler believed it to be caused by a want of perfect anastomosis, or accidental obliteration of the vessels of the iris. Baer believed that it was owing to the too rapid absorption, or over-absorption of the pupillary membrane. In some instances, the ciliary body is distorted and prolonged, or bent backwards behind the end of the split, but not interrupted."—Page 283-4.

We recommend this paper to those in the search of transcendentalism in the regions of anatomy, and we consider it will fully repay the time spent in its perusal, even by the most actively engaged practitioner. The Author promises to conclude the subject, in a subsequent paper, with an inquiry into the malformations of the dioptric media and sensitive apparatus, the lens, vitreous humour, retina, and optic nerve, together with the consideration of monoculi, both in man and some of the lower animals.

The second article of this Number offers us, from the pen of R. J. Graves, M.D., a detailed article on the progress of Asiatic Cholera, and refers to a former communication, in which the evidence brought forward seemed to afford a warranty to the conclusion, that the disease was chiefly propagated by contagion. He pursues this subject *in extenso*, and brings into play the analogy of plague, smallpox, and typhus fever, in support of his argument. He further adverts to the circumstances which attended the appearance of the fever in the Eclair, and its introduction through that vessel to Boa Vista. The yellow fever was thus introduced into that district, and he considers that its contagious character has been completely established. Referring to an excellent article on that question in the July number (1848) of the *British and Foreign Medico-Chirurgical Review*, he remarks that the Reviewer, relying altogether on the testimony of Dr. King, a *non-contagionist*, succeeds in proving *incontrovertibly from Dr. King's facts*, that the disease was imported by the crew of the Eclair. Following accordingly the same line of evidence, he conceives that the Reviewers in the same number would have come to a similar conclusion as to the contagious nature of cholera, had they been conversant with the evidence he subsequently submits, taken from the thirteenth volume of the *American Journal of the Medical Sciences*, p. 359,—"On the Communicability of Cholera, by Professor S. Henry Dickson, M.D.;" whereas they had arrived at the very reverse opinion. This question, we must concede is not quite so easily

wants of their unhappy inmates, varying from 140 to nearly 400 in each. We frankly and unreservedly state, that it is not against *individuals*, but against *a system*, we enter the field; a system which we may venture to say only lingers now in an unhappy country united to the most powerful, most civilized, and most exalted nation in the world,—but which stands out, in her social condition, as the most painful *fact* of the Nineteenth Century.

Let us not be misunderstood. For all existing officers we will advocate the full and entire amount of their present salaries; and in the event of compensation being deemed desirable to superannuated parties, we will advocate justice to its fullest extent; but we loudly proclaim, as Scientific Journalists, that the great Institutions of Ireland should *at once* form an object of humane interest to the legislators and philosophers of Great Britain, who, by their own acts, are deeply responsible for the system which at present particularly marks their medical control.

Our first Article on the subject will probably appear in our next Number.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—March. 13, 1849.

Thos. Addison, M.D., President.

The President: On first occupying the chair of this Society, allow me to express the deep sense which I entertain of the honour you have done me, in appointing me to such an office. And, while I thus feel, I am equally well aware how little any merits of my own have had to do with that selection; on the contrary, I have a most painful conviction how largely your generosity must have been taxed to place me in the position in which I now stand before you. I cannot—I dare not—look back on the past without a sense of shame in the contemplation of the character and high reputation of those who have gone before me; and the only return which I can hope to make to you is, to endeavour faithfully, assiduously, and impartially to discharge the duties of my office, ever bearing in mind the character, constitution, and objects of the Society, and never forgetting that it comprises among its numbers a large majority of the ornaments of our Profession, and that it is expected to furnish to the world an example of that liberality and harmony so essential to the public appreciation of a noble and dignified science. (Applause.)

Dr. Moore: Before the regular business of the evening is proceeded with, I wish to make a few observations. I find that on Thursday, (on which occasion I was not present), an incident occurred with regard to the merits of which it is not now necessary to trouble the meeting; but on that occasion I understand that the party in authority declared that he would not permit a discussion to take place on a matter vitally affecting the interests of the Society. I speak not for the purpose of exciting hostility; but when I find (as the President very properly observed) this Society composed of the *élite* of the Profession, I think such a course of procedure not right. Dr. Moore was proceeding, when

Mr. Hawkins rose to order, and said: I hope our President will excuse the liberty I take in drawing his attention to the rule of the Society, which says, that at these meetings nothing shall be discussed but scientific matters.

The President: I must apologise for not interrupting the speaker sooner; but, as I fear that he is referring to matters which might excite some collision, and as an opportunity will be afforded him at the Special General Meeting, to be held on the 1st of May, I trust that Dr. Moore will excuse me if I ask him to do me the favour of deferring any further remark on the present occasion.

Dr. Moore: I was not aware that such a meeting was to take place; and only wished to enter my protest against such a course as that to which I have alluded.

Mr. Travers: You will pardon me, Sir, if I, too, join in the felicitations which have been pronounced on occasion of your filling that chair. But I cannot, at the same time, forget, that the Society lies under deep obligation to their former President. I may, perhaps, be allowed to state, that I have a sort of patriarchal feeling in connexion with this Society, being the only one now among its Fellows who is a survivor of those whose names appear on the list in its first published Transactions; and this leads me back to the circumstances in which the Society originated,—for I remember it in its infancy, when it met in Verulam-buildings, Gray's-inn. I knew it, also, in its early difficulties, and well do I remember with what strong feelings of ardour and energy, on the part of its principal friends, it was assisted; these gentlemen may be considered its founders, and undoubtedly they conferred a great boon not only on the community, but on the whole civilised world; and it must also be remembered how much individual and collective exertion had to be employed to carry through a Society till it has become organised to its present pitch of perfection. I feel now somewhat as the representative of these men,—proud of the high state of perfection to which the Society has arisen, and would breathe a pious wish for its long-continued prosperity. The choice of its officers, the selection of men to fill its various departments, to carry into effect the objects of its founders, has been most fortunate; and, without further intruding, I beg leave to move, that the thanks of the Society be presented to its late President.

Dr. Hodgkin having briefly seconded the motion, it was passed by acclamation.

Dr. Moore: Other changes, I believe, have taken place in the Council, and I know well the feelings of kindly respect entertained towards those who preside over the Society's affairs. Understanding that Mr. Quain has retired from the office of Librarian, and this being by no means a light or easy one, I think those present will be disposed to accord the thanks of the Society to that gentleman, and I therefore move accordingly.

This motion having been seconded, was unanimously adopted.

The Secretary then read the minutes of proceedings at the General Meeting, on Thursday, when the officers for the year were appointed (as given in our last, p. 406.)

A Paper was read, entitled:—

"*A Case of Apoplexy of the Cerebellum.* By Robert Dunn.

"The patient was a man 52 years of age, whose sight had, for some years, been much impaired from an amaurotic affection. The author was first called to attend him in June, 1843, when he was suffering from cephalæa and febrile disturbance. This attack left his sight more impaired. About two years ago he became unfortunate in business, and from that time his mind was weak and excitable. On the last day of April, 1848, he was seized during the night with sickness and faintness, and, getting out of bed, fell, as it was thought, in a fainting fit. The author found him in a low, exhausted state, and cold, but complaining of pain, heat, and uneasiness in the back part of his head. The latter symptoms continued for some days. There was no paralysis, but his mind was weaker, more confused than before, and his emotional excitability increased. Early in May, his wife mentioned that he had become the subject of a constant desire for sexual intercourse; that his conduct in this respect was very different from what it had been before his late attack. By the advice of the author, he left home for about three weeks without his wife. On his return, the desire of sexual intercourse was abated, and from this time was gradually lost. There was now observed an unsteadiness of gait, which increased; and, for some time before his death, was attended by weakness and stiffness of the left leg and foot. On the 6th September, he was seized with an apoplectic attack, and died in less than four hours.

"After death, the vessels on the surface of the brain were found turgid. The convolutions of the brain were shrunken, deficient in firmness, and of a dingy yellow colour. The optic nerves, shrunken and of a dingy colour, were, together with the substance of the brain around them in the cerebral part of their course, softened. The whole region of the meso-cephali had an unhealthy aspect. The interior of the right hemisphere of the cerebellum was a softened, pulpy mass, in the midst of which was an apoplectic clot, of the size of a pullet's egg. The softening extended inwardly beyond the centre of the median lobe, implicating the fibrous strands of the middle and inferior planes, and outwardly near to the surface of the hemisphere. The whole arterial system of the brain presented the diseased condition which results from cartilaginous and osseous deposit between the coats of the vessels. This state was remarkably apparent in the vertebral arteries, especially in the cerebellar branch, from which hæmorrhage appeared to have taken place.

"The author regards the state of the vessels as the primary cause of disease. He believes that the first attack in April was of the same nature as the fatal seizure. Around the first apoplectic clot, inflammation, he thinks, was set up in the cerebellum, and this terminated in disorganization. To the inflammatory state of the cerebellum he refers the exaltation of the sexual propensity; to the state of disorganization, the depression of that feeling, and the disturbance of the powers of locomotion, namely, the tottering gait from defective power of co-ordination, ending in a weak and stiffened condition of the left leg.

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Dr. Carpenter: It is of great importance carefully to record cases of this description. With regard to the question before us, there are many aspects in which it may be viewed. I think that Professor Owen a little misunderstood the scope of Mr. Dunn's observations; I think his remarks were meant to be limited to the central lobe of the cerebellum. It is very important to draw a clear distinction between sexual propensity and sexual instinct; the terms are often employed as synonymous, while, I think, a distinction is needed; that is, to use the term "instinct" in respect to those actions which are purely automatic, in which action follows sensation. It is a fact that we have a sexual sense; and, believing that all sensation is situated in the encephalon, I cannot see any improbability of our having a centre for the sexual sense; and various phenomena, I think, place it somewhere in this position. Some years ago, Dr. Turley, of Worcester, mentioned a case strongly bearing out this idea. A gentleman, of a free life, at an advanced age, 65 or 70, became the subject of satyriasis. So strong was the sexual feeling, that he would practice masturbation even while his sister was in the same room. After his death, a small tumor was found on the pons varolii; there was not enough disorganization for its destruction, but enough to produce temporary exaltation. Many illustrations might be adduced, where the first stage of inflammation produces a high degree of activity, and great exaltation of power, and therefore I think there may be a state anterior to that, not enough to produce impairment, but as a source of irritation. I cannot but think that this explanation is feasible. If we can admit a centre in that locality of the sexual sense, and that undue excitement of that will excite the sexual propensity in such a degree as to overmaster the strongest motives of reason, I think we gain an important step in physiology, and towards that step this contribution of Mr. Dunn is a valuable one.

Mr. Travers: There is, on the records of the Society, a paper relating a case where there were just such symptoms as have now been narrated, in which a morbid change of the prostate gland was remarked. It seems to me, notwithstanding the statements in the paper, that there is yet a long link separating the facts stated from the conclusion drawn; and I believe that it may be shown, that there is this central organ in the brain, but that the organs of influence are far away from this.

Dr. Barlow: The case appears to me of equal interest in regard to our views in reference to the functions of the cerebellum. In the paper before us, the light which is thrown on the functions of the cerebellum is very trifling; but, in respect to the general views, it is a very important contribution, on account of the admirable manner in which the *post-mortem* examination was made. Referring to the point of pain preceding the paralysis, I will just mention a case of epilepsy ending in cerebral effusion. One night the patient retired to rest with violent pain in the head, and next morning had a fit, with pressure on the medulla oblongata. Shortly after my visit he died. On a *post-mortem* examination, there was an effusion of blood of the size of a sixpence pressing on the medulla oblongata. With regard to the cerebellum as being the seat of the sexual propensity, I knew a case of a young woman who suffered from extreme sexual desire, but was found to be without any cerebellum at all. The cases in which the sexual action may be completed, in which the cerebellum could not be involved, are numerous. At the time of the incubation of frogs, I removed the head of a small frog while in the act of copulation, and the act proceeded as before.

Mr. Streeter: I think the case brought forward in the paper has fully and fairly laid the question before the Society, whether the cerebellum has a connexion with the sexual organs. I cannot help thinking that Professor Owen has confounded the two actions—the psychical feeling which leads to copulation, with the organs which lead to the perfection of the act. If the argument derived from the observations on fishes is worth anything, it would go to show by analogy, that the woman with the largest cerebellum ought to have the largest family. This is the legal sequence; and I need not say that it is destructive of the principle with which the Professor set out. I have paid some attention to the subject, and however feeble one's powers are in coming to a right notion on such a point, I have arrived at the conclusion that the sexual propensity does reside in the cerebellum. I see no reason why the cerebellum should not have the white matter to convey its wishes to the organs. The complexity of the cerebellum will be found traced upwards, according to the complexity of the sexual act. A grand difference exists in the superficial anatomy of the cerebellum. It has been observed, that every localised part of the brain has its nerves connected with it, descending down to the various organs which it excites to action. The motive actions which take place under the sexual instinct are most nicely regulated; they are performed with a precision with which no other act takes place. All experiments with reference to the destruction of the cerebellum I look on with very great distrust; and that remarkable fowl which Flourens is said to have watched for ten months, I really think that such things are not worthy of the slightest attention. In conclusion, I would just mention a case of injury to the basis of the skull, causing it to press on the cerebellum, in which the sexual appetite was so exalted as to lead the man to invite his nurse to enter into cohabitation with him.

After a few words from Mr. Dunn in corroboration of the views stated in his paper,

The meeting adjourned.

REVIEWS.

DUBLIN QUARTERLY JOURNAL OF MEDICINE.

We have to offer an apology to our readers, that we have hitherto allowed this excellent periodical to remain unnoticed in our pages. The *Dublin Quarterly Journal of Medical Science* holds a high rank among its competitors. Ireland, unhappy in its political relations, stands prominently forward in medical science; and among her ably-conducted medical journals, that now under consideration is second to none, while it reflects the greatest credit on its talented Editor,—to whose exertions it owes the enviable position which it now occupies.

Let us take two Numbers as they lie nearest to our hand, and this for November contains the third portion of the Essay of Mr. Wilde, "On the Malformations and Congenital Diseases of the Organs of Sight." The first and second Parts which were given in a former series of the Journal, embraced the history of the various malformations and congenital diseases of the lachrymal appendages, the globe of the eye, and the cornea. In the present, the congenital peculiarities and diseases of the iris and the choroid are considered The nature of this paper does not offer much scope for an analysis, as it is restricted chiefly to the descriptive anatomy of the imperfections, or anormal conditions in the anatomical structure of these parts. Interesting as this branch of anatomy is, particularly as illustrative of the grand universal law of development throughout the whole animal creation, it is a source of no small obstruction in its progress, the almost protean form of the terminology employed by writers on these topics; for though we admit that new forms or new conditions of matter necessarily demand new names, we cannot understand why they should have two, or even more. Thus:—

Myosis,	*alias*,	Microcoria.
Corectopia,	*alias*,	Parastrophe.
Dyscoria,	*alias*,	Coremetamorphosis.
Atresia Pupillæ,	*alias*,	Synizesis Congenita.
Cordiform Pupil,	*alias*,	Coloboma Iridis Congenitum, *alias*, Iridochisma,

and so forth. The last named signifies a deficiency in the structure of the iris, usually in the lower segment; giving the pupil that form which we see exemplified after the operation for artificial pupil. On the theory of this peculiarity in the form of the pupil, our Author observes:—"Several hypotheses have been put forward to account for coloboma iridis. By most authors it is believed to be an arrest of development, at a very early period of uterine life, when a cleft naturally exists, it is said, in the choroid, which occasionally runs on to the iris. In a case dissected by Ammon, not only was the iris cleft, but also the choroid, retina and the ciliary processes; and, externally, a bluish projection, corresponding to the line of the fissure, was observed on the sclerotic. This case seems to bear out the theory of Walther; but, Rudolphi and Udgin, who had likewise opportunities of dissecting cases of coloboma, were unable to confirm the observations of the Dresden author; though they found the lens deficient at the lower part, and the vitreous humour fluid. Moreover, we frequently find coloboma existing in situations where no fissure of the choroid has ever been observed, as on the upper and outer sides, "*query, of the pupil?*" Comparative anatomy, it is true, rather confirms the views of Walther and Ammon; for, in several fish and mollusca we find both the sclerotic and retina cleft. In birds, and also some amphibians there is a cleft in the choroid and sclerotic, and, it is said, in the iris of the sheep fetus also. Irregularity of the cornea, protuberance of the sclerotic along the line of the cleft, and congenital cataract are often found in connexion with coloboma. According to Gescheit, the iridochisma is owing to the non-closure of the choroid split. Seiler believed it to be caused by a want of perfect anastomosis, or accidental obliteration of the vessels of the iris. Baer believed that it was owing to the too rapid absorption, or over-absorption of the pupillary membrane. In some instances, the ciliary body is distorted and prolonged, or bent backwards behind the end of the split, but not interrupted."—Page 283-4.

We recommend this paper to those in the search of transcendentalism in the regions of anatomy, and we consider it will fully repay the time spent in its perusal, even by the most actively engaged practitioner. The Author promises to conclude the subject, in a subsequent paper, with an inquiry into the malformations of the dioptric media and sensitive apparatus, the lens, vitreous humour, retina, and optic nerve, together with the consideration of monoculi, both in man and some of the lower animals.

The second article of this Number offers us, from the pen of R. J. Graves, M.D., a detailed article on the progress of Asiatic Cholera, and refers to a former communication, in which the evidence brought forward seemed to afford a warranty to the conclusion, that the disease was chiefly propagated by contagion. He pursues this subject *in extenso*, and brings into play the analogy of plague, small-pox, and typhus fever, in support of his argument. He further adverts to the circumstances which attended the appearance of the fever in the Eclair, and its introduction through that vessel to Boa Vista. The yellow fever was thus introduced into that district, and he considers that its contagious character has been completely established. Referring to an excellent article on that question in the July number (1848) of the *British and Foreign Medico-Chirurgical Review*, he remarks that the Reviewer, relying altogether on the testimony of Dr. King, a *non-contagionist*, succeeds in proving *incontrovertibly from Dr. King's facts*, that the disease was imported by the crew of the Eclair. Following accordingly the same line of evidence, he conceives that the Reviewers in the same number would have come to a similar conclusion as to the contagious nature of cholera, had they been conversant with the evidence he subsequently submits, taken from the thirteenth volume of the *American Journal of the Medical Sciences*, p. 359,—"On the Communicability of Cholera, by Professor S. Henry Dickson, M.D.;" whereas they had arrived at the very reverse opinion. This question, we must concede is not quite so easily

disposed of, and however *likely* Dr. Graves' train of analogical reasoning may be, or actually is, we are of opinion that the infectious or non-infectious quality of any disease whatever is to be determined solely by the facts which pertain specially to that disease, and that disease alone. Subordinately, an appeal to analogy is all fair enough, but the final settlement of the question must be by an appeal to the actual disease. We cannot afford space for the extract from Dr. Dickson; but we refer to it all those who are desirous to examine this much agitated question, uninfluenced by the preconceived adoption of any hypothesis on the subject. We would observe, however, that Dr. Graves uses the term "chiefly by contagion," from which we would infer, that he must admit other causes, and that such might be the case, we have not time here to discuss, though possibly on some other occasion we may take up the question at large. On the general feeling at present against contagion, Dr. Graves thus forcibly and justly expresses himself:—

"It is strange what a general disinclination has existed for some time in Great Britain to allow that diseases are contagious. The influence of capital has, for obvious reasons, been brought to play; and every expedient has been resorted to—no matter at what danger to the public health—to try to diminish the stringency of the quarantine laws, and thus remove the obstacles to trade. In furtherance of this object, advocates have been found who did not scruple to advance opinions quite opposed to those hitherto received, and many treaties and books have been published to disprove the existence of contagion even in the case of the plague. As to typhus fever, its non-contagious nature was by such persons supposed to be demonstrated, and the great majority of the physicians of England were non-contagionists. The Irish physicians, however, never supported this view of the subject; for, unfortunately, they had before their eyes daily proofs of the contagious nature of typhus. The events of last year (1847) have shown that the opinions of my Irish brethren were correct, and no one is now found who denies the contagious nature of typhus; for all have been taught, by its transmission to America and Canada, that it is a portable disease, capable of being propagated by infection." We give this quotation as a candid expression or declaration of the views which at present rule on this subject. We chronicle opinions as well as events. We do so in justice to the respectability of the authority we quote, and we must confess, that whatever way the preponderance of evidence lies, it has not yet approximated the form of a "constant" in physic, as there are constants in physics. Both views may, perhaps, be the truth; but that would require a nicer balanced train of evidence than our limited knowledge can at present supply.

We have already occupied so much of our space, that we can barely do more than notice another original communication,—"Observations on the Fever of the Western Coast of Africa," by Dr. Kehoe, Assistant-staff Surgeon. In this we find some very judicious remarks. At the outset he proclaims, writing on that most complicated question, the *identity of fever*:—

"For myself, I believe that tropical fevers do not differ essentially from those of temperate climates, and that in a modified form, the same rules of practice will be found to apply as to similar symptoms occurring in the fevers of Europe. Though I do not pretend to have established a decidedly rational mode of treatment, yet I am convinced, that the African fevers and those of Europe are essentially the same, and that the symptoms which in Europe require treatment most carefully diversified, according to the constitution, the type of the prevailing epidemic, &c., do not in Africa require the one unvarying mode of treatment—the exhibition of mercury so as to produce salivation." The monograph is well written, and details several highly interesting cases. The writer seems to have considerable faith in the cold affusion, as an efficient mode, in the majority of cases, of removing the morbid heat; and suggests a combination of quinine and opium (where there are no strong contra-indications) as the remedial means to be adopted for soothing nervous irritability, supporting the general powers of the system, and putting a check to the remittent form of the disease.

We pass over some important practical observations on "Uterine Hæmorrhage, connected with delivery of the Placenta," by Dr. Cane; and a short paper, by Mr. Colles, recommending a new form, or, at all events, a very much modified form of forceps for the extraction of nasal polypi. Under the head of "Medical Miscellany," two fatal cases of that most loathsome malady, glanders in the human subjects, are described by Dr. H. Graves, in which the characteristic mark of the circumferential elevated white zone was noticed exterior to the redness which surrounds the pustule. They were both infected from the same horse, the eruption appearing on the fifth day after inoculation.

In the February Number, Dr. Hargrave renews the subject of placing a ligature on the subclavian artery internal to the scaleni muscles,—a subject certainly of most important practical interest in surgery.

It would have been thought, that after the fatal result of every case, in which the operation referred to had been performed, scarce any surgeon would have anew mooted the question, and particularly after the authority of Liston, *that it should never be attempted again*. But such a tenor of conduct does not suit the bold daring of our modern surgery, which seems to arrogate fearlessly for itself the motto, "*Nil mortalibus arduum est.*" Sir Astley Cooper abandoned it, even though the operation was external to the scaleni muscles, as he could not pass the ligature without including some of the brachial plexus. Dupuytren was occupied one hour and forty-eight minutes in his operation, and the ligature, after all, had included a portion of the fourth cervical nerve. In his own words, it was the most tedious, difficult, and painful operation that he had ever attempted.

Dr. Hargraves observes, that if the causes of failure can be ascertained, "a way will then be open which will lead, with greater certainty, to success." We cannot subscribe to that idea; for, though it be true enough, that the knowledge of the cause often unriddles the disease (a proposition rather distinct from the means of cure,) it does not do so always; for often a little more knowledge but teaches us the desperate fatality of the result. The doctor advocates his old proposal of sawing the clavicle, which seems likewise to have had the sanction of Cruveilher; while Velpeau, and Dr. Norris, of the Pennsylvanian Hospital, United States, object to it; and we must own, that we think it but a clumsy expedient. We will not remark on the expedient suggested of amputating at the shoulder joints, for the relief of aneurism of the subclavian artery, owing to the fatality of securing the vessel in the first third of its course; but merely ask if it would not be better in all these cases, seeing that the operation has invariably proved fatal, to revive the operation proposed by Brasdor, and recently put in practice by Wardrop, of tying the artery on the remote side of the tumor?

Dr. Hargrave also relates a case of dislocation of the great toe upon the dorsum of its metatarsal bone,—a very unusual accident, but it is too long to describe here. There is no such case mentioned in Sir Astley Cooper's work on "Dislocation and Fractures." The Doctor says in concluding:—

(P. 64.) "From such researches, it is evident that the rarity of this accident must be very great, and fully justifies it being brought before the Profession. In cases of difficulty and failure in the reduction," (it failed in this case,) "the surgeon will either have to perform tenotomy of all the tendons of the toe, which is a simple and comparatively painless operation, even without an anæsthetic agent; or, to perform a more compound one, the section of the projecting end of the bone, and then reduce it, and maintain the parts *in situ* by proper bandaging and apparatus. From the success attendant upon Liston's case; also from the one now submitted to the Profession, perhaps it would *be the most satisfactory practice to have immediate recourse to resection of the bone, after the attempts at reduction had failed, and follow up the treatment so as to obtain a false, but useful articulation.*"

Defects in the Practice of Life Assurance, and Suggestions for their Remedy, &c. London: Published by W. S. Orr and Co., Amen-corner, Paternoster-row.

This is an exceedingly clear and able exposition of the defects of the present system of life assurance. The Author strongly advocates the *indisputability* of Policies, and urges that it is the duty of the Office to ascertain all the necessary facts before the Policy is granted. This view is undoubtedly the correct one; for nothing can be more improper than the indulgence of any laxity on the part of the Offices, thereby tempting assurers to a misrepresentation which will be afterwards rigidly used to deprive them of the benefits of their policy. If policies were indisputable, the Offices would find it absolutely incumbent on them to pay Medical Men for their certificates; it is, therefore, the peculiar interest of our Profession to use their influence to secure so desirable a security for the public. We recommend the work to the careful perusal of Medical Men, who are even more interested than other classes of society in the evil defects of the present system of life assurance.

ON DR. STEVENS'S SALINE TREATMENT OF ASIATIC CHOLERA: BEING THE FIFTH LETTER OF E. A TURLEY, M.D., IN CORRESPONDENCE WITH G. ROSS, ESQ.

My Dear Sir,—As I stated in my last letter, I am desirous that the present communication should contain a condensed review of the facts I have advanced in my former letters to you, and also a brief relation of the real nature of the true saline treatment of Dr. Stevens. This plan is the more essential now, as cholera is daily taking a wider range; and some of our readers may be inclined to put the alleged advantages of this treatment to the test of experience, for I fully agree in what you say in your first letter—"I believe the saline to be the best treatment yet tried, and would recommend it as such." Therefore, as I shall for some time engage myself on a work on the history of the opposition to the first introduction of the saline remedies in cholera, by which thousands of lives have been lost, I shall here finish all I have to say till after your reply to the statements I have made on the subject. In the first letter I had the pleasure to address to you, and which you answered with so much candour and good feeling, I stated as my

First assertion (or inference), that your third Table (page 106, No. 478, *Medical Times*,) was probably incorrect, though I am sure unintentionally so.

Proof.—Your third Table finds no support on comparison with the authentic Tables of Dr. Stevens's treatment of cholera, which are still preserved in the House of Correction at Coldbath-fields.

Deduction.—Your table is incorrect, and, as it has been, and will be, recopied into the periodicals of the day, as well as into works on pestilential cholera, it should be corrected, and the correction made public through the same medium which first disseminated the error.

Second assertion.—That Dr. Stevens was equally worthy of credence with any other writer on cholera: that he was early distinguished in our profession, and had made discoveries of the last importance to mankind.

Proofs.—The published opinions of Dr. Stevens' improvements in both medicine and surgery, by Drs. Prout, Copland, Turner, Hodgkin, Macleod, Müller, O'Shaunessy, Sir Astley Cooper, (a) Professor Brande, Owen, Mr. Prætor, &c. &c.

3rd Assertion.—That Dr. Stevens was the first person who pointed out the true value of the saline matter of the blood, as well as the pathological changes in the vital current in yellow fever and other malignant diseases, and first applied the saline treatment with success in the West India fevers in the year 1827.

Proofs.—In Captain McNichol's letter, written in Trinidad, 1827, and the numerous proofs contained in the *Lancet* and *Medical Gazette*, &c., for 1832, as well as the testimony of many of the individuals referred to above. (b) His honorary degree of

(a) See his eulogium on Dr. Stevens in the fourth edition of the *Lancet* for 1823-4, page 380.

(b) See Brand's Manual of Chemistry, pages 1144-5, edition of 1836; also Turner's Elements of Chemistry, pages 902-3-4, edition of 1833.

M.D. of the University of Copenhagen, (1820,) which, at the request of the University, was confirmed, and presented to Dr. Stevens by Frederick VI., for having been the first who tied the internal iliac artery, as well as for other services he had then rendered in the Danish colonies. His degree of D.C.L. from the University of Oxford, presented to him in 1834, by the Duke of Wellington, for his researches on the blood, animal heat, and for the reduction of the mortality in yellow fever, the Asiatic cholera, &c.

Deductions.—The saline treatment was the result of induction from facts, and, consequently, was not the effect of an empirical trial of its merits in cholera; and the many proofs of its success strongly recommend this treatment to our notice, inasmuch as it is not a purely hypothetical, but is, in my opinion, the only rational doctrine that has ever been brought forward on this subject.

4th Assertion.—In 1832 there had been, in the Island of Trinidad, 1,100 cases of yellow and other West Indian fevers, treated on Dr. Stevens' plan, with a mortality of only eleven in that number.

Proofs.—The above fact is stated by Dr. Stevens in his work on the blood, on the authority of a document that he received from the Army Medical Board in 1832. His facts, relative to the success of the saline treatment in the Island of St. Thomas, have been doubted by some, but never disproved. And the truth of his statements, relative to the cholera in Coldbath-fields prison and in other places, it will be my duty to prove.

Deductions.—That, whereas it is proved that the red colour of the blood in the venous circulation, as well as its scarlet colour in the arterial system, depends on the presence of the salts of this fluid, which are greatly diminished, or almost entirely lost in the last stages of yellow fever, cholera, and other pestilential diseases. That these salts should be supplied is essential, as it has been proved by many of his more recent experiments, that on their presence depends the electric vitality of the blood, the stimulus of which is the true cause of the action of the heart and the capillary arteries. If this be true, then the material life of the flesh is in the blood—a truth, that Dr. Stevens' subsequent experiments have proved to be most religiously correct.

I now feel myself called upon to state to you and to our readers the views of Dr. Stevens on the nature of pestilential cholera—the manner in which the specific poison produces its effects on the human body, and his method of employing the saline treatment for its eradication. I also feel it necessary to make some observations on the views of some other authors on cholera, in order to demonstrate the wide difference between Dr. Stevens' conception of the nature and treatment of this disease, and his practice in contradistinction to theirs.

On the appearance of cholera in England in 1831. Drs. Russel and Barry, the medical advisers of the then existing Board of Health, judging by their statements, and published directions to the Medical Profession and to the public, must have entertained strangely incorrect notions of human physiology. These gentlemen stated, that the spinal marrow is the true source of vitality and function; they averred that the then new disease was the offspring of "*germs;*" but, they offered no clear explanation how the said *germs* of cholera produced their effect upon any of the component parts of the human frame, except that they acted in some mysterious manner on some particular spot of the spinal marrow. Incorrect conceptions induce incorrect conclusions, and, therefore, those practitioners did no service to humanity, who taught that the cause of the symptoms of cholera and other idiopathic fevers arose from some mysterious impression made through the medium of the nervous system on the brain or spinal cord. That such hypotheses as these have done no good has been proved in the result of the treatment of cholera and other malignant disease. Drs. Russel and Barry not only tell us that the spinal marrow is the seat of the then new disease, but they also tell us that the germs of cholera produce a purgative effect, but how or why they do so they did not know. They divide cholera into three periods, the premonitory, the collapse, and the fever stages. They very foolishly considered the collapse as the first, and the secondary fever as the second stage. Dr. Stevens, on the other hand, considered the premonitory symptoms as the result of the presence of the poison in the body; the sickness of the stomach, and the bowel complaint, he considered as the efforts of nature to expel the deadly poison from the blood and the body; consequently, this is evidently the first link in the chain of effects; the collapse he considered to be the second stage, and the fever he believed to be entirely the result of bad treatment; or, in other words, the evil effects of locking up the poison in the body by opium, astringents, absorbents, &c. Drs. Russel and Barry themselves afford us a melancholy instance of the truth of this view:—"To give a notion of the importance and danger of cholera fever, a most intelligent physician, Dr. Reimer, of the Merchant Hospital, (in St. Petersburg,) informs us, that of twenty cases treated under his own eye, who fell victims to the disease, *seven* died in the cold stage and *thirteen* in the consecutive fever. Yet, even with such facts as these staring them in the face, they advised, in their printed directions, "When the diarrhœa affords time for distinct treatment, it ought to be arrested at once by the most prompt and efficient measures; by opium in moderate doses, astringents, local bleeding by leeches, if the subject be plethoric; by cordials and sulphate of quinine, if there be cold sweats; by confining the patient strictly to bed, and keeping up heat; by diet, by emetics." The contradiction will be here observed, of desiring the sickness and bowel complaint, first to be stopped by opium, and then promoted by emetics. In severe cases they directed that, "should no medical person be at hand, let the patient be then immediately placed betwixt warm blankets, then let two table-spoons-full of common kitchen salt be dissolved in six ounces of warm water and be given immediately and at once, if he be an adult," (certainly the best method of treating dogs for distemper.) Only to *adults* remark! leaving the juveniles to take their chance. In another section of this curious document Drs. Barry and Russel tell us that the nervous centre, the spinal marrow, is the great source of vitality and function. A softened spinal cord was consequently imagined to be the seat and cause of the malady; for as they tell us this pathological state had been observed in the autopsy of some cases of cholera, therefore the actual cautery was recommended to be freely applied on one, two, or more places on each side of the spine. Such is the synopsis of the medical treatment recommended by the central Board, based on the opinion of two physicians, as if burning three holes on each side of the spine could expel from the blood and body the narcotic poison which appears to be in reality the remote cause of this disease. First, they desired that the poison should be locked up in the body; secondly, that emetics should evacuate it; and, thirdly, that a *hot poker* should destroy it at the fountain head!

There is one circumstance I must remark on here as a matter of history. We know that the cases treated by the rules of the Board, as well as by similar means in other places, were during recovery attacked by secondary or consecutive fever, often proving fatal; yet, in the first 100 cases under the saline plan at Coldbath-fields prison, not one suffered from this secondary fever; the cases progressed from collapse even to health in a few days, save those who were much emaciated during the attack, and these more slowly recovered; whilst in other places, even those mild cases that were treated by opium, astringents, and other *retentive* remedies, owing to the effect of the still persistent poison, had consecutive fever, which proved, perhaps, more fatal than the cholera would have done if left to nature.

Oxygen is generally believed to be a simple element. If this position be true, then Dr. Stevens's theory on this subject is false; for he maintains that not only animal heat but vital electricity is derived from the oxygen of the air that we breathe. In his work on the from arterial to venous blood does not take place in either arteries or veins, but in the cells intermediate in respect to the extremities of arteries and veins. When in the capillaries, the oxygen combines with free carbon, and in changing its form the oxygen parts with both heat and vital electricity in a free state; thus the high temperature of warm-blooded animals is maintained, and the vital electric life evolved from the oxygen is the true cause of bodily sensation. Hence, in the last stage of cholera, when the circulation is all but arrested, neither heat nor vital electricity is evolved, the body becomes cold from the non-evolution of heat, sensation ceases, and the material body dies from the loss of its vital electric life, which is, according to Dr. Stevens' new views, the cause of bodily sensation.

Dr. Stevens believes that the recent discoveries of the properties of chloroform and ether afford a strong proof of the accuracy of these views, for neither ether nor chloroform contain oxygen in a free state; consequently, when a human being breathes the vapours of either of these dead gases, as neither of them contains free oxygen, the vital electricity is no longer evolved in the body, consequently, as the sensational nerves can no longer convey the impression of pain to the mind, the mental spirit is no longer capable of receiving the intelligence, which, under ordinary circumstances, the sensational nerves conveyed to it. If all this be true, if the heart derives its material electricity from the brain or the cerebro-spinal system; and if the body derives its vital electricity from the blood, and the blood from the air that we breathe; and if the vital electricity contained in the saline matter of the blood be the true cause of the contractions of the heart and capillary arteries, how then can the blood stimulate the heart when its electric saline matter is lost in the last stage of cholera? Under such circumstances, how can opium, or calomel, or chalk julep, or cajeput oil, or hot irons applied to the back, restore the oxygen to the blood, or saline electric matter to the dead blood in the last stage of cholera, any more than they can restore the action of the heart in asphyxia from drowning or other causes?

I have already given a short description of the theory and practice recommended by the then existing Board of Health; and if such was the treatment set forth by authority, in 1831, as the polar star, to lead the sick to safety, why marvel if the mortality from cholera continued? Had Truth been allowed to flow in her natural course, long ere this cholera would have been as harmless as an attack of gout, as the statistics of the Coldbath-fields Prison, the Greville-street Hospital, and some other places demonstrate. For the present, we have lost the merit of having taught the whole world the natural and proper treatment of this pestilence; viz., the restoring the saline stimuli to the blood, which, as has been already stated, is proved by Dr. Stevens' experiments to be the cause of the action of the heart, as well as of the capillary arteries over the whole body.

In another place it shall be shown, that certain individuals, at that time, of unbiased principles, and of their own free-will, lauded Dr. Stevens to the skies as the author of some mighty discoveries, regarded him as a most meritorious person, and described his views as of the last importance to mankind! Yet these very same critics did, in a very brief time, for *weighty* considerations, make attempts to prove that Stevens' views were false, and his saline treatment of cholera a delusion.

Dr. Stevens' theory of the nature and effect of the poison of cholera, and his system of treating the disease naturally, may be tersely stated in the following aphorisms:—

1st. The poison of cholera, however generated, is inhaled, and, being mixed with the blood in the lungs, does, in an indefinite time, poison the whole of that fluid; consequently, the poisoned blood soon affects the whole body. The vital preservative power now makes an effort to eject the poison by vomiting and purging; in these efforts, however, the natural saline serum of the blood is so far diminished as to leave it too vapid and thick, and, by the great diminution of the electric salts, the blood is soon too weak to stimulate the action of the heart and capillary vessels, the action of which is essential to the evolution of heat and vital electricity, the true cause of bodily sensation.

2ndly. The rational treatment of Dr. Stevens is based on re-supplying the lost saline ingredients, by offering to the lacteals of the whole intestinal surface an aqueous vehicle containing these. The evacuation of the serum occasions great thirst, and the plentiful supply of the artificial fluid is readily imbibed into the blood, the heart is thereby invigorated, its natural action restored, and the blood then acquires its wonted colour.

To recapitulate, Dr. Stevens considers cholera as the result of a narcotic poison which emanates from the bodies of the sick, and which taints the air around the infected person. This poison is the remote cause of the disease; the immediate cause of the symptoms is the poisoned blood, which, infecting the whole body, tends to paralyze the whole frame. But, above all, it acts with most energy on the blood, the heart, and whole vascular system. The blood soon loses its saline ingredients, and the loss or the great diminution of these Dr. Stevens considers as the cause of death. If these conclusions be correct, then the first curative effort in cholera should be, to evacuate the poison *per vias naturales*, and, at the same time, to supply the necessary stimuli on which the action of the heart solely depends. Such were the impressions on Dr. Stevens' mind when he conceived the new method of treating this new disease.

The practice used at Coldbath-fields Prison was simply this:—When a patient was attacked with merely the premonitory symptoms, he was removed from his cell, and placed in the Observation-ward, where an even, elevated temperature was kept up by night as well as by day, and the strictest attention paid to obtain pure air and cleanliness. A Seidlitz powder was immediately given, and, if the patient felt sinking, without any bowel-complaint, more

active purgatives were then employed. Three or four teaspoonfuls of Epsom salts were added to the draught; on the medicine acting, the patient had plenty of thin beef-tea, well-seasoned with salt; when great irritability of the stomach prevailed, a sinapism was applied to the epigastric region; thirst was slaked with seltzer or soda, or plain water, *ad libitum*. Such were the means employed to favour the removal of the poison from the body, and, under this simple treatment, twenty-four out of every twenty-five patients had no further complaint, but, in a few days, were dismissed cured. It will afterward be clearly proved, that, of the 1,300 individuals then in the prison, at one period there were upwards of eighty patients suffering at the same time with premonitory symptoms, and not more than one in twenty-five cases were taken into the cholera wards, nor entered as cases of cholera. But, if cramps, coldness, or sinking prostration were present, then they were considered as cholera patients, placed in the cholera wards, and entered in the cholera journals as patients with premonitory symptoms.

The non-purgative neutral salts were then administered every half hour, more or less frequently according to the severity of the case; where the stomach was very irritable, a large sinapism was applied to the gastric region; and when the patient complained of heat or burning at the stomach, an additional quantity of the carbonate was added to the saline powder, so that the proportions were varied according to the varied symptoms. In some cases, where life seemed rapidly ebbing, a strong solution of the same salts that were given by the mouth was injected into the bowels at a temperature of 100 degrees. In many cases, the rapidity with which this solution reached the blood appeared miraculous, the action of the heart was soon increased, warmth and sensibility were restored, and the colour of the face brightened, as if by magic. Two years afterwards, Dr. Stevens told me, that, in extreme cases of collapse, this latter method succeeded far better than injection of salines into the veins. In the treatment of the above cases, the powder usually given was composed of

Muriate of soda, ℥j.;
Carbonate of soda, ʒss.;
Chlorate of potass, gr. vij.

In severe cases the muriate of soda was increased to a drachm, or even more, if peculiar symptoms called for it.

Such is the outline of the treatment that was used at the prison in the first two irruptions in 1832: adding to these, then, the 24 cases of 1833 to my first list, they make in all—

526 cases / 44 deaths } or 8·3 per cent.

But taking away 16 from the deaths of those *not under the saline treatment* of Dr. Stevens, which I can do with propriety, then 28 deaths in 510 cases give an average mortality, on the whole number thus treated, of about 5·4 per cent.; and not, as you have stated in your Table, an average mortality of 76·3 per cent. under Dr. Stevens' treatment, and only 14 per cent. under that of Mr. Marsden's, at the Free Hospital, Greville-street.

The success of the new method was too brilliant for the withering curse of jealousy and selfishness to allow to pass unscathed; the means employed and the acting motives, shall be treated of in another place, and that as promptly as the fullest assemblage of facts can be completed.

Having now given an outline of the result of the treatment that was used in the prison of Coldbath-fields in 1832 and 1833, I must now call on you to bring forward your proofs of the failure of Dr. Stevens's saline treatment in the cases to which you refer in the third Table, page 106, No. 478 of the 19th volume of the *Medical Times*.

Remaining, my dear Sir,
Very faithfully yours,
ED. ASTBURY TURLEY.

Ivy-house, Worcester, 4th March, 1849.

To G. Ross, Esq.

P.S.—In looking over my last published paper (page 348), I find an error, originating either in manuscript or type. It is stated—"Out of the 36 remaining cases, I find there must have been 3 deaths and 33 recoveries." It ought to read thus—Out of 33 remaining cases, I find that there must have been 3 deaths and 30 recoveries.

THE BIRMINGHAM GUARDIANS AND THEIR MEDICAL OFFICERS.

[To the Editor of the Medical Times.]

SIR,—Every member of the Profession who is a reader of the *Medical Times* must see weekly proof of the great interest you are pleased to take in the much-agitated question of Poor-law medical remuneration. For this interest, and the powerful aid which you have given and continue to supply to the important labours of the Committee of Convention, you deserve the support and best thanks of the Profession. While complaints from all parts of the country are made of the injustice of compelling Poor-law Medical officers to use their exertions under the Nuisances-removal and Diseases-prevention Act, without remuneration, it cannot, therefore, but be a matter of some interest to yourself and the readers of the *Medical Times* to know, that the Birmingham Guardians, with a vote amounting almost to unanimity, have agreed to pay their District Medical Officers the sum of one guinea per week, for their services under this Act, from November last.

The District Medical Officers of Birmingham think that it may, if made public, which you are well able in part to accomplish, operate as an example to those Boards of Guardians who refuse to acknowledge the just claims of their medical officers. Moreover, it is strictly due to the Guardians of Birmingham, amongst whom are many liberal-minded men, to state, that from their first interview on this subject in November last with the Medical officers, the strictest honour on their part has been exhibited, and the best understanding thus preserved.

It is matter of extreme regret that the same sense of justice does not exist in all bodies of Guardians; but, under the present system, this is not to be looked for. In the rural districts in particular, nothing will manifestly suffice but a Government regulation on the subject; and I earnestly hope, that the labours of the Committee of Convention of Poor-law Medical Officers will, ere long, be crowned with success.

I am, Sir,
Yours obediently,
WILLIAM HINDS, M.D.

Birmingham, 17th March, 1849.

ON POISONING BY WATER PASSED THROUGH LEADEN TUBES AND RETAINED IN LEADEN CISTERNS.

[To the Editor of the Medical Times.]

SIR,—Some months since the *Medical Times* reported a few cases of lead poisoning, from the use of water passing through tubes of that metal; and owing to Dr. Thomson's able paper having been republished in the *Morning Herald*, considerable good has resulted from the subject meeting the eye of the public generally, and from his confirmation of facts which have occurred in other localities. How many of these lamentable cases of poisoning have been brought to light within the last few years? How many of those cases were mistaken for diseases incidental to mankind, over a long period of time? The origin of the evil being unknown, the silent instillation of the poison went on in spite of all remedial agents, and finally resulted in death. The public are daily becoming more enlightened on the subject, while chemical investigations demonstrate the danger to which they are exposed. I would suggest to the Profession the propriety of following Dr. Thomson's example, in publishing every case of lead poisoning arising from the cause in question; and I would further suggest, that those persons who have been rescued from the various effects of the poison should register their names at the Board of Health, which measure would be the means of remedying the evil more speedily, and making those localities, where the water contains no protecting agents, safe places of residence for all classes of society, instead of their being entrapped, as they have hitherto been, when they change one place of abode for another.

There is but little chance of improving our sanitary condition in England if a wholesale system of poisoning be allowed to exist: the ill has only been partially arrested, but will still make its ravages if the cause be permitted to remain.

In order more fully to show the position in which the public are placed, I will give an instance or two, by way of illustration, out of many of a similar description. A gentleman being about to take a house, inquired if the water was good? The reply was in the affirmative, and conscientiously one might make this assertion, independently of the lead. However, the house was taken, and, after a few months had passed over, one member of the family became seriously ill, and the surgeon in attendance pronounced the case to be that of lead poisoning. The water was sent to me for examination, which, as usual, was strongly impregnated with lead, thus affording sufficient evidence to account for the direful symptoms.

I will now relate a case of inconvenience resulting to tenants. A gentleman, residing a short distance from this town, requested me to examine the water for lead at his place of residence. I found a large quantity of the deleterious salt in solution, and advised him to make application to his landlord for the removal of the metal. The house was taken for two or three years, and the owner of the property obstinately refused to meet the wishes of his tenant. Some months having passed over I received a letter stating, that he was put to great inconvenience, having to send out for all the water required for domestic purposes, or run the risk of being poisoned, and requested me to report the particulars to the Sanitary Board. I have not taken this step, but waited to see if the authorities of that Board intend to take up the subject; and, in the meantime, if death should occur in that or any other house where the necessary caution has been given, I should consider it a duty to remind the coroner of the necessity of holding an inquest.

Since taking up this subject about seven years since, investigations have been more frequently made by chemists in different parts of the county, and the further the investigations are carried the more cases will be found, the symptoms not always being developed alike, but differing according to the predisposition of the constitution. It not unfrequently happens that the lips put on a blue appearance, particularly in the morning, or the skin assumes a blue hue about the neck and face, even when the blue line round the gums is not observable; but persons may be seriously affected without these appearances. The finding of lead in water, together with other symptoms which do not belong to my province to bring forward, is sufficient to justify the abandonment of the metal; and I shall never cease to give every warning in my power until steps have been taken to effectually remedy the existing evil.

I am, Sir, your obedient servant,
H. OSBORN.

Southampton, March 14, 1849.

THE OUT-DOOR PAUPERS' BILL AND THE MEDICAL PROFESSION.

[To the Editor of the Medical Times.]

SIR,—In the last Number of your valuable publication, you state, that a magistrate, under the Out-door Paupers' Bill may order any medical man he thinks fit to visit and inspect pauper establishments. Will you do me and the Profession the favour to state, whether the said Bill contains also a clause for remuneration; otherwise I fear any such order would be little more than waste paper; the magistrate missing his object, the medical man his fee, and the poor paupers the necessary revision.

YOUR CONSTANT READER.

[There appears to be no provision in the Bill for remunerating medical men.—ED. *Med. Times*.]

THE PENAL CLAUSE OF THE APOTHECARIES' ACT.

[To the Editor of the Medical Times.]

SIR,—In your last Number, I perceive a letter on "the Penal Clause of the Apothecaries' Act," in which the writer asserts, he will "not yield to any one in liberal feelings," and then proceeds to ask the question, "Is there any one of the illegal Practitioners, calling himself a General Practitioner, who, before he commenced his career, was not fully aware that he would be infringing the Apothecaries' Act?" I will answer for myself, and I dare say for many hundreds of others, practising Medicine as a science in this island, though not calling myself a "General Practitioner"! but a "Physician and Surgeon." I never attended a single lecture in Great Britain, nor did I ever serve what is called an Apprenticeship, in this country, to an Apothecary for five years!—which, I have been given to understand, consists in compounding medicines in a *bonâ fide* shop where money is received for the goods delivered. And this is the noble portal through which nine-tenths of English Medical Practitioners enter the *Profession*, as they term it. Can an establishment of this sort, tacked to a science, add dignity, or even common respectability, to those who are obliged to follow such curriculum?

After studying abroad, I returned to my native country, which I left at an early age, as I thought, qualified, in the true sense of the word, to practise Medicine. I was soon successful in obtaining patients, when some of my professional brethren, knowing that I was not an Apothecary, nor even an English Surgeon, annoyed me in every possible way they could, by telling the people I was not qualified. I wrote to the College of Surgeons, and demanded an examination; and, as I had studied the Profes-

sion upwards of six years, and had the necessary certificates, and more to boot, I was admitted, and passed. I applied to the Apothecaries' Company, I went to their shop and looked over their *concern*, as it is termed. I must confess I was shocked at the idea of joining myself to a trading company,—I, who had learned to converse in Latin and Greek, in German, French, and Italian, join a company who sold an ounce of real Turkey rhubarb! However, this was pride, and pride must have a fall. I was told, that, as I had not served an Apprenticeship, nor taken out my Certificates, layer upon layer, as prescribed by the Company, I could not be admitted!

I then took Mr. Belfour's opinion as to how I might practise my Profession. He informed me, that, provided I did not sell, nor was in any way connected with the sale of drugs, I might practice as Physician (having a foreign degree) and as Surgeon. As such I have been practising, and, I am happy to add, successfully. Nor do I know, even up to the present hour, that I am "infringing the Apothecaries' Act."

I am, Sir, your obedient Servant,
Jus.

March 19, 1849.

MANCHESTER MEDICAL REFORMERS.

MEMORIAL TO THE RIGHT HON. SIR GEORGE GREY, BART., M.P., ONE OF HER MAJESTY'S SECRETARIES OF STATE.

The undersigned members of the Medical Profession, practising in Manchester and its immediate neighbourhood, beg to express the gratification which they feel at the interest you have evinced in the subject of Medical Legislation; and to offer you, at the same time, their best thanks for the efforts you are making to bring about a satisfactory settlement of the question.

They feel bound, however, to offer you the very serious objections which they entertain to a scheme proposed for the purpose, imbodied in certain "Outlines of a Bill for regulating the Profession of Physic and Surgery," which is contained in a "Report on the present state of the Medical Reform Question, published by the Council of the National Institute of Medicine, Surgery, and Midwifery;" which Outlines, it is stated, have been submitted to you by a Conference of Delegates from the principal Medical Corporations in London, as likely to be acceptable to the Profession at large.

The undersigned Memorialists would observe, in the first place, that no satisfactory reasons exist for the establishment of a College of General Practitioners in England, when no corresponding institution is proposed for Scotland and Ireland; and they see, moreover, no good reason why any such incorporation should be proposed at all. It has been urged that the Royal College of Surgeons of England, unlike that of Scotland or of Ireland, has always been an institution for the promotion of Surgery merely; on which account the Council have constantly repudiated any arrangement whereby future members of the College should undergo some comprehensive examination in all the sciences, an acquaintance, with which is more or less required in the several exigencies of medical and surgical practice. The undersigned, however, would submit that the voice of the great majority of the Profession, and the all but unanimous disposition of members of the College, should be paramount to the antiquated conceptions of certain members of the Council; and they would urge that the English College, either by legislation or by Royal Charter, should be so far assimilated in its constitution to those of Scotland and Ireland, that one scheme of medical polity should uniformly apply in every part of the United Kingdom.

The undersigned would urge upon you, that any alteration in the constitution of the English College of Surgeons, at the instance of its virtually irresponsible Council, is deemed by them to be quite out of the question, and yet without an alteration in its present constitution, harmony between the College and the great body of the Profession cannot be re-established. They would recall your attention to the circumstance, that legislative enactments, some years ago, harmonised municipal institutions with the spirit of the age, irrespective of the feelings of irresponsible councils; and they would submit, that no grounds exist for the application of a different principle in the treatment of Medical Corporations. But even if it were conceded that the establishment of a College of General Practitioners in England were a necessary or a good thing, the undersigned maintain that the kind of institution proposed would fulfil none of the ends for which such a College has been stated by the Conference to be required; for, by the draft of the charter which is solicited, it is proposed to admit doctors and bachelors of medicine to the membership, without any further examination, in this way leaving the public, to whom they thus become certificated as General Practitioners, without any guarantee for their practical efficiency in midwifery or pharmacy, and giving them, moreover, equal advantages with those who have been examined in every department of the Profession. The Memorialists would observe, that attendance upon lectures, without the expectation of examination on the subject of the same, is notoriously a mere formality. A still greater anomaly exists in the proposal to enrol, in the College of General Practitioners, persons holding only the diploma of the English College of Surgeons, seeing that it is merely a testimonial of anatomical and surgical proficiency; but if this circumstance were passed over as a mere temporary evil, necessary for the adjustment of certain existing anomalies, the proposed scheme of the Conference would permanently establish the practical absurdity of authorising the Fellow of the College, without any medical examination whatever, not only to practise every department, but further to do so with the prestige of superior rank. If then the Council of the College of Surgeons be sincere in its declarations, that its purpose is merely to educate anatomists and practitioners in what is called pure surgery, it is a flagrant injustice to the community at large that they should thus confer privileges to practice the profession generally.

The Memorialists hold, that if a College of General Practitioners is to exist at all, it should be for the three kingdoms, and as a common portal to all who enter the Profession with the intention of practising the same in all its departments; and they would remind you that, except in the metropolitan and some other of our leading cities, almost all members of the Profession are general practitioners, whatever be their academic or collegiate distinction.

The Memorialists would further observe, that no legislation can be acceptable to the great body of Practitioners in England, that may in any way ratify the arrangements introduced into the College of Surgeons by the Charter of 1843. In remedying the retrospective injustice perpetrated by that enactment, they would urge you (in any Bill that may be introduced) to abolish the distinction in the register to be made between Fellows and those who were members prior to the grant of the Charter in question. They would more especially urge upon you, that the distinctive classification of a register should have regard not only to collegiate rank, but to the actual circumstances of practice; for example, that to be registered as Physician, the doctor or bachelor of medicine should practice in that capacity,—that to be registered as Surgeon, the Fellow or member should at least cease to dispense his own medicines,—and that all, whether Doctors of Medicine, Fellows or Members of Colleges, should be required to register as General Practitioners, if such be their actual position.

The Memorialists, however, would again submit, that for all purposes benefiting science or the community, there is no requirement for any additional college, and that no practical advantage can result from any such threefold classification in the proposed register, as that just referred to; because, out of London, the actual condition of the Profession would be found to have no reasonable correspondence with the same.

They would, in conclusion, earnestly entreat you to decline becoming a party to any legislation in the spirit set forth in the "Outlines of a Bill" published by the Conference of Delegates. They have to state, moreover, that if, unfortunately, from the extraordinary activity and perseverance of a very small minority of the Profession, any such Bill should pass into a law, Members of the English College of Surgeons will, in many cases, feel bound to decline being placed on the register altogether, rather than to occupy therein an unjustly subordinate position. The Memorialists sincerely hope that the Members of the College will not be driven to so extreme a proceeding; but they are convinced, at the same time, that if the course of events should call upon them to take such a step, they will not hesitate to do so.

[Signed by 142 of the leading Members of all classes of the Profession in Manchester and its immediate neighbourhood.]

ANNUAL REPORT OF THE GERMAN HOSPITAL, DALSTON. 1848.

We are glad to perceive, by the Annual Report of the German Hospital, that the Institution is in a thriving condition, and that the expectations of the founders, both as to the support which it would command, and as to the acknowledgment of its utility by those for whom it is intended, are sufficiently realised. Few of our readers have probably had an opportunity of visiting it; nor can it be said that the extent of the Hospital, or the character of the cases admitted, present any peculiar attractions to medical men. The chief feature, in addition to its being devoted exclusively to the reception of Germans, is, that the matron and the three nurses belong to the German Protestant Sisterhood of Charity. They have been instructed at the Institution of the Rev. Mr. Fliedner, at Kaiserswerth, near Bonn; and, according to the Report before us, "have in every way answered the expectations formed of their conscientiousness, energy, and humility." The writer of the Report adds, that "as it is to be hoped that the Institution generally may lead to promote an interchange of good offices and influences between the German and English nations, so the benefit conferred upon the sick at the German Hospital, by the Protestant Sisters of Charity, may gradually be extended to English Hospital." The German Hospital, which was founded in 1843, at the suggestion of Dr. Freund, and under the special patronage of the King of Prussia, occupies the former Infant Orphan Asylum at Dalston, and is about a mile and a half distant from Shoreditch. "The buildings contain four lofty and spacious wards, with ten beds in each for the male patients, several rooms for the female patients, a separate set of rooms for the sanatorium, a chapel, and the necessary offices." The sanatorium is destined for the reception of persons belonging to the higher classes, who are strangers in London, and are desirous of securing the comforts of a home and good medical attendance at a moderate expense. The charges are fixed at from 1*l.* to 2*l.* per week. The number of patients treated during the year June 18, 1847, and June 18, 1848, amounted to 467, of whom 407 were males, 46 females, and 14 children. It is interesting, in a statistical point of view, to observe the predominance of certain trades among the in-patients; thus we are told that, among the 407 males, there were 109 sugar-bakers, 45 bakers, 12 musicians, 43 tailors, 14 carpenters, 10 clerks, and 2 were Doctors of Philosophy; the rest being mechanics and artizans belonging to other trades. Among the 46 females, there were 15 maid-servants and 8 music girls. The great majority of patients are natives of Prussia and Hanover, 112 belonging to the former, and 105 to the latter. Out-patients, also, receive advice and medicines at the Hospital, and the poor English in the neighbourhood largely avail themselves of the advantage thus offered them. There are, also, two town dispensaries in connexion with the Institution, one at the east, the other at the west end of London. The number of out-patients relieved during the year were, at the Hospital, 1,280; at the Eastern Dispensary, 589; at the Western, 49.

The present Report does not enter into greater detail in regard to medical topics, which must probably be attributed to the changes which have lately taken place in the Medical Staff of the German Hospital. In the place of Dr. Freund, who resigned his office at the commencement of the past year, the Governors have elected Dr. Swaine, whose name and reputation may be expected to contribute much to raise the character of the Institution in the eyes of the Medical Profession. A new office, that of Surgeon, has been lately created, which is held by the late House-Surgeon, Dr. Straabe, and in his place Dr. Benecke has been appointed. It may be stated, that Drs. Cobb and Babbington are the Consulting Physicians; Messrs. Keate, Key, and Waine, the Consulting Surgeons.

GOSSIP OF THE WEEK.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, 15th March, 1849:—Theophilus Taylor, Hereford; John James Williams;

William Nicholson Price, Leeds; Thomas Newham, Rothwell, Northamptonshire; John Livy.

War Office, March 16.—6th Foot—Staff Assist. Surg. Robert Marshall Allen, to be Assist.-Surg., vice Mostyn, promoted on the Staff, 17th Foot—Assist.-Surg. Thomas Cowan, M.D., from the 60th Foot, to be Assist.-Surg., vice Heffernan, who exchanges. 31st Foot—Staff Surg. of the Second Class John Crespigny Millingen, to be Surg., vice Hart, promoted on the Staff. 60th Foot—Assist. Surg. Nesbitt Heffernan, M.D., from the 17th Foot, to be Assist.-Surg, vice Cowan, who exchanges. Hospital Staff—Surg. Henry Hart, M.D., from the 31st Foot, to be Staff Surg. of the First Class, vice William Bain, M.D., whose promotion has been cancelled; Assist.-Surg. John William Mostyn, from the 6th Foot, to be Staff Surg. of the Second Class, vice Millingen, appointed to the 31st Foot; Staff Assist.-Surg. Simeon Henry Hardy, M.D., from half-pay, to be Staff Assist.-Surg., vice Allen, appointed to the 6th Foot.

Death of Dr. Lloyd.—We regret to learn that Dr. Lloyd (who was lately a candidate for the office of Physician to the Bedford General Infirmary), died last week at Aberystwith. He was ill at the time of the election. We understand he was greatly respected in the neighbourhood where he resided.

Obituary.—March 10th, at his residence, Wavertree, in the 74th year of his age, John Latham, Esq., surgeon.—At the College, Elgin, on the 15th inst., Dr. William Mackie, late of Bombay.—On the 15th inst., at his mother's residence, 19, Tonbridge-place, New-road, of consumption, Robert Abraham Varicas, Esq., M.R.C.S., late of Woburn-place, Russell-square.

Awful Progress of the Cholera in Limerick.—The progress of cholera in this quarter is most appalling. One practitioner alone saw 60 cases, of which 54 died in the course of Thursday. No adequate preparations had been made by the Board of Health, sitting in Dublin, to prevent the spread of the disease in Limerick, and the consequent confusion has proved most fatal to the inhabitants. Six foreign sailors were the first attacked, five of them died, and every individual in the house where they lodged died of the disease.

A New Antidote against the Cholera.—There has been discovered on Mount Olympus in Asia Minor, a plant, of which the botanical name is unknown. The stalk and leaves resemble thyme, the flowers those of lavender. After a number of experiments it has been found that a decoction of this plant has the power of producing reaction in the stage of collapse in cholera,—to arrest the diarrhœa and sickness,—in fact, to bring about the most satisfactory results. This plant, which is affirmed to be a true specific against cholera, is known by the name of *Zhorabia*.

Melancholy Result of Improper Medical Treatment.—On Tuesday week, an inquest was held before Mr. Roberts, deputy-coroner for the borough of Manchester, at the Bridgewater Arms, Medlock-street, on the body of Elizabeth Clegg, aged 12 years, daughter of Edmund Clegg, policeman, Hulme. The facts were of a very melancholy description. The father had been reading Dr. Coffin's book on medical treatment on Sunday, and his daughter being ill, he took the symptoms to be those of fever, and resorted to the mode of treatment laid down by Dr. Coffin in such cases, which was, to put the girl in a vapour bath. A quantity of hot water was placed in a washing mug, a hot brick put in the water, and then the girl, with a blanket round her, was seated on a board placed across the mug, and kept there for some time. She was then put to bed, but getting worse, Mr. James Robb, surgeon, was sent for on Monday morning. He found that the girl was much scalded, and in such a low state that no pulse could be felt in the wrist, but he prescribed some medicine, and called to see her again on Monday night. He found her on Monday night to be in a state of collapse, and directed the application of some bottles of hot water to her body and other means of restoring heat, but she died during the night. There was every reason to believe the distressed parents had acted ignorantly in the matter, and the jury found a verdict of "Died from the scalds of a vapour bath applied as a medical remedy."

Hotel Dieu of Lyons.—After a most brilliant concour, M. Desgranges has been elected Principal Surgeon of this Hospital.

Antiquity of Anæsthetic Agents in China. M. Stanislas Julien has addressed to the Academy of Sciences a note in reference to a substance employed in China more than a thousand years ago, about the third century of the Christian era, for the purpose of producing a temporary loss of sensibility. These curious facts have been taken from the great Chinese work, entitled, "Kou-Kin-I-Tong;" or, "A Compilation of Ancient and Modern Medicine," published at the commencement of the sixteenth century. It is there said:—"When Moa-Tho knew that it was necessary to employ acupuncturation, he used the remedy in two or three places, the moxa being applied at the same time as it was indicated by the nature of the affection which he had to treat. But if the complaint is situated in parts upon which the needle, the moxa, or liquid medicaments cannot produce any action, for instance, in the bone, stomach, or intestines, there may be given to the patient a preparation of hemp (ma-yo), and in a very short time he *becomes so insensible, that he seems intoxicated or deprived of life.* Then, according as the case may be, the operations are performed, of amputations, &c., and the cause of the malady is removed. Subsequently, the tissues are brought together by sutures, and liniaments are applied. After some days, the patient is restored to health, without having felt, during the operation, the least pain." Well may we say with truth, "There is nothing new under the sun."

The Doctor's Wig.—The wig, in former times, was looked upon as no inconsiderable part of the insignia of a physician. Even in the middle of the last century, so much importance was attached to it, that Dr. Brocklesby's barber's boy was accustomed to carry a band-box through High 'Change, exclaiming, "Make way for Dr. Brocklesby's wig."

MORTALITY TABLE.

For the Week ending Saturday, March 10, 1848.

Causes of Death.	Total.	Average of Five Winters.
All Causes	1,083	1,169
Specified Causes	1,073	1,164
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	233	221
Sporadic Diseases:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	61	54
Tubercular Diseases	196	203
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.....	122	141
Diseases of the Heart and Blood-vessels.....	42	40
Diseases of the Lungs, and of the other Organs of Respiration	198	243
Diseases of the Stomach, Liver, and other Organs of Digestion	64	67
Diseases of the Kidneys, &c.	12	13
Childbirth, Diseases of the Uterus, &c.....	5	9
Rheumatism, Diseases of the Bones, Joints, &c.....	8	7
Diseases of the Skin, Cellular Tissue, &c.	..	1
Malformations	1	3
Premature Birth.....	19	23
Atrophy	22	15
Age.....	62	73
Sudden	3	14
Violence, Privation, Cold, and Intemperance	25	37
Causes not Specified	10	5

An Epidemic of Voluntary Mutilations.—In the month of February, 1844, 350 men of the 3rd battalion of the 1st Regiment of the Foreign Legion was encamped at Sidi-bel Abbés, in the province of Oran. A soldier mutilated himself by a blow upon his wrist with the lock of his gun. Thirteen others inflicted a similar injury upon themselves within twenty days. None of these men would admit that the mutilations were voluntary; but all affirmed, that they arose from pure accident while cleaning their arms. It was not possible, in a single case, to discover a plausible motive to explain so strange a circumstance. The commanding officer, alarmed at this singular epidemic, and, supposing it might extend, removed the camp some seven or eight leagues, to a place occupied by the 10th battalion of Chasseurs of Vincennes, commanded by M. Boëte. The astonishment of the officer commanding the Foreign Legion was great, when M. Boëte informed him that eight of his men had mutilated themselves in the same way, and nearly at the same time. The commanding officer and the surgeon both affirm, that there was no communication between the two camps. But even supposing that a communication had existed, it affords another example of the force of imitation.

TO CORRESPONDENTS

"Mr. Brown, Castle Donnington."—The cases shall receive insertion at an early opportunity.

"Mr. Clarke, Lynton."—We are compelled to postpone the Letter to next week.

An Irish Correspondent writes as follows, in reference to the Irish Medical Charities:—"Our Medical Charities at this side of the water are, I fear, about to undergo a serious change from their present state of utility, and I may add respectability, which their connexion with the gentry of the country confers upon them. I fear much they will fall into the shameless and ruinous state of the Poor-house Hospitals; and for the patronage of men of consequence, men of charitable feelings, we shall be presided over by a body of green-grocer parish guardians; men who, having never contributed one farthing to the voluntary support of these charities, have ever been found as their constant maligners, as an apology for their wretched penury."

"A Constant Reader, C.B.Y.," asks, "Are there any physicians in London, practising as such, who hold only the Edinburgh diploma, and are they allowed to practise generally."—We do not know of any.

Mr. Jones's case of amputation of the thigh at the hip-joint in the Jersey Hospital shall receive an early insertion.

"An Annual Subscriber."—The extra sum cannot be recovered from the Guardians, without the surgeon having previously received an order.

"Chemicus" writes:—"A lady of title left with me, late the other evening, a prescription, as under, to be called for in half an hour, as she was about leaving town:—

Rept. Pil. ut antea prescrip. et ℞ Mist. Conil. C. C. G. ℥xii. Sumat. Coch. ij. Amp. ter die.

As there is no acknowledged Mist. Conil. C. C. G., I could not in conscience prepare it. A chemist, near Londonbridge, was the party to whom she was sent, and who first prepared it; since then it was had at the Isle of Wight, and lately at St. John's Wood; but the mixtures obtained from the three establishments were, what might be expected, 'quite different.' The prescription requires no comment from me, as it will at once be apparent to the Profession, that its object was an interested one,—and that it is an act of injustice to the patient and chemist, is beyond doubt; also a direct injury to the prescriber, inasmuch as his patient was not taking his medicine."

"A Looker On."—The Profession would attach no value to our Correspondent's communication under an anonymous signature.

"A Surgeon and Apothecary" should send us his name and address in confidence. If he is in possession of a knowledge of the facts referred to in his letter, we shall feel obliged by an early communication from him.

"An Articled Pupil."—The degree of M.D. from the University of London does not confer a right on the possessor of practising as a physician in the metropolis.

"Autopsy."—It does not appear that any examination was made of the contents of the stomach and intestines.

"Medico-Chirurgus."—The quality of Cod Liver Oil depends on the care with which the livers have been selected, and the manner in which the oil has been filtered.

"Timoleon."—The paper is without originality.

"Philo-Chirurgus" labours under a mistake.

"Senex."—The preference would depend upon the regulations of the various licensing corporations.

"A Retired Surgeon."—The remarks are too personal for publication.

"A Physiologist."—Some of our scientific correspondents are rather unreasonable when they request "immediate" publication of articles which are not of pressing emergency.

"M. N."—The insertion of the report is unavoidably delayed.

"Toxicologist."—The dose of the hydrated per-oxide of iron should be large in cases of poisoning by arsenic.

"A Union Medical Officer."—There is no legal remedy.

"Mr. Edser."—Not at present.

"M.D."—A private communication has been forwarded.

"Dr. Dawson, Finsbury-circus."—Communication received.

ORIGINAL LECTURES.

LECTURES ON FEVER.

BEING AN ATTEMPT TO DEVELOPE MORE DEFINITE VIEWS OF ITS NATURE AND TREATMENT, BY THE CONSIDERATION OF THE PHENOMENA, AS OBSERVED IN THE PRACTICE OF MEDICINE AND SURGERY; BEING IN CONTINUATION OF "MEDICINE AND SURGERY ONE INDUCTIVE SCIENCE."

By GEO. MACILWAIN, F.R.C.S., Author of the above mentioned Work, "Unity of the Body," "Tumors," &c., &c., &c.

LECTURE VII.

Propositions enumerated in the last Lecture considered—Analogies of different forms of injury—Evidences of the essential link of the previous state of body in the class of phenomena necessary to the constitution of fever.

We proceed to the consideration of the propositions which were placed before you at the conclusion of the last lecture. The first of these assumed that "fever is essentially neither more nor less than the body dealing with an injurious influence, in virtue of the very same law by which it disposes of all others, and that the apparent complexity and real variety of the phenomena depend on the number and variety of certain explicable interferences. That the most accurate expression of the whole is, that the phenomena result from a force compounded of an injurious influence *ab extra*, acting on a definite, but, in different cases, varied condition, of the body, the common circumstance in all being, that it is a minus state of power. The second proposition was, that "although certain combinations of forces, such as severe forms of mechanical or chemical injury (a), certain rare cases of peculiar poisons, &c., may constitute at once, and in fact compose, both the injurious influence from without and the particular condition, yet that the histories of all fevers show that the condition of body referred to almost always *precedes* the occurrence of fever. With regard to the first proposition, it is universally admitted, that fever is itself a proof of some injurious influence acting on the body, and that in successful cases it is, *de facto*, a conservative process. That the mode of dealing with injurious influences in general in the body is the establishment of some secretion, varying according to the site affected and the nature of the injury, but still secretion in all, which is, in fact, the essential conservative process in fever, since no one ever saw a fever subside without it. This shows us the real meaning of the third of our "common characters." The conservative tendency of fever, as marking its essential "meaning," is further shown from so many forms of fever, immediately ceasing on the removal of an injurious influence, as foreign bodies, dead bone, confined pus, and, in certain cases, amputations of long-standing diseases. Another proof of this meaning of fever is, that the very same influences which give rise to fever, if combined in greater intensity, so as to depress power below a given point, although they shall not immediately kill, but admit of a very considerable interval between the infliction of the injury from without, and the death of the patient, are still attended by no fever, and this is equally true, however different the injury may be. Whether it be the case of a man half flayed alive by being caught in machinery,—unusually deep and extensive burns,—or when there is a rent in some important organ, or when he is carried off in a few hours by the plague, as I have quoted from Sydenham. No cases are more instructive than those in which extensive lacerations occur in the viscera. A man's liver may be rent; there is a fracture of his leg, perhaps, too; there is a sort of deceitful calm; a subdued pulse; no fever; no reparative power; no reparative process; a gradual sinking. The injury exceeds the power of reaction, it has passed the limit which implies disturbed, yet *still existing* resistance. The injury is irreparable, and none of the actions of repair take place, either in the fracture, which is *seen*, or in the system at large, where their nature, as reparative actions, is *inferred*. So old people, after operations, sometimes sink without any reparative process, without any fever, and often without any complaint. I have particularly described this state, in connexion with some remarks, on the operation and general treatment of strangulated hernia. No class of facts exposes more teachingly this generally conservative relation of fever, if I may so speak, than the various kinds and degrees of external injuries. If an injury be trivial, little effort is required; there is no fever. To get fever here you must exalt the previous disorder of the body, (which is lowering its power,) and which is, in fact, exalting that of your injury. Trivial injury requires no effort, and induces no fever. Severe injuries invariably produce some, and, in a pretty exact ratio, with the gravity of the injury—both in type as well as degree; but if your injury be excessive,—so exaggerated as to exceed reparative power, again you have no fever. With regard to "explicable interfering influences," these are to be found in the different conditions of the viscera; and, as we have a distinct proposition in relation to these conditions, the argument on that subject will be more conveniently placed in connexion with that, our fifth proposition. Our second proposition relates to the "*precedence*" of the state of body, which we consider an essential element in fever, with the admission, that it may, in rare cases, be imposed by the injurious influence from without. These cases, however, are, in the true sense, rare exceptions; for, although an extensive burn, a compound fracture, with injury to bone, muscle, nerve, skin, &c., at once constitute the necessity of repair or resistance, with injury, or disturbance of important organs, the true elements of fever; and although, accordingly, *a* fever occurs, yet, if we take the purest form of mechanical injury, there is no injury whatever in which *the* fever is more incontestably dependent on the previous state of the body. In persons, for example, who are in pretty good health, the fever is almost limited to the establishment of such increased actions, as are necessary for repair; subsiding after three or four days, and requiring little more after that than a guarded regimen, which shall support without excitement. How different the course is in many, and in populous cities *most* cases I need not recapitulate. Particular poisons may obviously at once charge the system with an injurious influence, and disturb the various organs, or the nervous system, so as to require resistance, and subdue power. Extreme cases, when a poison proves fatal, are again merely exaggerated forms of injury, and in these you have not necessarily any fever, as has been already observed. But, with such exceptional cases, if, indeed, exceptions they be, the element of fever, represented by the condition of the body, is almost always a state *antecedent* to the actual accession of fever. In the first place, all the acknowledged precursors of fever, whether they are termed "predisposing causes," or by whatever name designated, are every one of them either demonstrably disturbers of function, or exemplifications of function already disturbed. Intemperate habits, excesses of any kind, even habitual ease and indulgence at table, without what is commonly called excess; sedentary habits, unwholesome gases, malaria, whether of marshes, or of crowded, close, and ill-ventilated, or badly drained localities; affections of the mind, and so on, are all amongst the frequent precursors of fever, and all notoriously disordering to the various organs, *even though they produce no fever;* and it should be borne in mind that this disordering of function and *not fever* is the *necessary* and *constant* effect of them; for, although it is very true that persons exposed to such influences do commonly, sooner or later, become affected by fever; yet to this there are many exceptions. Whereas, no one ever saw a person, long exposed to such influences, or examined his body after death, who did not, during life, and in the appearance of the organs after death, afford ample evidence of disordered function; and it is material to add, that the evidence in either case is never, in different individuals, always afforded by the *same organs*,—the common effect being, that *some* organ is affected. In short, whether we take the mere history of fever, as demonstrated in any epidemic, where many are attacked, whilst more escape; or the actual state of organs, as ascertainable in the mode presently to be adverted to; or consider the *positive* effects of certain precursory influences, it is impossible to resist the evidence of a preceding state of disorder. This argument, however, is cumulative, as will be seen as we proceed; for, amongst other things, we shall see, that as the influences which have produced the state of organs contended for have been in operation previously to the occurrence of fever; so are we obliged, (if we wish to ascertain the true state of the organs, *when fever has actually occurred*,) to depend on the *history* of the patient, the mere symptomotology *abstractedly* being for any *special* treatment, absolutely useless. In fact, the true relation of precedent or predisposing causes, as they are termed, is this, that they are not, strictly speaking, causes at all,—I mean in the sense here intended, and as described in the first Lecture; because they may, any of them, be in operation, without producing fever. Of this we have daily proof, and therefore, it is clear that their operation, *quoad* the production of fever, must be indirect or contingent, which is just the fact. They do, it is true, in time, induce a disordered state of organs, which is a real *element* in the causation of fever, which, combined with the other element (some injurious influence acting from without) which disturbs any part or function, or requires additional resistance or repair (for *quoad* power, all these are convertible expressions) will certainly produce fever; or, the state of organs, wrought up by predisposing causes alone, if it be exalted so as to combine the actual retention of anything which had hitherto been excreted, no matter whether by the organ to which the excretion is ordinarily assigned, or by some compensating action in some other organ, may at once represent both elements (if I may so speak of fever,) that is to say, the preparatory or previous disorder, and the disturbing influence (in this case retained excretion;) and that is the true relation to fever, of what have been called "predisposing causes." Of course, retained secretion would, at any time, *without any previous disorder*, be sufficient; but, in point of fact, this never happens. Now, as all predisposing influences produce different degrees of disorder, and in *different times* in different persons, we at once see how irregular they must be, regarded as causes; since the occurrence of fever will obviously depend on the degree of disorder they may have induced, the external influences which may be in operation, and so forth. In fact, although it is true that the causes of fever may thus be engendered *gradually* altogether in the body, or suddenly imposed; yet, in actual life, there is not the smallest tittle of evidence deficient of the full proof that the ordinary course is determined by the state of the body. This present—a thousand means will enable us to get fever with certainty; without it,—nothing but influences, which are obviously of poisonous or destructive tendency will do it. We shall, however, briefly recur to this in our synthetical argument. Now, the evidence of our propositions naturally flows from one to the other; our next proposition was, that the condition of the body referred to was not a general indefinable sort of disorder, but one in which the organs were in an unhealthy or unnatural relation to each other. This, our fifth proposition affirms to be either the separate of coexistence of the following conditions; or the presence of organic disease; or otherwise, a state in which the functions of the body are disturbed as thus; that they may be performed, but, if so, they are not properly *distributed* to their respective organs, &c.; and, further, that this state is important because, although it does not alter the *general* treatment in fever, yet that the *special* treatment, which is, of course, *quoad* medical practice, the thing essential, can alone be deduced from the condition referred to. Now very numerous facts point to a definite condition of organs, as preceding and

(a) Burns, compound fractures, &c., in which, besides the necessity of repair, there is an injury which, from the sympathies and functions of the injured organs, disturbs the whole body.

influencing the phenomena of fever. No doubt, it is one thing to prove that there is *a* definite condition, and another to demonstrate its intrinsic nature; still, the obvious connexion of the two propositions shows, that the evidence which bears on the one must be a necessary step in the demonstration of the other, if we are to arrive at any generalization in the matter. We have seen that all predisposing causes involve influences capable of disordering the functions of the body; we have also seen that, whatever may be the *usual* access of any particular form of fever, that is, as sudden or gradual, that all fevers *occasionally* assume *both* kinds of attack, and that, in all, the premonitory symptoms are merely so many indications of disturbed function *without* fever. You have only to refer to any or all the writers on the subject, to see concurrent testimony in proof of this fact. These symptoms themselves have been referred to already in connexion with continued fever, so I need not repeat them.

A class of facts, having most interesting bearings on the previous state of the body, is presented in those remarkable exemptions which have been observed in so many great epidemic fevers. We have seen, that in regard to the plague, several different occupations have been observed to co-exist with a very remarkable immunity from the disease, and that, at other times, the natives of particular countries have been untouched, whilst all around have been more or less affected in the ordinary proportions. All this, which presents itself at first with a phase of mystery, becomes, in a general sense, perfectly intelligible, when we determine that a particular state of organs is the essential link in the phenomena; and that *all* states of organs have definite relations to the mode of life followed by the individuals, and, in short, the sum of influences to which, whether natural or factitious, to which he is exposed. We recollect that different nations have very different habits, (and that, although there are differences of degree in this aspect in different nations), yet that natives of all countries, be they *where* they may, live as much after their national manner as is convenient. Now, this would obviously make a great difference, —it may be for the better or worse, as the case might be, the *difference* would still be great, unless we were to choose the other view, that such varieties of habit, &c., made no change in the relations of the body to surrounding influences, which would be a "*reductio ad absurdum.*"

There is also another class of facts by which we approach those, which more clearly demonstrate the precise nature of the condition of the body, as consisting of altered and definite conditions of particular organs.

We have seen that in hot climates, fevers are commonly much more dangerous in their form and more rapid in their progress than is usually observed in more temperate latitudes, and that in the yellow fever there is in the negro a remarkable comparative insusceptibility to the disease; that in some cases where the fever has raged with great malignity, not "*a single negro*" has been affected; and that at other times when the negroes have been affected, that the fever has been much milder in its character, and much less fatal in its results. The extensive experience of Drs. Rush,(a) Lewis,(b) Daniell,(c) Dickson,(d) &c., as quoted by Dr. Bartlett,(e) shows, that, during four distinct periods, as the fever appeared at Charleston in South Carolina, there was no instance of yellow fever amongst the negroes, and, on one occasion, when Dr. Rush saw them affected, he says:—"The disease was lighter on them than in the white people. I met with no case of hæmorrhage in a black patient." Dr. Lewis, in his account of the yellow fever at Mobile, in 1843, when the negroes *were* affected, says, "that in them the fever was mild; that, as far as his experience went, it never arrived at the stage of black vomit, nor did a single case prove fatal among that class of persons; but *four or five mulattoes* died with black vomit, and many cases amongst the coloured population went through the graver stages of yellow fever, having hæmorrhages, and requiring great stimulus through the collapsed stage; but *these were all Mulattoes.*" In 1820, Dr. Daniell states, that "nearly 300 Africans, recently captured by the Government vessels, were brought into Savannah, and remained there during an epidemic yellow fever, but *not one of them* was attacked by the disease." Dr. Lewis, whom I have already quoted, has remarked also the same immunity "in the blacks, who come down from South Carolina to his neighbourhood at particular seasons, and who, notwithstanding, came strictly under the class of unacclimated persons." Now, all these facts are highly interesting, because, although they may, and, in fact, must, involve other conditions, from the very laws of relation between different organs, yet there is one very obvious difference here in an organ of great importance,—"the skin," coexistently with a remarkable comparative immunity from fever; or, what is still more to the purpose, the worst forms of it; for, as it will ultimately appear, that the practical application of our views are not so much to prove, that fever may be prevented *altogether*, as that you can cut away the link to which its fatality, as a rule, is owing. Now, this co-existence of the immunity I have just described with a dark skin, is the fact which I am anxious to impress, irrespective of any explanation of it; but one cannot help seeing, that this relation is functionally of great consequence. A black skin will, probably, radiate heat, *cæteris paribus*, more rapidly than a white one; and the very remarkable approach to the virulence of the yellow fever having been confined, in the case stated, so far as the coloured population was concerned) to the *mulattoes*, is surely strikingly significant as to the effect of the colour of the skin, and its relation to heat. I need not say how important, in a hot climate, any extension of a refrigerating function must be; and it is very pertinent to the subject to remark, that, in the argument I have elsewhere sketched, to show that the lungs and skin *are* refrigerating organs, and the means by which the temperature of the body is kept from *rising above a given standard*; I have there remarked, that all animals have increased respiratory organs in proportion as the circumstances under which they are placed *require refrigeration*; and that animals, having both lungs and gills (a) remarkably exemplify the fact. Now this harmonizes very well with the coincidence of a dark skin, and the comparative immunity above described. That colour, too, exerts the influence stated, is, I think, suggested by the tendency to white observed in *cold* climates, in animals not necessarily indigenous or restricted thereto.

The very remarkable history of small-pox, in a series of beautiful facts of a most conclusive character, not only most unequivocally demonstrates the influence of *a* special condition of organs, but most significantly illustrates, in a series of experiments, at will, which would have been quite inimitable, the general qualities of *the* condition. We have seen that here we have to deal with a very virulent disordering influence, producing a disease that, taken naturally, that is, *without preparation*, is always serious, most frequently dangerous, and yielding in its fatality to no disease whatever; indeed, scarcely any disease even to a medical man, is more frightful than a severe case of small-pox. But communicated by inoculation *with certain conditions* annexed, it becomes so safe a disease, that we hardly know any malady less fatal. Now, I beg your particular attention to several of the circumstances. In the first place, patients were always, when the choice was given, selected from those *apparently in health*; secondly, notwithstanding this, they were subjected to the preparation I have already mentioned, viz., careful diet, abstinence from alcohol in all forms, cheese, butter, &c., and a few doses of medicine were given calculated to act on the liver and bowels. Nor is it less interesting to remark the crucial experiments that ignorance, inattention, or accident furnished, in which either the preparation was neglected, or the care after inoculation abandoned; for, if we desired to know whether the mildness of the inoculated disease was referable to the new channel, so to speak, through which it was communicated, or to the previous preparation, these cases furnish the unequivocal reply; for prepare the patient as you say, inoculate as mildly as you please, and let both the constitutional symptoms and the local indications be all as favourable as you like, you have only to pursue a plan the opposite of your preparation, and you rouse this sleeping savage, and at once evolve the disease in all its horrors. Now, your preparation consisted of a diet which has a tendency to keep the organs from being loaded, and a few doses of medicine having the direct effect of, more or less, relieving them from any previous accumulation,—a treatment, in fact, both directly and indirectly opposed to that condition of organs which I contend is the essential link in the majority of fevers; for, whether an organ be really overladen *quoad* its *power of secretion*, or whether it be already in course of relief by the increased action of some other organ acting in compensation, these are essentially the conditions for which I contend, and to which the preparation cited is manifestly opposed; whilst the selection of the patients from those *apparently in health* not only thickens the evidence by which I maintain that people in general are out of condition, but is a significant hint to those of my brethren on whom I have so often endeavoured in vain to impress the reality and practical importance of the distinction implied.

[To be continued.]

(a) Rush Med. Eng., Vol. iij.
(b) New Orleans Med., Vol. III.
(c) Fevers of Savannah, p. 64.
(d) Essay, Vol. I.
(e) Opus Cit, p. 459.

(a) Axoloth, Lepido, Seren, &c.

CLINICAL OBSERVATIONS ON SOME OF THE MORE FREQUENT DISEASES OF CHILDREN.

By W. HUGHES WILLSHIRE, M.D. Edin.; M.R.S., Physician to the Royal Infirmary for Children, &c.

(Continued from p. 318.)

GENTLEMEN,—In my last lecture I spoke of some peculiar views which have been advanced in late years as explanatory of the pathology of certain diseases, and I dwelt more particularly upon those which have been proposed as elucidatory of that affection occurring in young children, called *true thrush* or *muguet*, &c. I promised you I would offer you some further remarks upon the value of those *facts* which appeared to some minds to substantiate the opinion, that *thrush* and some analogous diseases,—analogous, at least, as regards one element in their morbid phenomena,—consisted in nothing else but the generation of a vegetable parasitic growth. Before doing so, it is but just that I should refer your attention to a very interesting paper, by Mr. Busk, the surgeon of the Dreadnought, which you will find in the first volume of the *Microscopic Journal*. It is a paper illustrative of much that we are at present considering, and of the information contained in which I shall make free use.

In relation to what I before spoke of, I would first remark, that in most of the experiments made for the purpose of primarily generating the *parasite*, no effect is produced, in fact, the growth is not seen to occur until serious local disturbance of the *vegetative*, or local nutritive processes of certain portions of the body, especially where a state of previous debility existed, induces the exudation, excretion, or formation of a peculiar organic substance, *albumen* or *fibrin*, and either of which are favourable, of course, under certain conditions, to the development of these primitive organised vegetable productions, by the conversion of their own cellules into a new form, or type of organised existence. The truth of what I say is well shown by the investigations of Dr. Stilling, of Cassel, who, whilst he was inquiring into the influence of the nerves on the circulation of the blood, by experiments on several hundred frogs, found that it was chiefly when the greater part of the under half of the spinal cord was removed, the wound closed with sutures, and the creatures kept in flat vessels just sufficiently shal-

low to enable them to breathe, by raising themselves on their forelegs, thus bringing their mouths above water, that first the toes of the hind feet, and afterwards other parts of the body, became attacked by a *parasite*. He observed, likewise, that from the first appearance of the affection the health of the frogs was always sensibly diminished —as well, indeed, it might be—and that, if the parasitic growth was allowed to remain on the creature two days and then removed, the subjacent skin was seen to be excoriated, reddened, or ulcerated. Further, it was proved, that, though by inoculation on *unhealthy* frogs, &c., the same kind of parasitic growth might be produced; yet creatures *in health, unhurt* systemically or locally, by the usual means employed to carry the experiments into effect, *did not appear to be affected by any such disorder*.

The fact, also, of local disease of the particular structures necessarily preceding any development of the parasite, is further proved by Dr. Stilling, who says, "at an indefinite time after the operation (removal of the lower half of spinal cord, &c.) the tips of the toes frequently put on a whitish appearance, as though they had been dipped in hot water;" "the epidermis in these places appeared to be much thickened, of a whitish grey colour, and could be easily wiped off, when it left the true skin denuded, but perfectly smooth. On the following day, the diseased epidermis would be reproduced, and it might for several days be thus renewed at pleasure. If left to itself, however, very fine filaments, in close apposition with each other, sprout up," &c. —*Microscopic Journal*, Vol. I, p. 139. This is sufficient to prove to my mind, that it was here, by the *decomposition* of the organic cells of the epidermis, that the parasite was produced; the more so since "a careful removal of the morbid epidermis and washing the part daily with water, prevented the extension of the disease." (Op. cit. v. 140.)

With respect to some experiments I spoke of, apparently, to some minds, substantiating the contagious nature of, and power of transmission, by inoculation, of a parasite to living organisms both systemically and locally healthy, I may remark, that M. Gruby practised inoculation with the contents of the crusts of *Tinea*, containing the mycodermatous vegetable parasite, upon thirty phænogamous plants, and succeeded but once in producing the affection, or we must here rather say, perhaps, in generating a fungus on the plants under experiment. He practised the like inoculation on twenty-four silkworms, four birds, eight mammals, and six reptiles, without any result whatever. On himself four times, and on another person once, with the like negative effect, except in one instance, when a little inflammation ensued. So, you perceive, that out of seventy-seven inoculations, one definite result alone was arrived at. (See Mr. Busk's paper.)

Again, even the Reviewer of Dr. Berg's work, in *Forbes' Journal*, who greatly leans, I think, to many of his author's opinions, thus speaks in relation to Dr. Berg's experiments on inoculation:— "We cannot call these trials, in one respect, perfectly successful, for they occasioned great suffering to the children, and so materially interfered with the health of one of the little patients, that it died afterwards of bronchitis and pneumonia." After this result, Dr. Berg abstained from further researches on this point, and which, I may say, has been the reason I have not attempted to make any. Lastly, upon this part of the subject, I may tell you, that whilst Trousseau, Guersant, Bouchut, and Berg believe in the propagation of *thrush* by direct contact, and Duges and Berg by indirect, or through the miasms or zymotic particles or sporules floating in the air, Baron, Billard, and Valleix, either doubt or deny both circumstances.

It may be asked whether, even supposing the inoculation of *another* organism cannot be effected without the previous induction of that local morbid condition of the part which must, in my belief, precede the development of the parasite, yet that the parasitical growth once formed may extend itself over other parts adjacent to the spot in which it was originally produced in the first person by virtue alone of that remarkable power of propagation and extension possessed by low forms of organic existence. In answer to such a question I should say, that I believe not, unless these parts antecedently participate in that local disturbance which results in the *exudations*, &c., I before spoke of.

I concluded my last lecture, you will recollect, with a quotation from Dr. Pereira's work, and I have now to make a few remarks on the theory involved in it. I may tell you, then, that I place quite a different interpretation to that there laid down upon those cases in which a membranous discharge from the bowels takes place, containing an organized vegetable formation, and which has been supposed to have its origin in inoculation, if it may be so called, by sporules from without, as by the water consumed as drink by the patient. It is a fact, undoubtedly, that water, containing vegetable or animal matter in certain states of decomposition, and above a certain amount, will seriously affect the constitution of those who employ it; and, if you can have any doubts upon the matter, refer to the writings of Dr. Cheyne in the Dublin Hospital Reports, to those of Brande, and to the evidence of Mr. Chadwick, Dr. Copland, and others, before the Committee for Inquiring into the Sanitary Condition of the Labouring Population of Great Britain. But, admitting it does produce deleterious results, let us ask what is the usual way in which it does so, or how are these results exemplified? We find that its use causes irritation of the intestinal canal, accompanied often with a low febrile condition of the system, running on, in extreme cases, to dysenteric disorder; and in slighter ones, if the cause be continued, evincing symptoms of chronic muco-enteritis, or chronic ileo-colitis. We also know well enough, that Brettoneau, Powell, Copland, and others, have drawn special attention to the fact, which most men who have seen much practice amongst the poorer classes are aware is a true one, of there being a chronic and intermittent affection of the intestinal canal, accompanied with the discharge of a pseudo-membranous exudation, and that the attendant symptoms are those of an intermittent and subdued form of chronic muco-enteritis or chronic ileo-colitis. What more likely, then, than that in the case of Dr. Farre, alluded to by Pereira, and analogous ones, such a disease existed, that exudation ensued, and that amongst its organic cells, &c., the generation *of* a low form of vegetation should arise?

But it might be replied to this view of the matter, as the author of the case himself writes, that "this patient had lately suffered but slight indisposition; but that, in whose symptoms there was nothing remarkable, except that for twelve hours before the passage of these shreds considerable pain and uneasiness had been felt in the abdomen, unaccompanied, however, by any evidence of inflammation." (*Microscopic Journal*, vol. ii. p. 189). Therefore, it might be assumed, that no inflammation was going on, so as to produce exudations from whose cells a parasite could be generated, and then the source of the latter must have been *extrinsic* and not *intrinsic* to the individual affected. To this I would reply, that the symptoms detailed are just what would have been expected according to my view of the matter, since all the more experienced writers on this malady assert, that the disease rarely appears in an acute state; that the symptoms are often very slight, so much so as hardly to occasion any inconvenience until the membranous production is about to be evacuated, and then supervenes, as in Dr. Farre's case, the pain, &c. (See Copland.) Again, Dr. Farre's patient was a middle-aged female. Now, Dr. Copland says, that most of his own cases occurred in females, all of Dr. Powell's were of the same sex, and those which I have seen myself (4) were in women also. I must not forget to tell you, likewise, that, in some instances, accompanying the shreds evacuated from the bowels, a like discharge has been seen to come from the *vagina*; and, unless the sporules got there during the process of ablution,—a process not too often performed by the class of patients we are speaking of,—it is difficult to understand the theory of the inoculation by vegetable spores from without the body. But still more satisfactory to my mind, as substantiating my own views of the matter, is the following quotation I shall read to you, from Dr. Engel, on the Pathology of the Tissues:— "Every anatomist knows that viscid, thin, colourless exudation which appears as a layer on the free surface of the great serous membranes, in cases of exhausting diarrhœa. In children, more especially, this exudation is not a rare occurrence, and in most of this class of cases is limited to the pulmonary pleura. The false membrane is easily obtained by stripping it off, though seldom in such purity and quantity as to allow an analysis to be made of it. Examined with the microscope, it appears an amorphous gluey mass, amid which are discernible *numerous round cells, one or both the sides of which are prolonged into threads*; the cells seem two or three times larger than blood corpuscles, and appear filled with many pigmentous nucleoli." (*Medico-Chirurgical Review*, Oct. 1842, p. 545.) If this occurs in the pleura, surely it may in the bowels also.

Reverting now more particularly to the disease under consideration, *true thrush*, I may state, that Dr. Berg considers the excessive production of acidity in the primæ viæ, inducing vomiting, diarrhœa, and the green, spinach-like motions, as marking the *third* stage of the malady, and as caused by "the increase of the sporules of the parasite in the liquid contents of the intestinal canal." This stage, therefore, according to Dr. Berg, cannot occur until "a sufficient quantity of sporules have been swallowed to produce a competent catalytical operation on the contents of the intestines." I freely grant, that the circumstances characterising Dr. Berg's *third* stage of the malady are constantly seen in connexion with the local disease in the mouth at that period, but also, I believe, will be found to exist at a far *earlier* period in the course of the affection, and long before the little patients could swallow a sufficient quantity of sporules, so as to induce the "fermentation process" in the contents of the intestines. But even supposing, for the sake of argument, that such disturbance in the digestive tube does not occur until *late* in the course of the malady, yet I think there is no necessity for assuming that we must have waited for the *catalytic* operation of the sporules of the parasite to induce the *acidity*, &c., since we know that the coats of the stomach and animal membrane in general, nay, even albumen alone may change saccharine matter, molecular albuminous deposit, epithelium, &c. &c., into lactic acid; and, surely, we do not wait in other diseases, where acidity is generated in the *primæ viæ* of children, for the fermentative process induced by the sporules of a vegetable parasite, ere we believe such acidity can be produced. Dr. Berg believes, that, were it possible to discover some chemical preparation which would effectually check the growth of the parasite, we might then regard the malady as one always within the power of medicine to heal, and that "perhaps the nitrate of silver, in a solution of eight grains to the ounce of distilled water, may effectually prevent the increase of the malady." (*Forbes' Review.*) That the nitrate of silver, as well as some other metallic salts, locally applied to the lining membrane of the mouth have a power in arresting the local affection there, I believe every one knows. But we may differ from Dr. Berg as to the way they effect such benefit. We know that the nitrate of silver, applied to mucous membranes and exudations, influences them in a remarkable manner, altering the vital actions going on in the extreme capillaries of the former, and influencing, without doubt, the organic nervous agency. It enters into chemical combination with the albumen and secretions of the membranes, and with the various albuminoid principles of exudations forming new compounds, the albuminate and chloride of silver. Attendant upon these actions, we see also often discharges put a stop to from mucous surfaces and specific inflammations arrested. We find also erysipelas and chilblains stopped in their progress, as well as tonsillitis and conjunctivitis cured. A new tendency is given to the vital manifestations of the parts affected by these diseases; and, under

edly, all this is done without the destruction of the sporules, &c., of any organised parasite. And may not, it may be asked, such equivalent actions be produced upon the lining membrane of the oral cavity, and thus arrest the local manifestations there of thrush, without such arrestation be merely dependent upon a chemical destruction of the sporules of a parasitic fungus, upon whose existence and further propagation, the essence of the disorder is, I think wrongly, believed to depend.

THE CROONIAN LECTURES.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS.

By J. CONOLLY, M.D.,
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Lecture III.

MENTAL DELUSIONS—HYSTERICAL MANIA—PECULIAR DEVELOPMENTS OF INSANITY—MORAL IDIOTS—INSANITY IN CHILDREN—THE RELATION OF CRIME TO INSANITY.

The very frequent occurrence of delusions is such, as almost to cause them to be looked upon as matters of course; and, though they are not constant, yet a firm belief in facts that are imaginary is always a remarkable phenomenon. To see the young man or the young woman, surrounded by the same objects as ourselves, but visited by delusions of a very touching kind, is to witness a very curious fact, indeed, but enough to alarm any one who values the condition of the mind. We are, by such circumstances, led to inquire, what the state of the brain is in such a case? whether the condition of the organ is, that only a part of it is awake, and what that particular part is which is asleep? and then, again, we might ask, whether the lungs or the skin were failing in their office of purifying the blood? and to a great extent we shall ask these questions without arriving at a satisfactory result. Chronic cases of insanity are those, more particularly, in which delusions are entertained. At Hanwell, you might go through the building, and knock at each door, and be inclined to ask why those persons are shut up at all—so quiet are they. But on inquiring you would find that in all, more or less, some delusion was cherished, though, while there, that delusion is not predominant. When, however, they are allowed to remain at home, some of these patients become unmanageable, on account of the suspicions they entertain that some one is plotting to poison them, or some other fancy. Occasionally, we may have a case in which the cause seems evident, or somewhat better explained. In a clergyman, of plethoric habit, who spoke like a reasonable man, a gentleman and a scholar, there was this odd circumstance,—he was tormented by the idea of some pecuniary embarrassment, which would be his ruin. He would say, "I know that it is not so, and yet the idea is tormenting me to death." I recommended him medicine to counteract his peculiar habit, and some time after he left me word, that what I had prescribed (an aperient) had restored him to comfort. Another told me, that when he had not a seton in his neck, he imagined he was going to be dragged to prison. In other cases it seems evident that it arises from debility. In one female patient, after repeated miscarriages, all love of occupation deserted her, and everything seemed unreal. In patients of this sort, I have often witnessed their improvement under the exhibition of strengthening medicines. After fever, also, this affection is often seen. A friend of my own, after a long attack of fever, and, while getting better, sent to me to say he was sorry, but he was entirely ruined, and that I must not expect my fees, and he must discharge his servants. This was but a temporary delusion, and, by taking wine and other restoratives, it passed away. But sometimes these delusions are more permanent. A lady, who had recovered from a fever, imagines that she has ruined her husband by her extravagance, and nothing can convince her to the contrary; and, although she is still living with her husband, who is wealthy, and has comfort, yet she is continually crying on account of this delusion. I once met with a curious instance in a relative of mine. He had been in Germany some time, for the purpose of drinking the waters. He returned home irritable, and had a severe attack of English cholera. One morning he came down to breakfast, as usual, but was observed by the servants to have sat at the table for two or three hours without partaking of anything. On being aroused, he said he had been affected by a sudden idea of a letter having arrived, which he must answer. Stimulants were given him, and under them the delusion disappeared. These affections are often the result of bodily disorder; they frequently take place in women, at the close of the catamenial period; sometimes accompanied with a sense of pain and heat of the uterus and ovaries, when the patients fancy that a deluge of fire is about to be poured out on them. Some of these cases are relieved by local means, such as leeches, hip-baths, or sedatives. One old woman complained to me of dreadful pains in her back, and, to account for them, said that on one occasion the Devil suddenly seized her by the small part of the back: on the application of leeches to the spine, this delusion vanished. In many cases of melancholia in young women, I am very much inclined to think that irritation of the uterus is connected with it; and a treatment calculated to relieve this symptom will tend to dispel the delusion. In many other cases, the causes are very obscure. A young lady, aged 26, with bodily health undisturbed, complained of some uneasy sensation in the epigastrium, and she fancied that she was dead in the extremities, and that the life principle was concentred in the trunk; but on a sudden she would be seized with the most violent agitation; she would rush out of the house and express the most dreadful fear that her friends were being assassinated, and altogether her condition was most painful to behold. At this time there was never any particular heat of the head; no alteration of the pulse, or of the temperature of the skin; the tongue was clean, and no change in the uterus; the catamenia regular; but the veins of the face sometimes appeared very much distended. When the patient was spoken to on the subject, she would answer quite sensibly; she slept well, but some hours after waking her delusions became very painful. In this state, suppressio mensis supervened; but, on a restoration of the catamenial function, she became perfectly well. In other cases, there are not even these slight appearances of bodily disease. A young lady, aged 30, who was remarkably cold in her affections, had the idea that she was known to have very strong sexual desires; she had no internal disease; but, on an entire change of scene and pursuit, she recovered from this state. I have a letter from a patient, written very elegantly, some of whose poems had been thought worthy to be printed, and who appears in the most perfect health; but who has delusions rising up in his mind, leading him to believe that he is the Pretender and a descendant of the Stuarts; in it, he says to one friend:—"I assure you, while walking in the park, I was obliged to press my pencil-case strongly to my lips to intimate to the guards not to present arms to me." I had one patient, who is insane, whose mother was a Portuguese, and her father an officer in the English army, who declared that we were all of us in league with the foreign ambassadors to rob her of her property and then live upon it; and in this state she died of cancer in the breast. The state of the brain gives us little information here; and the appearances occur again and again in all kinds of cases; but all tend to show great disturbance of the brain, while of the first conditions we know little. A curious modification of insanity is seen in cases of hysteria. One day the patients are all religious; another, all poetical; sometimes they are amative, at other times revengeful; the young, of this class, mostly possess strong powers of attainment of language and of music; they have a great love of misrepresentation or of exaggeration; now and then they are the subjects of frantic mania of a short duration. In such cases, the usual anæsthetic applications are worse than useless; emetics are much more powerful in their remedial effects. Sometimes hysteric affection continues through life, and very much interferes with the peace of families; in some, there is always disease of the spine; they cannot walk; they are drawn about in invalid chairs, often until they take a pleasure in such means of exercise, and in the attendance thus imposed on others; until at last phthisis supervenes and deprives the physician of his patient. From this affection they will often awake in a most excited state, and declaim in an eloquent manner. But the mind generally grows weaker and weaker, and the patient is on the borders of insanity through life. I have seen cases of this kind recover, by patients being persuaded that the nerves may be diseased without the mind being destroyed, and by the sympathy of friends. But I have also seen the most cruel treatment practised; such as a delicate young lady being desired to keep a bottle of brandy at her side, and to take it whenever she felt affected; I really believe the end of such treatment is, that the patient becomes consumptive, and is carried off. The imitative character of this malady makes the contact of one of these dangerous to a younger person. A clergyman was suddenly taken ill while reading the Church service; he fancied that he was the Saviour come to judge the world. Just at this time his sister came to see him, and she became affected with exactly the same symptoms as her brother. Laudanum was administered to the patient, who slept, and awoke well. At Hanwell, we have many cases of true hysterical mania, in which great care is required, and in which excessive discomfort to the household is created. We had one who used to scream at the top of her voice for five hours in succession; and she would stamp and jump in such excessive fits, that the servants were always sending for the medical attendants, as they only could exercise any moral influence over her. One stout woman acquired the habit of springing up bodily from her bed, and then falling down on it with such weight as if it would shake the building down. A young woman had most violent hysterical fits; and while under their influence, no tragic actress could more touchingly play her part; (perhaps this might have been acquired from constant attendance at theatres;) she would, when the fits were coming on, retire, obtain some broken glass, and open her veins, then throw the glass out of the window, in order to excite terror. All of these cases are very serious, and require great vigilance, or the most fearful accidents will occur. It is not at all well here, to exercise moral treatment, such as talking about relative duties, and so on; the mind is in such a state, that the afflicted are not able to attend to it, and it only irritates; but, as they get gradually well, it may have a good effect. We had one patient who, when she came to us, was severely marked by instruments of restraint; the consequence was, that she was frantic; she would sing loudly and utter the most dreadful accusations. This was premonitory; then she would throw herself about, bite everything within her reach, tear her dress in bands, and tie them tightly round her neck, so that there was great danger if left; she, however, recovered, at least for a time. There are very fine shades of mental infirmity, and which are delineated with great difficulty. In the course of a life one will have met with many young men who seem never to be in earnest in anything they do; never succeeding, nor professing any desire of success; and the friends remonstrate, and look and watch for improvement. Still, however, they have no ambition, no pride—nothing can rouse them to sustained effort. These generally labour under an infirmity of mind, and we are almost inclined to say, that it is a happy circumstance for them, when, their malady more strongly developing itself, they are pronounced fit subjects to be admitted into an asylum where they may be free from the rebuffs and taunts of others. Medical men have often related curious circumstances to me of themselves; and many have voluntarily applied to be treated in the Asylum. One gentleman, on a sudden, left his home and family, and his friends wrote to me, if he applied at the Asylum, to detain him. He made his appearance; but, from his whole demeanour,

detention was quite out of the question; and yet there was this recurring incitement to leave his home. I advised him to return home, which he did; and after a voyage to and from the United States, he was restored. When reflecting on the diversities of the human character, and their development, we are disposed to think that many are of unsound mind throughout their lives; it seems impossible, on any other principle, to account for the actions of many monarchs; the horrible severities of Judge Jeffreys can hardly be looked upon but as the result of some mental malady; or the eccentricities of Swift and of Rousseau but as the infirmity of a highly excitable mind frenzied; Byron manifestly was often suffering from an ancestral taint; and so we might go on examining how, from time to time, insanity has perverted the best of souls,—the pensive, the pious, the tolerant, the humane—loving all God's works,—and fits of melancholy overcoming them, painfully illustrating the effects of insanity. If we attempt to investigate the state of those who, by their conduct, are the most marked by society—criminals, we shall there find some taint; but who shall say that in himself no foible exists which might lead to his shame. It is said of Boerhaave, that he never saw a criminal led to gaol without asking himself the question whether he might not be more criminal. In families we often see young men of irregular habits, and young women, too, apparently unable to form any judgment as to right or wrong; and this feature becomes very important in reference to criminals and to the plea of insanity. When circumstances will support such a plea, it would be cowardice in the medical man to disobey the call; but we might refuse it in the case of young men who commit forgery, and whose friends would refer the act to a morbid desire to acquire wealth; and yet the law would let them off; while in others, where the medical man makes no question as to insanity, the law has been allowed to take its course. In acute mania, homicide or suicide may be generally ascribed to disease; the patients cannot describe the impulses which move them; sometimes those impulses are confined to their thoughts—at church or in private devotion; but they may also have reference to the state of the brain, showing a desire on the part of wives to murder their husbands, or husbands, wives; dreading to be alone with children. I knew one lady who said she always had the idea, when with children, as if she felt inclined to snap off their noses; and in many cases they purposely leave their homes, for others' safety. Now in such cases, where crime is committed, what difficulty attends the testimony of medical men? One woman, aged forty, said she felt it would delight her to throw somebody down and trample them to death; and another, to kill her husband with a broom-handle. They are not, however, insane enough to be confined; and yet, if crime is perpetrated, who would venture to say that these were insane without the fear of public derision? A young lady, with violent hysterics, was one day pretty well, and another excited; as the day advances, she becomes homicidal; she seems to have nothing before her but an impulse to destroy something or somebody; and if she committed a crime, who could say that she was insane then, but sane now. In these cases, society finds it very difficult to arrive at a just decision. Some would say, this man cannot be insane, because the crime was accompanied with premeditation and evidently planned. But this feature is not at all uncommon. In the case of one gentleman, he paid particular attention to the construction of locks. He would persuade his attendants to let him take off the lock of his door and put it on again; but before doing so, he left a small piece out, which interfered with the action of the bolt, and by this means he escaped; yet he was so insane, that on getting out he set off for Apsley-house, but was soon sent back again, and the piece of the lock was found upon him. Then there are others, who have little sense of right and wrong,—there are a great number of criminals who are moral idiots. The young man, Oxford, who shot at the Queen, I believe to be just of that kind; he was indifferent, insensible,—in fact, a moral idiot. But if we go further, and say that many *have* a sense of right and wrong, and yet do the wrong; here, too, we have very great difficulty, and which can only be got over by taking into account every particular of every case. If a boy of tender years takes the life of his grandfather by arsenic, such a case requires very careful examination, to see whether the boy was healthy; whether there is any disease affecting the brain; whether his manners are like those of other children; and, in respect to all these inquiries, the medical man must approach such cases as a physiologist and psychologist, and not be scared away from what is the truth. I have here several notes of cases of insanity among children. In one boy there were several circumstances indicative of disease; he was in prison for intemperance, and he died insane. Another was mischievous; always insensible to truth; and if any medical man was called upon for his opinion, he would say, "This is a little fellow who will become lunatic, and it will be necessary to attend strictly to him." But, he is before a court of justice, accused of crime, and looked upon with abhorrence; in prison he continued heedless and insensible, and everything gave evidence of imbecility; but all these symptoms were disregarded; the jury paid no heed to the testimony of the medical man; the Judge expressed himself in strong terms, and the jury returned a verdict of "Guilty of Murder;" yet, curiously enough, the boy was not punished, but ultimately sent to Parkhurst as a lunatic, where he now is. The relation of crime to insanity requires more study on the part of the legal profession than has yet been devoted to it; the time for this must come; for their conduct towards those even who are convicted of crime they will be held responsible at the judgment. The poor wretch in prison has no other friend in the world than the medical man; and not the voice of the public, or the frown of the Bench on the facts of psychological science ought to scare him down. In the idiot there must be a point where responsibility ceases, and this can only be known accurately to Him before whom all is plain; but in our position of obscurity and doubt we should never despise the evidence of truth or the dictates of mercy.

ORIGINAL CONTRIBUTIONS.

OBSERVATIONS ON OCHLESIS, OR THE DISORDER GENERATED BY THE ACCUMULATION OF THE SICK.

By GEORGE GREGORY, M.D., Physician to the Small-Pox and Vaccination Hospital.

The establishment of hospitals for the reception and treatment of the sick is one of the most remarkable improvements in social policy, which flowed from the establishment, and accompanied the diffusion, of the Christian religion; and it is unquestionable that advantages, great beyond all calculation, have accrued to mankind from this single measure of pure and enlightened philanthropy. But, while we acknowledge the *benefits*, we must not shut our eyes to the *evils* which are attendant upon the system of collecting under one roof a vast number of sick and diseased persons. That such evils do exist has long been acknowledged. In the writings of physicians and surgeons at different periods, (more especially since the year 1782, when Pouteau's observations on hospital gangrene were published,) we have abundant evidence, not only that these evils have been felt, but that they have been made the object of scientific inquiry.

This branch of pathology, however, has been pursued more in detached portions than in the aggregate. An extended view of the whole question appears still to be wanting. Such a deficiency in medical literature (if indeed it exists) it is the object of this Essay to supply. My design is to condense and generalise—to sketch out as briefly as possible the chief points in the inquiry—to connect together what has already been observed—and to append such additional facts as my own experience has furnished.

To designate that general condition of disease which results from the accumulation of the sick, some simple term is required, and I venture to suggest Ochlesis as an appropriate one. Derived from οχλος,—a crowd,—its original meaning is *tumult* or *disturbance*. The metaphorical extension of this term to indicate that *febrile* tumult which is developed by the conglomeration of the sick, is perhaps admissible. There is something painful and repulsive in the terms "*hospital fever*" and "*hospital miasm*," under which I noticed the disease in my Volume on the Eruptive Fevers, and I then felt the propriety of adopting some less objectionable designation.

In early times, before the danger of excessive crowding in hospitals was fully known, this complaint exhibited itself in all its worst features, but we have no distinct details concerning the phenomena developed. We read generally of erysipelas devastating the wards of the Hôtel Dieu. We know that on many occasions contagious gangrene has decimated army hospitals, and has done more to disorganise the ranks than the sword of the enemy. We read the most appalling pictures of the pudendal gangrene, which has consigned to an early grave thousands of foundlings, whom a charitable but mistaken humanity had collected into masses of frightful proportions. We hear it whispered, rather than openly avowed, that lying-in hospitals have sometimes been closed, from the spreading of the intractable contagious peritonitis. In almost all these cases, however, those minute details, which are essential to the completion of the picture, are wanting.

Happily, we see, in this country, at this time, few instances of the disorder in that extreme malignity of which it is susceptible; but in its milder shapes it is, unfortunately, still too prevalent, and it is right that we should know what sometimes happens, so as to be prompt in applying those resources which are alone available in the worst circumstances.

Different views have been, and will continue to be entertained regarding the manner in which the general condition of disease, which I term *ochlesis*, is first developed; but no doubt can exist that, when once engendered, the disorder subsequently propagates itself by a *miasm*, or *contagion*. The ochletic miasm appears to have a short period of incubation,—generally five days, seldom exceeding a week. The phenomenon which it developes, in by far the greatest number of instances, is, unquestionably, erysipelas of the face. This is the *normal type of the disorder*; but there are a vast number of allied affections which appear, at different times, with it, either separately or in combination; and these it will be proper to enumerate in the first instance. They are, erysipelas of the extremities, especially affecting wounds or sores; trails of erythematous redness following the course of the chief absorbent trunks, and terminating in abscesses; cellular inflammation of the lower limbs, or phlegmasia dolens; cellular inflammation of the neck leading to abscess; cynanche; otitis; glossitis; inflammation of the veins; inflammation of the joints, terminating in purulent effusion; spontaneous gangrene of the genitals, and of the extremities; gangrene supervening upon wounds or sores; spontaneous gangrene of some portion of the trunk of the body; in new-born children especially, gangrene of the umbilicus.

It will be observed, that in all the instances now adduced, the tendency of the disease is, to affect one or more of the *superficial* structures of the body; but there are occasions, when no superficial complication is observable. Instances of pure fever, of a low type, from the same source, are not uncommon. When ochlesis assumes the form of simple fever, it is seldom that delirium is present in any notable degree. Muscular weakness, a failing appetite, and a white curdly tongue, are the leading features of the complaint. The absence of delirium is equally remarkable in the early stages of hospital gangrene. The severe facial erysipelas is the only form of ochlesis in which delirium may be anticipated.

The mucous membrane of the bowels is sometimes the structure primarily, or at any rate most deeply involved, and the result is, *ochletic diarrhœa*.

the wards of lying-in hospitals, the miasm expends all its virulence on the peritonæum, and the result is, the contagious peritonitis, or ochlesis puerperarum.

Further, I have seen the ochletic miasm, in several instances, induce an asthenic form of laryngitis, rapidly fatal; and I have no doubt that many of the cases of low, insidious, and intractable pneumonia, which spring up in hospitals, and especially in the surgical wards of an hospital, have their source in the same destructive miasm. Mr. Arnott's "Pathological Inquiry into the Secondary Effects of Inflammation of the Veins," published in the fifteenth volume of the Medico Chirurgical Transactions, contains a most instructive series of cases, exhibiting these and other forms of ochlesis. I would direct particular attention to the case of Elizabeth Rogers, as displaying, in a remarkable manner, the pathological relation of erysipelas to phlebitis and puerperal peritonitis.

Closely allied to this ochletic disorder is the *sea scurvy*. That diet has a large share in generating the scorbutic diathesis is unquestionable; but scurvy developes all its worst features in crowded, ill-ventilated, and ill-regulated ships. When once scurvy has shown itself, a miasm is speedily generated, which is far more injurious to the human frame than salt provisions. To the operation of that miasm, the excessive exhaustion which accompanies the worst cases of scurvy is mainly attributable. The close connexion between ochlesis and scurvy is undeniable. In the wards of the Small-Pox Hospital, I have seen the ochletic miasm occasion petechial blotches, hæmorrhage from the mouth and nose, and a squalid aspect of body, identical, in all respects, with the ordinary phenomena of scurvy.

Nothing is more worthy of note than the extreme depression and low condition of the vis vitæ which the ochletic miasm almost invariably produces. The natural result is, that the convalescence from this disorder, in any of its various shapes, shades, and phases, is singularly tedious.

This principle applies to the ochlesis of lying-in hospitals, not less than to that of the Small-pox Hospital. Mr. Gream, Surgeon of Queen Charlotte's Lying-in Hospital, has kindly favoured me with a communication, from which I make the following extract:—

"There is often in hospital patients, up to the time of their discharge, a want of power not observed in private practice. The women complain of weakness. Their breasts are flabby, and they perspire profusely; all which symptoms are removed in a day or two after leaving the hospital, though their meat and beer have necessarily been relinquished."

Another common feature in all the complaints originating in the ochletic miasm, (from simple erysipelas to the most aggravated form of hospital gangrene,) is *intractability*. They seem to resist alike all forms of treatment. Wine, the best remedy, is often perfectly powerless. Those who do struggle through the crisis, owe their safety mainly to the natural strength of their own constitution. The modes of treating erysipelas are well known to be as numerous as the hospitals in which the disease originates; yet it is difficult to assign to any *one* the palm of superior efficacy.

The forms of ochletic malady which have been most studied, are erysipelas and hospital gangrene. The pathological relation of these disorders has been strongly urged by several authors, especially by Dr. Rollo, of Woolwich. Delpech distinctly affirms, that hospital gangrene may originate from the same contagion as typhus, but this opinion is not, I believe, generally entertained. Mr. Samuel Cooper, in his Surgical Dictionary, treated it as an unsupported conjecture. The experience of the Small pox Hospital during many epidemic visitations, especially in the years 1842-44-47 and 1848, offers the most unequivocal evidence of the truth of the principle for which Delpech contended more than thirty years ago. Our experience has further shown, that next to erysipelas the most frequent form of ochlesis is cellular inflammation of the neck, with cynanche. Glossitis is less common, and happily so, for few, if any, recover, in whom this symptom manifests itself.

Nothing is more certain than that the malignant or contagious peritonitis of lying-in hospitals, is "part and parcel" of the ochletic malady. The great features of this complaint, its origin and propagation, the absence of nervous affection, the tendency to affect the blood, and to involve, in its destructive career, the internal membrane of the blood-vessels, alike concur in establishing this principle. But other proofs are not wanting. Three cases of ochletic peritonitis occurred last year in the Small pox Hospital, all of which proved fatal. Mr. Gream informs me, that, concurrently with the outbreak of puerperal peritonitis in the *mothers*, hospital erysipelas often appears in the *infants*, which is almost invariably fatal.

It is not my object to describe at greater length the different phases of the ochletic miasm. The disorders enumerated as the offspring of ochlesis are individually too well known to require such minuteness of detail, but their mutual relation, and their dependence on a common cause, are not, I believe, so generally acknowledged. Having attempted to pourtray these points in pathology, I shall next proceed to unfold, briefly, the origin and development of the ochletic miasm.

The writings of Delpech, Hennen, Blackadder, Wells, and others, are filled to overflowing with criticisms on the contagiousness of erysipelas and hospital gangrene, on the condition of the atmosphere in which these diseases chiefly prevail, and the concurrent circumstances which favour their diffusion, either as epidemics or endemics. The statements of these authors may appear, at first sight, inconsistent, even if not absolutely opposed to each other, but a few considerations will tend to reconcile such apparent discrepancies. In all reasonings concerning the origin of disease, we ought carefully to reflect what an infinite variety of circumstances may, and generally do, contribute to the actual result.

The chief agent in the production of ochlesis is, certainly, the crowding together of the sick in one spot, be that spot ever so open, ever so airy; but matters are made much worse by unfavourable locality, by the dampness of the surrounding soil, imperfect drainage, or choked sewers. The danger is still further increased by deficient ventilation. It is made still greater by the character of the cases thus congregated; by neglect of personal cleanliness; by the employment of unpurified bedding; by inefficient purification of the wards. All these things may, and certainly do contribute largely to the engendering of hospital malady, and the evolution of ochletic miasm. Nevertheless, it is only at certain times that such effects take place; and we are bound, therefore, to believe, that a peculiar condition of the atmosphere concurs towards the actual result. What that condition of the air is, cannot even be conjectured. All attempts at explanation have failed as signally in this instance as in that of cholera, plague, small-pox, or measles.

That the crowding together of the sick in numbers disproportionate to the area of the ward is the chief agent in the production of ochlesis, is rendered almost certain by the frequent appearance of the malady in the wards of the Small-pox Hospital, when they become crowded by epidemic visitation. A curious and striking illustration of this principle was forced on my attention in the summer of 1844. In that year, at the Vache in Buckinghamshire, I saw a nursery of 500 young pheasants, reared by barn-door hens, until of sufficient maturity to fly to the woods. I was astonished at the number of the birds, the small space which they occupied, and their healthy condition, and anxiously inquired of the attendant the secret, which he had obviously attained, of securing the health of the young brood. He informed me, that the secret consisted in changing continually their sleeping ground. Every evening the hen coops were removed to a new portion of the hill, and a new encampment formed. He added, that if this precaution were neglected, a fatal and uncontrollable disease would speedily manifest itself among the young birds.

Of the *concurrent* circumstances, the most important is *the character of the cases congregated*. A disorder throwing out unhealthy secretions must naturally taint and vitiate the air infinitely more than one where no such secretions are generated. A ward may therefore be *crowded* with cases of jaundice, of palsy, or of chronic rheumatism, and yet no symptom of ochlesis, or superadded hospital malady, shall show itself. But, in the wards of a lying in hospital, where the lochial discharges are abundant,—in the surgical wards of a common hospital, where two or three bad compound fractures, each pouring forth daily its pint of pus, are gathered together, there erysipelas will often appear, and in its train the several allied maladies already enumerated. Such being the pathological principle, it can be no matter of surprise that a small-pox hospital, filled exclusively with cases of such a character, should be specially liable to the ravages of the ochletic malady.

The ochletic miasm, once generated, is signally and fearfully contagious. The disorder spreads from bed to bed, from ward to ward. This miasm, like other febrific morbid poisons, appears to attach itself strongly to the walls and floor of the apartment; and, in a practical point of view, this consideration is of the first importance. I am indebted to the late Sir Anthony Carlisle for a most useful suggestion founded upon it. It consists in covering the floor of an affected ward with a mixture of quick lime and water—allowing, in fact, the slaking of the lime to take place upon the floor.

I need not enlarge on the further advantages of lime-whiting the walls, fumigating by the nitric acid, or chlorine, and thorough purification of the beds and bedding employed about the sick. Valuable as these measures are, they will, nevertheless, occasionally be found inadequate to meet the evil. It then becomes necessary to *restrict the admissions*, and to leave any infected ward unoccupied for a certain time. In every hospital liable to visitations of erysipelas, peritonitis, gangrene, or other form of ochletic malady, the principle should be established of leaving each ward, in succession, empty for one entire week. By this simple expedient I feel persuaded, that much serious inconvenience would be prevented, and the ravages of the ochletic miasm greatly checked. Much has been said on the danger of washing the floors of the ward, and on the salubrity of dry scrubbing. I am well persuaded that continued dampness of the floors is injurious to health, but I am equally convinced, that, in spite of dry scrubbing practised exclusively and most diligently, ochletic erysipelas and its associated maladies will yet occasionally break out in hospitals, under the conditions already noticed, as specially favouring their development.

In a paper, to be found in the Ninety-eighth Number of the *Edinburgh Medical and Surgical Journal*, entitled "A Brief Notice of the Disease popularly Termed Puerperal Fever," Dr. Samuel Cusack, of Dublin, advocates the propriety of removing the sick into tents, when this malady breaks out during the warm seasons of the year. This measure, he says, has not, indeed, been anywhere adopted for patients labouring under the "ochlesis puerperarum;" but the great benefit which attended the removal into tents, when typhus was prevalent in Dublin, speaks strongly in its favour. It would not only, he adds, obviate the necessity of crowding the hospital, but it would afford the best possible opportunity for carrying into effect other expedients, such as ventilation and painting. These suggestions of Dr. Cusack are the more worthy of consideration, because, though perfectly aware "that the vitiated air of a crowded hospital must certainly, more or less, predispose to the puerperal form of fever," he is, nevertheless, of opinion, that the influence of this cause has been over-rated. Dr. Cusack's practical directions, however, embody admirably the whole spirit of the doctrine. "*When removal is practicable*, he says, *it should never be neglected*. If removal be impracticable, measures should be taken to allow the free ingress of UNCONTAMINATED AIR."

EXCISION OF THE HEAD OF THE FEMUR.

By H. HAYNES WALTON, Esq., F.R.C.S., Surgeon to the Central London Ophthalmic Hospital, and to the St. Pancras Royal General Dispensary.

Within the last twelve months, the revival of Anthony White's operation "of excision of the head of the femur," has been much discussed, and I have been frequently alluded to as having performed that operation.

Following the dictates of duty, I now lay before the Profession a sketch of two cases. I avoid any detailed account, mentioning only those points that appear to be of importance. Perhaps some may think that remarks and observations should be appended; such is not my opinion. I wish the cases to speak for themselves, and each reader to arrive at his own conclusion. I am not unwilling to answer any questions respecting them, provided they are authenticated; anonymous communications I always disregard. At the same time, I beg to state distinctly, that I shall not enter into any controversy.

William White, aged 16, had good health till within one year and nine months ago; disease then manifesting itself by severe pains in the right hip-joint. Lameness soon succeeded. He was admitted into the St. Pancras Infirmary, remained there two months, and left it a cripple. He was then admitted as an Hospital patient, under the late Mr. Liston. The usual treatment was adopted without benefit, the disease making greater and greater progress.

On February 21, 1848, he came under my care at the St. Pancras Dispensary; there was considerable distortion of the hip, with thickening and induration of the tissues around the joint. The limb, apparently dislocated, was actually shorter than its fellow, and turned outwards. The least movement of it, on the slightest pressure over the trochanter, gave agonising pain. On the outer side of the thigh, about a hand's length below the trochanter, was a large abscess. There was no evidence of pelvic disease; he was greatly emaciated. Pulse 120, and extremely feeble. His lungs were examined, and disease was neither detected nor suspected. The abscess was evacuated the next day, and a pint and a half of unhealthy bloody pus, in which were coagula of blood, escaped. The introduction of a probe detected exposed bone. His condition becoming more and more hopeless, it was determined to cut down on the joint and remove the carious bone, it being considered that the disease was almost or entirely confined to the femur.

March 24.—In the presence of a large number of professional friends, among whom were Drs. Alleyne, Westmacott, and Taylor, Messrs. Shute, Greenhalgh, Baker, and Smith, I removed the upper end of the femur, just below the great trochanter; finding, however, that the shaft was soft and friable, I sawed off about an inch more; it was healthy lower down. He was so weak that I dreaded his power to undergo such an operation, and certainly without the use of chloroform, which was most judiciously given by Mr. Greenhalgh, I should not have undertaken it. Very little constitutional disturbance succeeded the operation. The conditions of the diseased parts were as follows:—

The capsular ligament retained but a portion of its pelvic attachment; the head of the femur was almost gone; its remaining portion rested against the upper edge of the acetabulum, and that cavity, although denuded of its sinovial and cartilaginous coverings, did not appear to be carious, at least so far as could be judged from the small bits of bone I gouged out. The femoral attachment of the capsular ligament was perfect; but its adhesion to the bone was less firm than natural. The condition of the neck of the femur may be inferred from the fact, that it fractured when the limb was rotated outwards, in compliance with my request, to facilitate the use of the saw. Its walls were mere scales of bone, which easily peeled off from the softened cancellous structure beneath. Along the anterior intertrochanteric line was a deposit of new bone. The periosteum might have been easily detached from the shaft of the femur. In the muscles around the trochanter were deposited little portions of bone, mostly of an elongated form, from the sixteenth to the half of an inch in length.

March 26.—The sutures were removed. The wound, a long one,—nearly nine inches,—united by first intention, except at the abscess, opening through which it passed. Quinine and wine were freely given. On the night of the 27th of March he slept for seven hours consecutively, an amount of rest he had not enjoyed for many months. After that he was put on mutton chops. His bowels were naturally evacuated, and his pulse greatly decreased in frequency; and on the 1st of April, a long splint, with a staple-like interruption of iron, over the site of the wound, was applied, changes in his medicine were made, and ultimately sulphate of iron, &c. was given. He continued to improve, and after two months the splint was removed, the discharge greatly lessened, and became more healthy. In two weeks after the removal of the splint, he could rotate the limb, and raise it a little on the pelvis; later still, he occasionally sat up for a few hours.

In June, the foot and leg became swollen, afterwards the thigh, and from this time he lost the flesh and strength he had gained. Symptoms of renal disease now manifested themselves, great emaciation followed, and he died on the 9th July, after having been delirious for two days.

Post mortem sixteen hours after death.—The left lung adherent at apex, internal part, and base; its structure was healthy; the right was quite free, but in its upper part were small tubercles; a few at the apex had undergone softening. In the right kidney all trace of glandular structure was lost, it being a cyst, filled with scrofulous matter; the left also contained scrofulous matter in several small cysts, which communicated with each other and with the pelvis of the kidney, and inclosed an irregularly-shaped calculus; the cortical substance was much hypertrophied.

Examination of the hip.—The external opening through which the discharge passed away, communicated with the acetabulum, which was lined by a pseudo-membrane. The remains of the ligamentum teres were still apparent. On the lower part of its anterior edge lay the end of the femur, in a shallow cavity that had been formed for it, and to which it was so firmly united by a ligamentous tissue as to require the application of the knife for its removal. The end of the bone had undergone a somewhat similar change to that seen in stumps some months after amputation. It had become rounded, reduced in thickness, and the medullary canal closed. An excellent false joint had formed. Mr. William James, of Exeter, was kind enough to assist in the examination.

The second case I am obliged to write from memory, since the particulars, which were committed to paper, but not entered into my case book, have been lost; therefore, I cannot supply the dates, except in one or two instances, without more time than I can at present bestow to find them out.

It is that of a boy, on whom I operated at the end of October, 1848. He was twelve years of age, and had been under my care in the early part of the year—in March, I think. The history then was, that eighteen months ago, he was observed to have a halt in his walk, which was attributed to a fall he had on his hip. He was very lame; the entire limb smaller than the other. The thigh slightly flexed, and the leg bent. The hip was free from pain, even when the thigh was moved about; but the knee was the seat of suffering. The condition of the soft parts, just below the great trochanter, indicated that an abscess was at hand. He was brought to me three or four times; I then lost sight of him till the middle of August. In the meantime he had been under Mr. Syme. I now visited him at his house; he was quite a skeleton; and there was a large sinus on the front of the thigh, about its middle, giving vent to a copious purulent discharge; his appetite was bad, and his circulation very feeble. The hip was yet free from pain, except when pressed on. The suffering in the knee was now greatly aggravated; he kept it tightly bound up, as that relieved him a little. There was considerable swelling and induration between the great trochanter and the crest of the ileum, with redness, and suspecting deep-seated abscess I made an opening, but no pus appeared. I left town, and did not return until the 11th of September. He had become more emaciated, took little support, and seemed sinking from exhaustion. The suffering produced in the hip and knee, by the slightest motion, obliged him to be kept in the same position for days together. The abscess that I failed to find on the outside of the pelvis, now pointed in the flexure of the thigh, close to the scrotum. I opened it; a large quantity of putrid pus escaped. I determined, that if competent authorities should pronounce him to be free from organic disease, I would attempt to save his life by removing the head of the femur, the part I believed to be diseased. Dr. Ballard, and my friend Dr. Robert Taylor, after a very careful examination, could not detect any affection in chest or abdomen. My opinion was expressed to the parents, and they readily acquiesced in the proposed operation. Contrary to my usual course, of acting promptly after my mind is made up on a point (except, of course, cogent reasons be produced against it), I delayed the operation through the suggestion of a friend, who thought there was just a chance of the lad getting better.

Instead of improving, he got worse, and discharge of blood from the abscess I opened, indicated that ulceration or sloughing was opening some vessels; on two occasions the bleeding returned. It was evident, that unless the cause of the unhealthy action that was going on could be checked, death would soon follow. The last bleeding was on a Saturday, and it was arranged that the operation should be on the Monday next. On Sunday night the bleeding again ensued. On Monday, nearly all the gentlemen who were present at the ... operation again assembled with some others, ...ong them Mr. Chalk, and, as no one considered he patient too feeble, but thought it right to give ...im a chance, I operated about 1 p.m. Chloroform was administered by Mr. Greenhalgh. The head of the bone was not dislocated, but rested against the upper and outer part of the acetabulum, some of it being external, so that, on introducing my finger through the incision, it was easily detached. I sawed through the neck close to the great trochanter. The acetabulum was bare, and slightly rough in the centre and just where the reduced head of the bone rested; in other parts it was healthy. Except the head, no other part of the femur was affected. The poor fellow was much distressed by the operation; he soon rallied with stimuli. I visited him at five o'clock; he was better, and had taken beef-tea. At eight I was sent for, as extensive bleeding had returned at the old place; when I arrived, he was dead.

I say, that the head of the bone was reduced; it is more correct to state, that it was carious on its entire surface, and had lost about the upper half, being flattened above, just as if the upper portion had been cut off.

A general examination of the body could not be obtained, notwithstanding all my efforts to procure it, and I was obliged to be satisfied with inspection of the inner part of the thigh from which the bleeding came. As a sentry was placed over me, I could not exceed the prescribed bounds. Mr. Baker assisted me. The abscess had passed between the adductor muscles and the upper end of the femur to the posterior part of the joint. The surrounding soft parts had undergone the change commonly seen in the immediate vicinity of large burrowing abscesses. The femoral artery was quite dissected from its surrounding connexions along an extent of two inches. The femoral vein was little disturbed, except where it is joined by the profunda vein, and here the source of hæmorrhage was disclosed. Nearly at the angle of junction was a small ulcerated opening in the profunda, just large enough to admit the end of a common dressing probe.

It would make this communication longer than I desire, were I to describe the mode of operating. As I said, in the first case, that the outer wound was

nearly nine inches long, I will merely remark, that in this it just a little exceeded four inches.

13, Bernard-street, Russell-square,
March, 1849.

REDUCTION OF FEMORAL HERNIA BY THE USE OF CHLOROFORM.

By E. W. TUSON, F.R.S.

The relaxing power of chloroform is now well ascertained, so as to warrant its employment in the reduction of cases of dislocation and hernia; but the more we make known the means that prevent an operation and that alleviate pain, the more benefit results.

My friend, Mr. Tucker, of Berners-street, called upon me on Wednesday, March 14, wishing me to see a lady with femoral hernia, and I immediately visited the patient at her residence. I found her suffering from violent pain about the umbilical region, with great tenderness over the whole of the abdomen, so much so, that she could not bear the slightest pressure; she had violent and repeated sickness, vomiting bilious and feculent matter. There was an irregular hernial swelling at the left inguinal region, occupying the central three-thirds of the lower border of Poupart's ligament, which was painful and tender upon the application of pressure; it had appeared after moving some article of furniture the previous day. She had suffered from rupture for more than ten years, and had worn a truss, but the whole of the swelling had never disappeared; it had now acquired more than six times its usual size. The employment of the taxis produced no impression upon the swelling, but caused merely pain. We recommended the administration of a large enema, and the use of a hot bath. The injection returned with nothing else. The patient was then placed in the bath, at 100 deg. Fahr., and after the lapse of ten minutes I had recourse again to the taxis, and continued the manipulation for twenty minutes, but with no success. She then fainted, and was removed from the bath to the bed, where I again used the taxis for twenty minutes more, but with no avail. We then gave it as our opinion that no further delay was advisable; but, as a relative wished another opinion, she was ordered to take a draught containing 40 drops of laudanum, and ice was applied to the tumor. At 10 o'clock, p.m., Dr. M'Intyre, Mr. Tucker, and myself, saw the patient, and further attempts were made to return the swelling, but with no results. We considered it advisable to employ chloroform; and in the event of a further trial at reduction failing, at once to perform the operation, which was readily consented to. I am indebted to Mr. Mortimer, surgeon-dentist, for his kindness in administering the chloroform, and the judicious manner in which he employed it. After twenty minutes' inhalation, it produced complete and general relaxation, and I then with some little difficulty succeeded in reducing the hernia successfully. The difficulty consisted in returning the threefolds or convolutions of intestine through the crural ring, as it was only possible to return a very small portion at a time, and sometimes one part would get obstructed by another, but at last all but a small portion of omentum was returned. When the chloroform had produced the most perfect relaxation, the folds or convolutions of the intestine could be much more distinctly felt, with some fœcal contents, and the omentum could be more readily distinguished with the finger, which I consider rather a curious and remarkable feature in this case. The lady has since quite recovered from all the inconvenience that existed.

15, Harley-street, March 24.

CASE OF AMPUTATION OF THE THIGH AT THE HIP-JOINT.

By G. M. JONES, Esq., Surgeon to the Jersey Hospital.

John Walters, aged 42, a healthy-looking labourer, and of rather a muscular habit, was admitted into the General Hospital on the night of the 20th of January, 1849.

While assisting in extinguishing a fire which took place in the town, he fell from a height of about fifteen feet on the spikes of the railing of the house, where he was so firmly fixed for a short time, that it required assistance to remove him; a large wound in the left thigh was the consequence of this fall; there was considerable hæmorrhage at the time, but it was soon arrested, and the injured part dressed by Dr. John Fixote, whom I found rendering every assistance in his power to this unfortunate man preparatory to his being conveyed to the Hospital. He was again seen in the morning, and the wound minutely examined; it was found to be a deep lacerated one in the posterior part of the upper third of the thigh, from four to five inches in length, and two and a half in its widest diameter; the integuments and flexor muscles were much torn, and, although there was considerable hæmorrhage, no vessel of any consequence seemed wounded. The pulse was 85 and soft; tongue rather coated; no thirst.

A saline cathartic was ordered to be taken immediately, an emollient poultice to be applied to the wound, and the injured limb was fixed, by means of pads, &c., in a position most comfortable to the patient.

7 p. m.—Since taking the aperient, the bowels have been twice opened; there is no pain in the wound, or any thirst; the tongue is clean, skin moist, pulse the same as before; feels inclined to be restless.

xxv. drops of tinct. opii. in camphor-water, to be taken immediately.

Jan. 21.—Patient slept well; complains of very slight pains shooting over the thigh, but there exists no tenderness on pressure, or the least tension; a sanious discharge, but trifling in quantity, is observable each time the poultice is changed. Nourishing diet ordered, and a small quantity of wine.

Jan. 22.—Continues the same as yesterday; bowels regular; pulse 88; easily compressed; no pain whatever on pressing the parts surrounding the wound.

Food as yesterday; one pint of porter daily; quinine mixture three times a day.

Jan. 23.—Symptoms much the same; appetite very good; pulse rather more firm and resisting, but not such as to denote that much re-action was going on.

Poultice to be discontinued, and to be replaced by a mild dressing, and moderate pressure, by means of a roller, to be applied above and below the wound.

Jan. 24.—The night has been a comfortable one, and the patient complains of no pain whatever; feels a little more thirsty than usual, and the tongue is inclined to be parched; pulse 90; bowels regular; skin far from hot or dry.

An effervescing draught every three hours; diluents *ad libitum*.

Jan. 25.—Does not appear near so well as usual, but only complains of having had several chills during the night, and but little sleep; pulse small, and rather more frequent. On removing the dressing, the purulent matter assumed a more unhealthy appearance, and was much greater than it had yet been; the exposed surface, but more particularly its centre, has an unhealthy and dry look; he is evidently losing flesh; the skin, too, is sallow and clammy; the bowels continue to be regular, and the appetite tolerably good.

Two grs. quinine to be taken every four hours, and half a bottle of wine in addition to the porter.

7 p. m.—Is much the same as in the morning; his spirits are good; the discharge from the wound very copious, and still of an unhealthy character; pulse 96, rather stronger.

Continue the same.

Jan. 26.—On removing the dressing, the discharge was so fetid that chloride of lime was used, and, on inserting a probe, several sinuses were discovered between the muscles, and, on introducing a gum elastic bougie, they were found to extend a considerable way upwards and downwards; some sloughing cellular membrane appeared on the wound, the surface of which was dark and unhealthy-looking; the pulse small and thready, but not more frequent than yesterday. The patient still persists that he feels no pain, but his countenance looks anxious, and the skin is very clammy.

A fermenting poultice to be applied to the wound, and the pressure, by means of pads and a roller, to be increased both above and below the wound. Strong beef tea and other nourishment to be frequently given. Quinine every three hours.

Jan. 27.—No amelioration of symptoms; the sinuses have increased, and extend towards the great trochanter, and below within an inch of the popliteal space; pulse as yesterday, perhaps a little more resisting; frequent profuse perspirations; general health evidently suffering in a great degree; appetite continues good; much nourishment has been taken; tongue but little coated, and not in the least dry; bowels regular; secretions natural.

Adhesive straps to be applied above and below the wound; the diet to be of the most generous nature; a glass of port wine every three hours.

Jan. 28.—Symptoms as yesterday. The discharge of a most fetid and unhealthy nature.

Sinuses to be injected with a mild, stimulating, and astringent lotion, and one of chloruret of lime to be applied to the wound.

Jan. 29.—Suppuration greater than ever; appetite still good; thirst urgent.

Saline draughts, in a state of effervescence, to be frequently taken. Diet, &c., as before.

Seven p.m.—The bowels have been acted on three times since the morning; evacuations watery; pulse 104, and weak; complains of feeling restless, but experiences no pain; has had profuse perspirations, but at present the skin feels tolerably comfortable.

Arrowroot, with brandy in it, to be taken during the night, and thirty drops of tinct. opii in camphor julep to be given immediately.

Jan. 30.—Has had a comfortable night, and was able to take a great deal of nourishment; the bowels have not been acted on since taking the anodyne; suppuration not in the least diminished; pulse 102, and very compressible; tongue rather dry, great thirst.

Omit quinine, and a cardiac mixture, composed of ammonia, tinct. card. c., &c., to be taken every two or three hours. Wine to be continued; nourishing broths, and occasionally egg-flip to be taken.

From the 30th Jan. to the 4th Feb. the symptoms became progressively worse, the pulse varying from 102 to 108, and daily becoming weaker. The skin was almost constantly clammy, and the perspirations had not only increased in frequency, but also in intensity. The sloughs about the wound were less, but the sinuses had burrowed more and more, and were discoverable in almost every direction, and appeared to have extended above, between the glutei muscles, and below in the gracilis tendon, but but not entering into the popliteal space. About two inches behind the great trochanter was an appearance of fluctuation.

Pressure, by means of strong adhesive straps and bandages was continued over the entire limb, and food of the most nourishing kind, wine, &c. was ordered.

Seven, p.m.—Feels much the same as in the morning; pulse 104, weak; features attenuated; bowels as usual, regular; the diet taken during the day was relished, and produced neither nausea nor uneasiness; perspirations still frequent and considerable.

Continues the same.

Feb. 5.—On carefully removing the dressing, it was followed with an alarming gush of arterial blood *per saltum*, which appeared to come from some large branch of the profunda. My friends Drs. Leigh and Baxter (who had frequently seen the man) were present at the time, and rendered every assistance in their power, but before the hæmorrhage could be arrested, from ten to twelve ounces of blood were lost. Shortly after a consultation took place as to the best line to be followed with regard to the case. The removal of the entire limb was decided on.

The Operation.—The patient, placed with the nates resting on the edge of the operating table, was at once put under the influence of chloroform. The diseased limb was supported by an assistant; and immediately on the artery being compressed in the groin, I plunged Liston's flap-knife

an inch anterior to the great trochanter, pushed it through the anterior muscles, then carried it obliquely downwards and outwards,—it was necessary this flap should be a large one, the sloughing wound occupying so large a portion of the posterior and upper part of the thigh. The flow of blood which followed this part of the operation was great, but only momentary; the flap was at once turned up by an assistant, and eight arteries secured: first the femoral, and as quickly as possible the remaining bleeding vessels; the vein gave out its blood so freely as to require a ligature; the knife was then introduced at the same point, when the first thrust was made, and its point brought out to meet the incision at the inner part of the thigh; it was then carried obliquely downwards, and by this means the posterior flap was completed; there was no artery to secure. The bone was then taken out of its socket, the flaps brought together by means of adhesive straps, and a moistened pledget of lint was applied, and secured by means of a light roller.

The quantity of blood lost was but trifling, of arterial certainly not more than three ounces, and about four of venous. From the time the patient was placed on the table to his being comfortable in bed not quite twenty minutes elapsed. The pulse, after the operation, remained much the same as before,—110 and weak; he soon recovered from the effects of the chloroform, and even before the dressing was completed spoke rationally, and expressed his satisfaction at the limb being removed. An anodyne was administered, and strong beef-tea and wine were ordered to be frequently given in small quantities. From the time of the operation (which was performed at 2 p.m.) to 7 o'clock, no untoward symptom manifested itself; he had taken most willingly everything given him, and begged that he might be allowed an egg, bread-and-butter, and tea; this he relished very much; profuse perspirations, however, came on, and to such a degree that the bedding was completely saturated with it; these never once left him, though they did not at all times exist in the same degree; he was most carefully watched during the night, and was able to take an amazing quantity of stimulus; his pulse rose each time he drank, but after nine o'clock it became very evident that it was gradually becoming weaker. He slept at short intervals, never once complained of pain, nor was he in the least restless. He sunk at 5 p.m., 27 hours after the operation; and, independent of taking everything which was applied to his lips, he continued sensible almost to the last moment of his life, and died without diarrhœa, any retching, or even nausea.

That this case should have terminated unfavourably was not a matter of surprise either to myself or to those who assisted me. This patient, from the time of his admission to his death, had frequently been seen by several of my medical friends, and his recovery was regarded by all of us as very problematical almost from its commencement. It is true that wounds, to all appearance, of far greater magnitude, and of a much more dangerous nature, are often found to terminate favourably and in a very short period; but when this takes place symptoms exist which were altogether wanting in this case. Here was a total absence of fear, an entire want of re-action, no pressure of the parts caused pain, and tension was a feature which never once presented itself; the pulse at no time denoted that any inflammatory action existed, and the temperature of the injured limb, and also of the rest of the body, was at no time greater than natural; thus no remedy or precaution was required to combat or keep in check symptoms which are essentially necessary to carry out a healthy process; on the contrary, our efforts were continually directed to produce that which is seldom found wanting after an injury of this nature. These resources which nature calls to her aid, and which, if properly encouraged or prudently kept within certain limits, tend to restore diseased parts to a healthy state, could not be produced by any topical or constitutional treatment. This patient, although to all appearance a strong and muscular man, had for years drank freely, and oftentimes to excess, and was, at the period he met with the accident, in a state of partial intoxication; it is, therefore, to be presumed, and subsequent events fully warrant the belief, that he was little able to contend against any sudden shock the system might receive.

In giving the history of this case I have not entered into minute details, but contented myself with stating the most marked features in it, and the general plan of treatment pursued. This patient was seen at least two or three times each day, and every symptom and change of symptoms carefully watched, and as much as laid in my power attended to; but the nervous system received shock after shock, which baffled every effort to lessen or ward off. The fall, the lacerated wound consequent on it, and the loss of blood, was soon followed by an unhealthy-looking sore, and burrowing sinuses, from which a most abundant, fetid, and ill-conditioned discharge constantly flowed; then succeeded the hæmorrhage, and that too at a time when hopes of a favourable termination (never very sanguine) had daily become less and less; under these most unfavourable circumstances, amputation at the hip joint was decided on. It must not, however, be supposed, that so great and formidable an operation was performed till other means had been thought of. Securing the femoral artery below Poupart's ligament was proposed, also taking up the external iliac; the latter operation was the least objectionable of the two, and I would certainly have given the preference to it, on account of the probability that existed of finding a healthy vessel, or at all events one which gave the greatest chance of being so; but what beneficial result could possibly be expected from this line of practice? Securing the main artery would, in all probability, have arrested the present danger, but the same cause which occasioned the loss of blood would still have existed, and the limb, deprived of its chief arterial circulation, must, however, have become more and more diseased, and hæmorrhage to a far greater and much more alarming extent would have followed. No case could, perhaps, exhibit a train of symptoms less calculated than this one to insure success; circumstances had, however, arisen which called for some prompt and decided measure; and although the one adopted presented little, if any, hope of a favourable termination, still it was the only one which offered the slightest chance of proving so. The unfortunate man was aware of the danger, but he willingly consented to any operation, however formidable it might be.

It has been said, that this was a case which ought to have been left alone, and no operation of any kind performed; there are persons to be met with everywhere, and in all professions, who draw inferences from results, and because some surgeons (whose operations may, perhaps, have never extended further than the removal of some small tumor, or the dressing of some trifling wound) have invariably been successful, they are at a loss to conceive why others should be less fortunate than themselves. That man who never takes up his knife except when certain of success, is influenced solely by selfish motives, and is as unqualified for the exercise of his Profession as the quack who pretends that his nostrum can cure every disease. We all of us have a duty to fulfil, oftentimes a most painful one, but in performing it our patient, and not self, must be the first consideration. Our primary object is, or at all events ought invariably to be, to consider the lives of those entrusted to our care, and it is not because an operation is surrounded with danger that we are to shrink from performing it. The time has now passed away since amputation at the hip-joint has been regarded as one which ought never to be performed, "and that the proposers of it were guilty of little less than murder." It is one which is now recommended by the first surgeons of the day, both in England and on the Continent, and has several times been performed, and occasionally with success, and that, too, in cases which offered scarcely a shadow of hope. One of the first authorities of our time, when speaking of this operation, states, "Amputation at the hip-joint is certainly a formidable operation to the patient. The removal of nearly one-fourth of the body must always be attended with the greatest danger, and must frequently be unsuccessful. It does not, however, follow that it should never be performed; on the contrary, when there is no chance of life unless relief be obtained by the removal of the injured part, the operation should be resorted to." If a similar case to the one I have given should ever again fall under my care, the want of success in this instance would not deter me from adopting the same line of practice I considered it my duty to follow on this occasion.

I cannot allow this opportunity to pass without offering my sincere thanks, not only to those who assisted me at this operation, but likewise to many others of my professional brethren, to whose never-failing kindness, judgment, and willing co-operation at all times, I feel myself sincerely indebted for whatever success may have attended me during my practice.

Jersey, March, 1849.

HOSPITAL REPORTS.

ST. BARTHOLOMEW'S HOSPITAL.

CASES UNDER THE CARE OF E. A. LLOYD, ESQ.

Reported by T. M. GIRDLESTONE, Esq., M.R.C.S., Surgeon to the Blenheim-street Dispensary. Formerly House-Surgeon to St. Bartholomew's Hospital.

SEVERE CONCUSSION, FOLLOWED BY SYMPTOMS OF PRESSURE ON THE BRAIN, PARALYSIS OF THE RIGHT SIDE OF THE BODY, PTOSIS OF THE LEFT EYE-LID.

William Adams, aged 33, admitted under Mr. Lloyd on the evening of July 29, 1848. He had been drinking with some other men, and, in a quarrel, was knocked down on the pavement.

On his admission, twenty minutes after the accident, he could not be roused to speak, but occasionally muttered incoherently; he had been insensible from the moment he received the injury. There was ptosis of the left eyelid; the left pupil was rather dilated and inactive, but the right pupil was active. Pulse slow and regular; breathing natural. There was a contusion over the upper part of the left parietal bone, with some effusions under the skin.

Head to be shaved. Hydr. chlorid. gr. v. statim.

Aug. 5.—He remains unconscious of what is said to him. He has got out of bed on several occasions to pass water or fæces; but he generally passes them in bed. On the day after the accident he moved all his limbs freely, but it was now discovered that he could only move his left side; motion and sensation of the right side were nearly lost; his mouth was drawn to the left side. The ptosis of the left eye continued. He has had leeches to the temples, a grain of calomel every six hours, and a blister kept open between the shoulders.

Aug. 26th.—His mouth has been kept slightly affected by mercury; a blister has been kept open either between his shoulders or on the back of his neck; his senses have gradually improved; on being roused he will answer a few questions, but soon relapses into a sleepy state; his right leg has nearly recovered both sensation and motion, and he is able to walk; can use his right arm a little, but cannot use it in feeding himself or for any other purpose; he says that it feels numb; his mouth is still drawn to the left side, but not so much as it was; he has slight power over the left eyelid, but cannot raise it high enough for the pupil to be seen; on raising the lid the iris remained inactive.

Oct. 11th.—He can now use his right arm pretty well, but not so well as his left. He has recovered the power of moving his left eyelid, and can raise it to nearly its full extent; thinks that he cannot see so well with this eye as with the other, and sometimes sees double; has pain in the head occasionally; his bowels are kept open by mild aperients; a seton has been made in the back of his neck; his face is not now drawn to the left side.

In October he left the hospital.

Remarks.—The paralysis and ptosis in this case lead us to the conclusion that the brain must have suffered injurious pressure. As the hemiplegia did not come on till a few days after the accident, it may probably have been caused by some slow effu-

sion of blood. According to Bichat, paralysis may also be caused by concussion; generally, however, it is the result of pressure. Sir Benjamin Brodie remarks, that in concussion there is no paralysis, but that hemiplegia is more rarely the consequence of accidental violence than of apoplexy.

In this case it is remarkable that the patient had hemiplegia of the right side of his body, and ptosis of the left eye. It is possible that this may have been caused by a clot of blood, so situated at the base of the left hemisphere as to make pressure on the third nerve of this side, and thus cause ptosis; while the same pressure would cause paralysis of the other side of the body. In the 14th Volume of the "Medico Chirurgical Transactions," Sir Benjamin Brodie says:—"I have seen ptosis of the left upper eyelid connected with pressure on the inferior surface of the left hemisphere of the cerebrum, the pressure being so situated as to affect the nerve of the third pair, immediately behind the left cavernous sinus."

PARTIAL DISLOCATION OF THE LEFT HUMERUS BACKWARDS. REDUCED THIRTY DAYS AFTER THE ACCIDENT.

Daniel Livington, a seaman, aged 43, while on the deck of his ship during a storm, was suddenly thrown forwards, and, falling heavily, struck his forehead and left shoulder on the deck, his arms being extended to save himself. The accident was immediately followed by inability to move the arm, or straighten the forearm, which was bent, with the elbow touching his side, and the anterior aspect of this joint rotated inwards or towards his body, in which position it was fixed. He suffered constant pain in the shoulder. In hopes of removing the stiffness of his arm, he frequently used to thrust his fingers or pocket-handkerchief under his elbow, and thus succeeded in moving it about an inch from his side. He remained at sea four weeks, and did not see a surgeon. On November 24th, 1847, he came to St. Bartholomew's Hospital, and was admitted under Mr. Lloyd's care. His arm now hung by his side nearly touching it. He had gained the power of extending and flexing the fore-arm, but could not move the upper arm. In appearance, his shoulder was not much deformed. Although there was hardly any falling in or flatness to be seen at the front of the joint, a deficiency could be plainly felt here. The outer and upper part of the shoulder possessed its usual roundness. Posteriorly, there was an unnatural projection at the root of the acromion process of the scapula; this was most perceptible when the arm was raised from the side, and, on rotation, proved to be the head of the bone, apparently resting on the posterior margin of the glenoid cavity. All movements of the arm gave him pain.

Reduction.—After the patient had been made insensible by inhaling ether, his arm was extended at right angles with his body, by means of the pulleys, his scapula fixed, and counter-extension made, in the usual way. Considerable traction was kept up for twelve and a half minutes, when, while Mr. Lloyd was forcing the head of the bone forwards with his hands, it returned to the glenoid cavity with a very perceptible snap. The natural shape of his shoulder was restored.

His arm was bandaged to his side.

Nov. 25.—He has had little or no uneasiness since the reduction, and states, that his arm is now, for the first day since the accident, free from pain.

Dec. 6.—Bandage taken off. To wear a sling.

Jan. 7, 1848.—He has now gained considerable, though not perfect use of his arm; he can raise his hand as high as his head.—Discharged.

Remarks.—In this case, the head of the humerus appears to have been thrown backwards, and to have remained resting against the margin of the glenoid cavity, thus producing what is called "partial dislocation;" an accident that seldom occurs to the humerus; indeed, the possibility of its taking place was denied until discovered by dissection. In 1824, Baron Dupuytren presented a specimen to the French Academy, taken from a man who died eight months after a dislocation of the humerus, which had not been reduced. It exhibited a false joint formed by the anterior edge of the glenoid cavity and a small portion of the surface of the ribs, which received the head of the bone. Somewhat similar cases have been found in the course of dissection, by Mr. Potter, Mr. Sollen, and others, in which false joints were formed on the margin of the glenoid cavity of the scapula. There are three specimens of partial dislocation of the humerus in the Museum at St. Bartholomew's Hospital; one of these bears a striking resemblance to the present case, and is thus described in the catalogue:—"Shoulder-joint, exhibiting an incomplete dislocation of the humerus backwards. The head of the humerus, unaltered in form, rests against the posterior border of the glenoid cavity. The tendons of the supra-spinatus and infra-spinatus are detached from the tuberosity of the humerus, but retain their connexion with the capsule. The tendon of the biceps is displaced from its groove in the humerus, but retains its attachments to the glenoid cavity. The tendons of the teres minor and subscapularis retain their attachments to the humerus. The capsule of the joint is thickened." This is decidedly a very rare form of luxation. The rupture of the muscles shows that it was the result of violence. There is no history known about the person it was taken from, but the false joint is sufficient evidence that it remained unreduced for a considerable period, at the same time pointing out the precise position of the head of the bone, which rests on the posterior margin of the glenoid cavity and root of the acromion process without descending into the dorsum scapulæ.

Such an injury as this may be caused by a fall on the front of the joint, although, if dislocation took place from such an accident, it would most probably be on the dorsum, but the direction of the head of the humerus must be influenced by the position of the arm at the time of the fall.

Mr. Samuel Cooper, in stating his opinion on this subject, mentions the case of a woman who fell, in the street, on the front of her shoulder, and dislocated the humerus on to the dorsum scapulæ.

From the number of instances in which partial dislocation of this bone has been found in the dead subject unreduced, as well as the existence of such an accident having been first ascertained in this manner, we may conclude that it is usually difficult or impossible to retain it in its proper position after it has once suffered an injury of this kind; or, that the nature of the injury has been sometimes entirely overlooked. In the case I have just related, there was no difficulty in retaining the parts in their proper position after reduction; but it was remarkable that an audible snap accompanied the return of the bone, thirty days after the accident.

PROGRESS OF MEDICAL SCIENCE.

GERMANY.

[Berlin Correspondence.]

REGULATIONS IN PRUSSIA CONCERNING THE EXHIBITION OF LARGE DOSES OF CERTAIN MEDICINES.

It seems, upon the recommendation of the *Medicinal Colegium*, that the Prussian Government has adopted a measure to obviate the fatal effects of errors occurring in the prescriptions of medical men, by fixing the maximum quantity of each medicine which an apothecary, or rather druggist, although the former is the term used in Germany, is permitted to make up. It is also ordered, that when a medical man deems it necessary to prescribe a larger quantity of any drug than the law allows as a dose, he must make express mention of the fact in his prescription, without which the apothecary is forbidden to prepare the recipe under a penalty varying from 3*l*. to 8*l*. We learn, too, that in the new Prussian Pharmacopœia, about to be published, the sign to be given by the medical man in his prescription, to show that the dose ordered is necessary, is to be a note of admiration: thus (!). We do not know how far this plan, or a similar one, would work in England; but very sure we are, that there are few druggists who would not at once detect an heroic dose of a powerful drug, and pause before they compounded it. Again, we fear John Bull would deem it an innovation upon his rights and privileges; and that we might as well make an attempt at once upon the liberty of the subject, as to prevent him from swallowing any given quantity of medicine.

The forms of Government on the Continent are so different from the genius of the British Constitution, that we naturally recoil from any regulation or law that is there enforced; fancifully enough, though unjustly, conceiving that they have but one object in view—the circumscription of the liberty of the subject. But there are not a few leaves we free-born Britons might nevertheless take out of their books, greatly to our advantage, comfort, and safety, without in any way affecting the proud privileges we enjoy. The instance we have now brought forward, of the law just enacted in Prussia relating to the vending of large doses of medicine, would seem in every respect faultless, and such as every State should enjoin, be it in the form of the purest Democracy, as a Red Republic—be it of the most despotic character, as with the Emperor of all the Russias—or whether it assume the mild and temperate form of the British Monarchy, if the Government be *in any degree* the guardian and protector of the lives of the people. As it wields the sternness of the laws on all that contravene its code, it is equally imperative that it should prevent the possibility of their infringement.

The object of the regulation is twofold—1st, to prevent accidents casually resulting from inadvertency, either through the fault of the physician, or the error of the apothecary; and, 2ndly, to prevent the purchase of poisonous doses of medicine with intent to destroy life, either by suicide or murder. Had some such law been in force in our island, many cases of poisoning would have been prevented, and not a month passes without the public prints recording them; nor would wholesale poisonings in Essex, as well as elsewhere, to obtain the miserable allowances secured by burial clubs, ever have been perpetrated. Sophistication of any substances from which the Exchequer derives a revenue is punished severely enough; certainly, then, it cannot be beneath the notice of our Legislature to regulate the sale of articles which can so easily, and by the most uninformed, be readily employed as a means of destruction. We would particularly, then, suggest it for consideration; perfectly satisfied, that were some such law enacted, it would meet the approbation of all druggists, and be equally acceptable to the great body of the people. *Facilities for the commission of crime, the Legislature must ever recollect is an indirect inducement to its perpetration.*

TREATMENT OF CHILDREN APPARENTLY BORN DEAD.

Dr. Thues, in the *Oestereichische Medecinische Wochenschrift*, recommends, in cases of children apparently born dead, alternate immersions in cold and hot water; and MM. Wieland, Schneider, and Scholler assure us they have succeeded in restoring animation by these means, when all others have failed.

SUBCUTANEOUS OPERATION FOR HERNIA.

Dr. Mayer, of Wurtzburg, in Bavaria, relates, in *Schmidt's Jahrbucher*, a case of strangulated hernia, for which he had successfully operated by the subcutaneous method. He states the advantages of this operation over the old one, and recommends it for the following reasons:—

1. The smallness of the wound.
2. The absence of considerable hæmorrhage.
3. The absence of pain.
4. The absence of inflammation.
5. In most cases, the absence of subsequent suppuration.
6. The absence of constitutional disturbance.
7. Speedy recovery.
8. The safety of the peritoneum and spermatic cord.
9. The non-contact of air.

10. The parts not being injured by manual contact.
11. Time gained.
12. Smallness of after cicatrix.
13. Ease with which a truss is afterwards worn.
14. Absence of peritonitis.
15. Patient's willingness to undergo it.

Is common with the rest of our professional brethren, we hail with pleasure every attempt to facilitate the cure of disease and to diminish human suffering. As practical men, however, we are compelled to say, that we do not anticipate much good in this way from the subcutaneous operation for hernia. All surgeons who have had much experience in the operations for hernia well know that, even with the parts freely exposed, it is often difficult, and requires great care to successfully divide the stricture externally to the sac; and often that, when the stricture appears to be completely divided, an irresistible impediment to the reduction of the hernia still exists. The parts being exposed, the cause of this is, in many cases, discovered and removed, and the necessity of opening the sac avoided. But if, as in the subcutaneous operation, the parts to be divided had been hidden, the obstructing cause would not have been ascertained, and, after much loss of time, recourse, in all probability, would have been had to the old operation of opening the sac. Having stated thus much for the consideration of our readers, we refer them to Dr. Meyer's fifteen reasons in favour of the operation, and leave them to judge for themselves.

FRANCE.

[Paris Correspondence.]

TREATMENT OF ERECTILE TUMORS.

Monsieur Guersant divides erectile tumours into three classes,—1. Patches, or slight elevations, as *nævi materni*; 2. Tumours of the skin and cellular tissue; 3. Tumours occupying a region, and involving both skin and muscles. There are also mixed cases. The spontaneous cure of these tumours are not without example; they are attacked with inflammation, suppuration succeeds, and the tumour disappears. Monsieur Guersant endeavours to imitate nature; and, after passing in review the different modes that have been proposed, such as excision, acupuncture, ligature, &c., he arrives at the conclusion that caustics, or the actual cautery, are the best methods to employ. For nævi, he uses the Vienna paste; for projecting tumours, not involving the skin, he prefers the actual cautery, even when the cellular tissue is involved; for the third class he uses Bérard's platina needle, which retains its heat longer than those made of other metals. He assures us of the great success of this method, and that erysipelas is never produced.

Erectile tumours are of frequent occurrence, and present themselves in different cases under very different appearances. With M. Guersant we so far agree, as to admit that caustics, employed in some form or other, constitute the best, if not the only remedy universally applicable in the treatment of such cases. But we believe all surgeons of much experience will agree with us, that cases often occur in which other modes of treatment may be employed more judiciously, and with greater benefit; and we deem it right to state this as a caution to our junior readers, so that they may, at all times, be upon their guard, look well around them, examine all the plans that have been at any time proposed, and select the one which their own good sense and experience lead them to consider most applicable to any particular case. For ourselves, we may state, that, in all large subcutaneous nævi, we consider the treatment by injection as employed by Mr. Lloyd of St. Bartholomew's Hospital, to be the most convenient, the least painful, and the most efficacious.

CHLOROFORM.

Monsieur Moreau, at the Bicêtre, has applied chloroform externally, with great success, in wandering rheumatic pains; Monsieur Legroux, of Beaujon, in the same way, in painful cancerous affections, which, he says, have thus been greatly relieved; and Dr. Aubrun, of Paris, in the most painful angina pectoris. In brow ague it is a very valuable application.

CAPUT SUCCEDANEUM FATALLY MISTAKEN FOR PRESENTING MEMBRANES.

In cases of head presentation the skin is some times so gathered up and swollen as to be very like the presenting membranes before they have broken. To this the term *caput succedaneum* has been applied; and a case is related, in the *Gazette Médicale de Paris*, in which it led to a fatal termination. Professor Dubois recommends that no other instrument than a quill should be at any time used to rupture the membranes.

We give a place in our Journal to the above, not so much as a warning, but to show that such things have occurred; the case would not often be mistaken in England, and, even should it be, we do not find that a scalpel is necessary to rupture presenting membranes, the finger nails generally sufficing for the purpose.

BELGIUM.

TREATMENT OF CERTAIN DISEASES BY ELECTRICITY.

In the last Number of the *Archives de Médecine Militaire*, is a paper by Dr. Stacquez, on the treatment of certain diseases by electricity,—"*De l'Application de l'Electricité au Treatment de quelques Maladies.*" It deserves some notice; not so much, perhaps from any originality in the subject, as from bringing forward an important point that has been too much neglected. The last few years have added much to our hitherto but imperfect knowledge of electricity. Electro-galvanism now ranks high in the sciences; and there is scarcely any therapeutic agent that exercises so direct and powerful an influence on the human economy, whether it be considered physiologically or pathologically, as the electric fluid. We know it to be everywhere; it pervades the air we breathe; it forms an essential element in vitality, acting, as it were, in and about man as a compensating medium for establishing an equilibrium between him and surrounding objects. These facts, long known, and always admitted, will alone enable us to comprehend and appreciate the importance of this element in promoting disease when its action is disturbed, or of curing disease when that already exists. It may become a very energetic curative agent, by acting immediately upon the nervous system. Many facts are already known; and we cannot make sufficiently public the advantages to be derived from the application of this as a remedy for the cure of many nervous affections. Under a variety of circumstances, too, it may become not only useful, but even indispensable; but to prevent disappointment and failure, it is most essential that a correct diagnosis be formed. Dr. Stacquez considers electricity as a modifying agent, acting upon the human system in such a manner that we can, by its application, derive the greatest success. He thinks that in order that it should be properly appreciated, it should be submitted to fresh experiments and study. He says he has been most successful in its use, and he employs it, first, in those affections where there exists a diminution of nervous power; secondly, those which are dependent upon the lesion of sensibility and motion of the muscles, and in rheumatic and muscular pains. As the action of electricity accelerates the circulation and acts upon the secretions, it can be usefully employed in promoting the resolution of various sympathetic and other swellings, and the appearance of some of those critical phenomena which indicate disease. Might it not be usefully employed in cholera? Although, to this day, we have only been able to found our remarks upon uncertain indications, we cannot help thinking that electricity might produce great benefit in an epidemic, particularly at its first appearance. The great alterations produced upon the nervous system seems to be often the cause of the malady, and it is possible that electricity, applied in time, might have an effect upon this terrible disorder.

The observations that our Author makes are highly interesting and practical. He cites, 1st, the case of an officer, of 35 years of age, who was impotent for several years, and who had been treated with cantharides with little effect, and by cauterization to the neck of the bladder. This patient was completely cured after forty-two shocks of electricity.

Case II.—A lady had been ineffectually treated by her Physicism for severe nervousness,—she was fearful of noises, not those she heard at the moment, but which she dreaded to hear. She was cured by electricity in eight days. He remarks, that it is always far from the seat of the nervous pathological excitement that we ought to direct the electrical current; he employed it in this case by action upon the nerves of the inferior extremity.

Case III.—An officer was attacked with paralysis, which resisted all active means employed, but at last gave way to a methodical and long-continued employment of electricity. The facts stated are too remarkable not to induce other practitioners to undertake the employment of therapeutic means, which have produced such brilliant results.

IRELAND.

(From our Dublin Correspondent.)

ROYAL IRISH ACADEMY.

A Stated Meeting was held on the evening of Friday, the 16th of March,

The Rev. Dr. Lloyd, President, in the chair.

DISCOVERY OF THE CONSTANT PRESENCE OF GRAPE SUGAR IN THE WHITE OF EGGS.

Dr. Aldridge having been called on by the President, stated, that he had to announce to the Academy the discovery by him of sugar, identical with the sugar of grapes, of honey, and of diabetes, being an essential constituent of the white of the egg of the common domestic fowl. In using the ordinary tests for the presence of this substance, the results will be found to be slightly modified, probably by the presence of other constituents. When white of egg is mixed with an equal bulk of potash-water, and boiled, as in Moon's test, the liquid becomes of a deep amber colour; when the white of egg is mixed with some potash water, and then with hydrated oxide of copper, as in Capeszuoli's test, the latter dissolves, forming a fine pink solution, which, after some time, decomposes throwing down a *brown* precipitate, probably on account of the presence of sulphurets. When the white of egg is mixed with potash water, and then a few drops of solution of sulphate of copper added, an intensely *red* coloured solution becomes formed, which, upon boiling, deposits a *brown* sediment.

But the cause of these reactions can be separated from the albumen of the white, and will then be found to present all the ordinary characters of grape sugar. To obtain this substance in a separate form, the whites of eggs are to be beat into a smooth pulp, with an equal bulk of rectified spirit of wine, sp. gr. 850, and then heated; when approaching the boiling point of the spirit, the mixture will rather suddenly separate into a firm coagulum of albumen, and a straw-coloured spirituous liquid. The latter is to be strained off, and an additional quantity can be extracted from the coagulum by strong expression. This liquid, which is highly alcaline, is then to be evaporated in a water bath; and during the evaporation transparent gelatinous-looking pellicles will be found to form, at first yellowish, but towards the termination, of a deep reddish brown, which are, from time to time, to be removed and preserved. Those pellicles are of an albuminous nature, becoming of a deep orange colour, when treated alternately with nitric acid and water of ammonia, although peculiar in being obtained by the evaporation of a spirituous liquid, from which no precipitate was capable of being thrown down by nitric or acetic acids. It is from these pellicles that the sugar is to be extracted, which can be done by triturating them with rectified spirit of wine, when they become whitish and opaque, then boiling and filtering. By evaporating the filtered liquid to the consistence of a syrup, and

immersing in a freezing mixture, grains of grape sugar will deposit on the sides and bottom of the vessel. These, as well as the syrup which yields them, have a taste at first intensely sweet, followed by a saline after taste, from the presence of accompanying salts. They dissolve without discolouration in cold sulphuric acid; and behave in every respect similar to the sugar of diabetes.

SURGICAL SOCIETY OF IRELAND.

There was a meeting of this Society at the Royal College of Surgeons on Saturday, the 17th of March.

Professor HARRISON, President, in the chair.

The Secretary (Dr. Benson) having read the Minutes of the last meeting, a paper was read by Dr. Bellingham, on a case of *scrofulous disease of knee-joint, amputation, repeated secondary hæmorrhages, and ligature of the superficial femoral, and subsequently of the external iliac arteries, recovery.*

There was nothing remarkable about the early history of the case. It was an ordinary instance of scrofulous disease of the knee-joint, in which amputation was considered advisable. A flap operation was accordingly performed, and every thing appeared to progress favourably until the 12th of January, the twelfth or thirteenth day after the operation, when suddenly a profuse hæmorrhage burst forth from the stump. Dr. Tufnell happened fortunately to be in the Hospital (St. Vincent's) at the time, and he quickly controlled the bleeding by pressure on the common femoral, where it crosses Poupart's ligament. A clamp was then procured, and pressure was exerted on the superficial femoral, which was found to prevent the return of the hæmorrhage. Matters remained in this state until the 16th, when the bleeding from the stump recommenced, although the clamp was tightly screwed. It was resolved to pass a ligature round the superficial femoral artery. Some difficulty was experienced in doing this, from the necessity of keeping up constant pressure on the common femoral, and also because the artery, when laid bare, did not pulsate. A greater extent of the artery than was desirable was separated from its connexion, and it was thought well to put two ligatures on it. It was remarked during the operation, that the artery was excessively painful when touched. For a few days there was no reappearance of the hæmorrhage, but on the night of the 20th bleeding again commenced. Upon consultation it was deemed advisable to control the hæmorrhage during the night by pressure on the common femoral by means of a key, and in the morning to tie the external iliac. Means were had recourse to to diminish the tension and distension, but these were only partially successful. In the morning the operation of tying the external iliac was performed under very disadvantageous circumstances, and it being recommended to tie the vessel low down, to meet the event of another operation being requisite, these difficulties thereby became increased. In the course of the operation, that which appeared to be a fascia being cut through, gave exit to venous blood, which commenced to well up at the bottom of the wound. This was probably from cutting the circumflex ilii vein which crosses the artery in this situation, and the danger of injuring which, was first pointed out by the late Dr. Hauston. However the operation was successfully terminated; and from that time no further secondary hæmorrhage occurred; the stump and the various wounds cicatrised in time favourably; and the boy, at the end of the reading of the paper, was exhibited to the Society, with many marks of the surgeon upon him, certainly, but apparently in excellent health and spirits.

After some observations on the foregoing case, Professor Harrison proceeded to demonstrate the structure of the foot of the camel. It is commonly stated in books, that the camel has feet admirably adapted for treading the desert sand, being broad and expansible, with convex sole, and two nails rather than hoofs in front, which assist him in progression. The nature of the elastic pad placed above the sole was that to which Professor Harrison principally directed his attention, as well as the connexion of the flexor tendons with the cutis of the sole. He demonstrated that the latter, besides having a direct connexion with the bones, had also vertical processes, which descended, and were connected with the skin of the sole, lifting it at the time the foot was raised; and these processes formed six distinct spaces, three for each toe, in which are contained the elastic pads, little elliptical bodies that appear to be of the nature of intervertebral substance. The Professor showed the differences existing between the structure of the feet of the camel, the elephant, and the horse, and demonstrated, that although the camel manifestly belonged to the ruminating class of mammalia, it properly constituted a transitional genus.

SCOTLAND.

[From our Edinburgh Correspondent.]

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

Meeting of March 7, 1849, continued.

Dr. JOHN GAIRDNER in the Chair.

ON THE DIVING-BELL AS A MEDICAL EXPEDIENT IN THE TREATMENT OF DEAFNESS.

Dr. Warden read a communication "On the Diving-Bell, as a Medical Expedient in the Treatment of Deafness." In the outset of his paper Dr. Warner made some remarks upon the advantages to be derived from an accurate exploration of the external meatus auditorius and tympanum by means of the prismatic speculum. He described the horny transparency which the tympanic membrane might, by means of this instrument, be seen to possess—a transparency which often enabled him to detect inflammation and its products; such as adhesions, even within the cavity of the tympanum. He believed that a descent in the diving-bell might be found useful in certain cases of obstruction of the Eustachian tube, but by no means recommended the rash and indiscriminate employment of this expedient. He was rather inclined to reserve it as a last resource, to be only employed when other remedies had failed, and when the speculum disclosed no evidence of *active* disease. He detailed, very minutely, the history of a deaf patient with whom he descended in the diving-bell at Granton Pier. During the descent, which was very gradual, the patient suddenly became alarmed, and inquired the meaning of a strange sound he heard. It was immediately discovered that he had regained the sense of hearing on the left side. When the bell was again raised to the surface, the patient's hearing again became dull, yet some degree of permanent improvement had been effected. In the course of his communication Dr. Warden alluded to the sensations experienced by professed divers while exposed to a dense atmosphere; he thought that when these sensations were painful, chronic inflammation of the ear might be discovered. He read a letter from Surgeon Home, who in 1846 had descended in a diving-bell to a depth of thirty-six feet, and remained one hour and thirty minutes under water. He felt acute pain in the ear, similar to that caused by thrusting a probe into the external auditory passage, and was deaf on the left side for several months afterwards. On a recent examination of Dr. H.'s ear with the speculum, Dr. W. could still detect traces of chronic inflammation.

In answer to some questions put by Professor Simpson and Dr. Douglas Maclagan, regarding the mechanical principle on which benefit might be anticipated from the use of the diving-bell, Dr. Warden and Dr. Seller explained, that if air of the ordinary density were contained within the tympanic cavity, *and the Eustachain tube obstructed*, when the patient was placed in a denser atmosphere, the membrane of the tympanum would be pressed inwards, and the air entering by the mouth would also be urged into, and might possibly succeed in clearing the obstructed Eustachian tube.

FRACTURE OF THE PELVIS, WITH INJURY OF THE BLADDER.

Mr. Spence read a case of fracture of the pelvis, with injury of the bladder, communicated by Dr. Taylor. The case was that of a man who was crushed under the ruins of a wall, which fell upon him while he was taking it down. In addition to fracture of the left clavicle, he was severely bruised over the chest and the lower part of the abdomen. Thirty-six hours after the accident he complained of pain in the lower part of the belly, with retention of urine, which was drawn off by catheter without affording relief. The urine was perfectly *clear*, and continued so till the period of his death, which took place on the sixth day after the accident. It required to be drawn off three times daily. On dissection, besides other morbid appearances, the bladder was found contracted, and placed more obliquely than usual. The bones of the pubis were found to be fractured, though scarcely at all displaced. The fracture on the right side commenced about 1½ inch from the symphysis, running obliquely through the horizontal ramus of the pubis, and separating a long or shelving spicula from the posterior part or inner body of the pubis. There was also fracture of the left horizontal ramus, and of the upper and inner part of the obturator foramen. The first-mentioned spicula had transfixed the bladder at its superior and anterior part. The sub-peritoneal tissue of the pelvis was filled with blood mixed with a thin fluid. On this being removed, the obturator arteries and veins were found to have been torn. The obturator nerve on the left side was found much stretched and ecchymosed, but not torn.

This case is chiefly remarkable as opposing the views held by Dr. Watson, of Glasgow, that in all cases of puncture of the bladder the urine is found mixed with blood.

ROYAL SOCIETY OF EDINBURGH.

ON THE REFRACTIVE AND DISPERSIVE POWERS OF THE HUMOURS OF THE EYE.

At the meeting of the Royal Society on Monday evening, the 19th inst., Mr. John Adie detailed a number of experiments he had made to determine the refractive and dispersive powers of the humours of the eye. His object in undertaking these experiments was to discover if the achromatism of the eye could be accounted for by the difference in the dispersive ratios of the fluids forming that organ. The indices for several of the fixed lines in the spectrum were determined in the aqueous humour; but with the crystalline no satisfactory result could be obtained. In subjecting the vitreous humour to experiment, only the strongest of the fixed lines could be seen, and that with great difficulty. One remarkable feature, however, was observed, viz., that on dividing the mass of humour, *two spectra* were formed, the one placed above the other, having a greater deviation, and, consequently, refractive power; thus proving that the vitreous humour is *not* of equal density throughout, as has heretofore been supposed.

REMARKABLE PROPERTY OF GUTTA PERCHA.

Dr. Thomas Wright, F.R.C.P.E., has recently discovered that sheet gutta percha possesses the property of polarising light, in a manner somewhat similar to the tourmaline, and may be used in place of that mineral as a polarising plate for the microscope, together with an analyzing prism of Iceland spar. Dr. Wright forms his artificial tourmalines by arranging six or eight layers of the thinnest gutta percha of the shops between two plates of glass, the grain of all the pieces having the same direction, and their surfaces being lubricated with castor oil to render them more transparent. We have examined several objects with light polarized by gutta percha, and find that its action is satisfactory—the black cross of *tous les mois*, and the rich colours of selenite and other crystals being given remarkably well. Gutta percha is not adapted to form an analysing plate, on account of the coarseness of its texture and its deficient transparency.

TO OUR SUBSCRIBERS.

Having received several communications in reference to Subscriptions due prior to July, 1848; the Publishers beg to state, that, although some confusion may arise in applications for payment by the former Proprietor and Editor, yet every means will be used to prevent trouble, and insure correctness.

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THE MEDICAL TIMES.

SATURDAY, MARCH 31, 1849.

Ordinary usage would assign the place of a Review to the consideration of "The Hunterian Oration, delivered before the Royal College of Surgeons of England, on the 14th of February, 1849; by Cæsar Hawkins, Surgeon to St. George's Hospital;" which has lately been published. The importance, however, of the subject induces us to place in a more prominent position the question which we here ask, and which we will attempt to answer,—What should the Hunterian Oration be? It should be worthy of the great name of the man whom it commemorates. It should not be a mere parade of common-placisms. It should be worthy of the body before which it is delivered. It should be a discourse on the progress of some part of the science of life, fit to interest the medical world at large.

It is idle to say, that the topics are trite—that they have been commented on in the same fashion, year after year, for nearly five-and-thirty times. Let that fashion be changed. The subjects, in the philosophy of life, with which John Hunter inseparably connected his name, are inexhaustible. To complain of dearth when the materials overwhelm by their abundance, is most palpably the wilful blindness of indolence, or the weaker wail of ignorance. We do not blame Mr. Hawkins in particular—he has followed the lead of most of his predecessors. Our readers are already acquainted with the substance of his Oration, by the full report of it given in our Number for the 17th of February. He has alluded to topics of surpassing interest, sufficient for a score of discourses; and what we complain of is, that he has merely touched on such topics without handling any one of them. It will be said the time is too short; but let one subject be chosen, and much may be compressed within a brief space. What is wanted, is diligent preparation; and surely the occasion deserves some sacrifice, not to speak of the audience, and the chance of the honour, as on the recent anniversary, of being listened to by Royalty itself.

How anxiously longs the well-educated practitioner, cut off by incessant occupation from the pursuit of once favourite studies, to gain general views of the present state of those great questions in the animal economy, on the elucidation of which John Hunter expended so much energy! What a noble field opens up here for the commemoration of the birth of the great physiologist! An annual discourse, addressed to men already familiar with such subjects, composed, not in a few snatches of leisure, but with time and pains, by a scientific Surgeon who had long before adopted the requisite means to prepare himself for the task. Such a discourse might be made worth fifty average reviews or reports on the leading points in the economy of living nature. The medical men of our day live in the midst of such an out-pouring of knowledge, that nothing is felt more than the necessity of trustworthy guides to show the point towards which the course of real science has set in.

Away, then, with orations of no higher mould than mere academic exercises. Let us have none hereafter, dwelling more elaborately on the number of editions and the character of a book so familiarly known as "Cooper's Dictionary," than on the exhibition of our present knowledge of the most essential functions of the living machine.

It will be said that our remarks point, not to an oration, but to a lecture; but such a discourse as we wish to recommend need not lose the character of an oration. Skill, no doubt, will be requisite to preserve it from the dryness of a lecture; but surely better it should pass into a lecture than dishonour the memory of Hunter with the puerilities of a school-boy's theme. Let the Orator invoke the spirit of Hunter, and force himself to conceive that he is to speak in his presence, and under pain, if he offend, of some such token of his displeasure as he was wont to give when alive; and he will be a bold man, as we think, who will have the hardihood to do less than his best.

Mr. Hawkins glances, as we have already intimated, at many topics:—the tissues; the synovial membrane of the cartilages of the joints; the reflexion of the vessels of the round ligament without entering the head of the thigh-bone; the nitrogenized nutritive principles of vegetables; the kreatine of the muscles ready to pass into urea; the influence of oxygen in the living system; the wonderful transformations of organic chemistry in the Laboratory as applicable to the understanding of chemical transformations in living nature; the claim of Dr. Prout to priority of discovery, under the name of secondary assimilation of what Liebig subsequently termed the oxydation of the tissues; cytogenesis; endosmose; exosmose; the urea of the blood; the want of universality in cytogenesis, and the restoration of the doctrine of the organisation of the fibrine of the blood, by Mr. Travers; the vital properties; the discordant estimates of the force of the heart by Borelli and Hales; the respective Proteine theories of Liebig and Mülder; the extravagancies of Matteucci's nervo-galvanic views; Poisseuille and Barchett's explanation of the action of purgatives by endosmose; the vital affinities of Alison; the presence of urate of soda in the blood, as taught by Garrod; iodine in the several fluids, as taught by Christison; the alternation of the acidity of the urine with that of the stomach, as observed by Dr. Bence Jones; the analysis of the blood; the life of the blood; the supposed vital formative properties of the blood vesicles; the inhalation of ether, chloroform, and nitrous oxyde as anæsthetic agents; the alleged refutation of Dr. Kellie's views of atmospheric pressure on the circulation of the brain by Dr. George Burrows; the slow progress of the right principles for the application of ligature in aneurysm; remedies in scurvy, and, among the rest, potassa, as suggested by Dr. Garrod; the epidemic cholera; the microscope, as a means of observation, and Mr. Quekett's demonstrations; the forthcoming illustrated catalogue of the preparations; the stethoscope; the hydrostatic bed; the spirometer; dextrine splints; new medical applications of electricity; ozone, (by the way, quoted from the *Medical Gazette* of October, 1848, but see *Medical Times* of April 8, 1848;) the effect of co-operation in meteorology, and the success to be expected in medicine were the same plan adopted in hospitals; the appointment of Sir David Brewster to succeed Berzelius in the French Institute; the condescension of Prince Albert; and, the overthrow of thrones and dynasties!

We read, in our schoolboy days, of a Cæsar who was able to carry on three distinct trains of thought at the same moment; but Mr. Cæsar Hawkins, in his oration, seems to have endeavoured to surpass this legend. We must be able to do more than realise Mrs. Malaprop's idea of a man being "three gentlemen at once" in order to do justice to him.

> "Grammaticus, Rhetor, Geometer, Pictor, Alyptes,
> Augur, Schænobates, Medicus, Magus."

which we may freely translate:

> He's operator, chemist, mechanician,
> Reviewer, midwife, artist, electrician,
> Apothecary, courtier, politician.

Or, if we might be allowed to extend our rhymes, we would say:

> He mourned o'er Callaway and Briggs, who 're dead,
> And long he dwelt on Cooper's three editions;
> Then fifty little bits of news he read,
> Yet from his written store made some omissions.
> His speech, in short, had neither tail nor head;
> But, since Prince Albert listen'd, politicians
> In these throne-breaking days will say, perhaps,
> Princes should learn to feed, like pigs, on scraps.

We have given a list of the subjects mentioned in the Oration; and of all the multifarious topics, extending over twenty-four pages, with the average of two topics to a page, our simple enumeration is hardly less instructive than the more pompous exhibition of them in Mr. Hawkins' work.

> "Purpureus, late qui splendeat, unus et alter
> Assuitur pannus:"
>
> The web *he* wove, but here and there has tied
> A dazzling patch which other looms supplied.

The greater part of the Oration is, indeed, composed of patches; but what they are sewed to hardly appears, unless, indeed, they be stitched on the cover of the last edition of Samuel Cooper's Dictionary,—the subject in hand when the first of them is produced.

Our readers, we are sure, will agree with us, that there are many subjects in the above collection, out of each of which a noble oration to

the memory of John Hunter might have been made. Mr. Hawkins has mentioned the name of Mr. Travers in connexion with inflammation and the cell-theory. He might have given a discourse on the "Physiology of Inflammation," the title, if we remember right, of that gentleman's work. Inflammation might properly be the subject of the Hunterian oration once in a lustrum. It is five years since that work was published, and important contributions have since been made to the subject. The very phrase, "Physiology of inflammation," offers a wide field for discourse. Does inflammation fall under physiology, merely because the latter, in contrast to physical science, embraces the laws of living nature under all possible circumstances, and therefore, in its largest sense, includes pathology? And are we to subscribe to the views of Macartney, and some other modern authorities, that the healing process does not belong to inflammation? Or, with Mr. Travers, are we to follow Hunter, and represent inflammation as a part of physiology, because it consists of a series of acts designed to serve a purpose in the animal economy,—an ordained provision, without which death would result from the slightest accidents, while, during its short career, the body would be covered with raw and irritable sores?

And here again arises a most important question, applicable to the whole of physiological science, namely, whether it may not be sometimes allowable, when a principle is proved to exist for a manifest purpose, to desert for a while the pure method of induction, and to investigate its operation by a reference to final causes, notwithstanding the anathema pronounced by Bacon against this mode of inquiry? This idea is plainly Hunterian, and deserves more attention than has been paid to it in Physiology.

In short, the work of Mr. Travers alone suggests an endless supply of physiological topics, fitted for the appropriate commemoration of Hunter's labours; for example, in the reparation of parts, the respective uses of the first effusion of liquor sanguinis, and that of the lymph particles, or colourless corpuscles, the first being, according to Mr. Travers, only a temporary bond of adhesion, while it is to the latter that permanent reparation is due,—the office of the blood corpuscles in the formation of new vessels, to which he assigns a far more important influence than is conceded to them by most Continental and some British physiologists. One more may be added, a truly Hunterian topic, namely, the source and nature of suppuration, and Mr. Travers' peculiar view of pus-glands temporarily produced by effused lymph.

Were Hunter still living, what subject would more stimulate his exertions than the doctrine of cytogenesis. What though the subject be still beset with some difficulties? Imperfect as it yet is, it is the largest and most satisfactory generalization that has been made as bearing on the unity of plan in the development of organic nature;—namely, that the development, growth, and maintenance of organic bodies,—plants, and animals—depend on the presence of a nutritive fluid, and of cells or other organisms, which grow by intussusception, that is, by the absorption of new substance from the nutritive fluid. It is already a rule to guide us in the further investigation of organic nature, but it would be premature to regard it as a principle from which conclusions could be safely drawn without the means of verifying their correctness as separate facts.

On the style of the Oration we have no particular remarks to make; it is in general sufficiently perspicuous and intelligible, though the sentences are sometimes constructed without much care or regularity.

The peroration is certainly not the best part; but as we suppose that Mr. Hawkins bestowed some pains upon its construction, we will give the latter portion of the concluding paragraph. After paying a deserved compliment, in somewhat obscure language, to Prince Albert, for modernizing the educational course of the Cambridge youths and Eton scholars, the Orator expresses himself as follows:—"So it is also the prayer of every Englishman, that the force of parental example may have its full influence upon those still more youthful descendants of a long line of Princes, whose personal character, thus trained, would add stability to the Throne itself, even if there should hereafter arise, with fearful rapidity, such an overthrow of Governments and dynasties as it has been our fortune, under Divine Providence, to sympathise with but not to share."

These fine sounding words are, we confess, a puzzle to us. We suppose they were intended to convey a compliment to Prince Albert, and we think it is to be regretted that they are not more intelligible. Taken grammatically, they would mean that the students at Cambridge and at Eton are all descendants of a long line of princes; and, if our recollection of the rules about relative and antecedent be correct, the personal character of the princes who are dead and buried is to be trained into a prop for the English throne. But Mr. Hawkins can scarcely have intended this. And then, again, how are we to interpret the sympathy with the overthrow of Governments and dynasties, and the confession that it was our good fortune alone which preserved us from catching the late revolutionary epidemic? Was it intended as a hint to Prince Albert to set his house in order; or did the Orator mean one thing, and write and speak another? To sympathise with an overthrow seems to us to be pretty much the same thing as to pity a fever; but we suppose that the Orator's sympathy was intended for the sufferers, and not for the cause of their suffering.

We would willingly part with Mr. Hawkins on good terms. We owe him no ill-will; and we fear the position into which he has been thrown is more to be blamed than the efforts he has expended in the fulfilment of his task. It is the principle of the Hunterian Oration we assail, and not the orator. We will ever raise our voice in support of what is right and fitting; and we cannot blind ourselves to the fact, that it is but common justice to the memory of the original Genius whom it commemorates—to the Members of the College, who feel honoured in associating their name with the "mighty dead"—and to the Orator himself, that the Oration should be something more than a collection of common-placisms, and a gathering from the indices of the Reviews and Medical Literature of the day. That Mr. Hawkins *might* have rendered it all that it ought to be, we do not for a moment doubt, or that he would have done so, had the general tone of these Orations been of a less vague and undefined character on previous occasions; and we confidently trust, that when he next appears in print, he will choose some definite and distinct subject, and write up to it, and so enable us to perform the pleasing task of awarding him that meed of praise, which he is so competent, with diligence, to merit.

DIPLOMA-MONGERING IN AMERICA.

The subject of Medical Reform is at the present time engaging the attention of the Profession in America, and some of its leading Members are endeavouring to effect changes calculated to raise the education and *status* of those who exercise the healing art. The United States is remarkable for the number of its Collegiate Institutions, in which Medical Science is taught, and from which Medical Diplomas are issued. But as in this country, so in America, the multitude of licensing corporations, instead of benefiting the Profession, has been the means of retarding, in a most remarkable manner, the progress of Medical Education. The competition which exists amongst the Colleges of the Transatlantic Republic has brought about a system of diploma-mongering by which a vast number of semi-educated men have been authorized to practice Medicine.

Looking at the curricula of the various Colleges, it is evident they have been competing with each other to render as easy as possible the acquisition of a diploma. It is to be expected, therefore, that the majority of young men who are desirous of entering the Profession under Collegiate sanction will seek those institutions where the fees are lowest and the time the shortest in which they may obtain the wished-for prize; and the supreme government exercising no control over medical education, doctors have been manufactured with extraordinary velocity.

We have before us a paper containing the term time of twenty-four Colleges of the Union, and from it we learn that, in one, the Session lasts eight months; in another, seven months; in two, five months and a half; in three, four months; in five, four months and a half; in six, five months; in three, sixteen weeks; in two, fourteen weeks. Virginia University stands first, as having the longest term time; Berkshire (Mass.) and Dartmouth (N. H.) are those which deem fourteen weeks long enough for a single Medical Session. But on looking carefully over this paper, we find Virginia only possesses three Medical Professors, while Dartmouth and Berkshire have six each. Of course, with double the number of Professors, medical knowledge can be imparted to the students in "double quick time," and this may account for the short terms of the Massachusetts and New Hampshire Colleges.

Now, we cannot wonder, that, with these facilities for obtaining medical diplomas, and

with no check whatever from the executive, the Union should be overstocked with Medical Men, and that charlatanism should luxuriantly flourish. Free trade in physic is triumphant in America; and unless a more conservative system be adopted, the majority of Medical Practitioners there will soon lose all title to the designation of "learned men."

The American Medical Association feeling that a speedy change is requisite, at its last Convention passed the following resolutions:—"Whereas, a general sentiment prevails in the Medical Profession that the active competition existing amongst the Medical Colleges of the Union, has a tendency to lower the standard of Professional requirement, and to depreciate the value of the degree. That, inasmuch as an opinion prevails to a considerable extent in the Profession, that certain abuses have crept into some of the Medical Colleges, namely, that they confer degrees upon persons who have not fully complied with their own requirements, or on those who do not possess the requisite amount of knowledge to entitle them to such distinction, it is deemed expedient by this Convention, in order to satisfy the just wishes of the Profession, and to remove just grounds of complaint, that such Colleges as do not already possess mixed Boards of Examiners, should consent to have associated with them, in the examination for degrees, some members of the Profession not engaged in teaching, or otherwise interested in such Institutions."

What is wanting in America is a supreme Medical Tribunal, appointed by the Government, and invested with authority to grant licenses to practise to those only who have passed an examination before it. This would at once put down dishonourable rivalry amongst institutions having the power of granting Medical degrees, and would go far to insure a future race of highly educated men. The system prevails in Prussia; why should it not be adopted in America and in our own country?

DISTRICT LUNATIC ASYLUMS IN IRELAND, AND THE GOVERNMENT SYSTEM OF NON-RESIDENT MEDICAL CONTROL.

Previously to entering upon the details of Medical Economy in these Institutions, we deem it desirable (in order that our English and Continental readers may, to some extent, understand their complicated and clumsy machinery) to offer a few preliminary remarks, 1st. As to the mode in which these institutions have been called into existence. 2nd. Their present number and extent of accommodation. 3rd. The population of the respective districts in which they are placed. 4th. The resources from which they have been built and are supported, so widely differing from similar public institutions in Great Britain. 5th. The manner in which the local boards are appointed. 6th and lastly. How the officers are nominated, inspected, and in general regulated.

About thirty years ago, Mr. Thomas S. Rice urgently pressed upon the notice of Parliament, the deplorable condition of the insane poor of Ireland. It would be tedious now to recapitulate the various difficulties which that excellent man had to encounter, before Parliament sanctioned a legal provision for pauper lunatics; suffice it to say, he was at length successful, and an Act was passed, granting to the Lord-Lieutenant, for the time being, and the Privy Council of Ireland, full powers to order and direct a Board of Control to build in such places as to them may seem fit, a certain number of district lunatic asylums.

Ten of these houses were in due time erected. The Executive named, according to the provisions of the various Acts that had been passed, year after year, to amend the original one, Boards of Governors from the nobility and gentry of the several counties forming the districts, to control, and officers to conduct, these establishments in their various departments.

France, at that time, and long previously thereto, was the only country which appeared to entertain and act upon correct ideas regarding the treatment and cure of the Insane, by placing her institutions in the hands of Medical men of eminence, and making the residence among the patients of one Medical Officer, *at least*, imperative.

Disregarding the excellent example set by France, in no instance was a Medical Man placed at the head of a District Lunatic Asylum in Ireland, when first they were opened. A favourable opportunity was, therefore, lost, of laying the foundation of scientific and enlightened treatment towards the Insane in Ireland, on the only basis where it ever can be fairly or successfully attempted to be laid,—namely, in great Lunatic Hospitals, under the exclusive control and guidance of the Executive, and its responsible Medical Officers.

The result has been what might naturally be expected. One single scientific essay has not been produced, nor one single step taken in advance, to cultivate even a corner of the wide field of Psychological Science; nay, even the very records of these Institutions, so necessary for statistical information or national character, are defective in the extreme; in a word, society has received little, if anything, except the safe custody of the insane, in return for nearly three hundred thousand pounds of an original outlay, and about forty-one thousand pounds of an annual expenditure.

Even in Cures, as will be shown as we proceed, nothing satisfactory can be deduced; as we shall find that one Asylum, in one part of a small island, cured, on an average of ten years, only 13 per cent., while another asylum, adjoining, cured 27 per cent.

It had been fondly hoped, that the progress of public opinion, the decay of prejudice, and the powerful influence of two great Colleges in Dublin, claiming a superiority over their sisters of England and Scotland, would render the continuance of the barbarous plan of conducting, without any resident Medical authority, great Lunatic Asylums, containing from 120 to 400 inmates, too gross an outrage on the intellect and common-sense of Ireland, to be longer endured. However, the promulgation of a new code of rules, by the Privy Council of Ireland, in March, 1843, (the department of Government under whose immediate control, in conjunction with that of the Lord-Lieutenant, Parliament has altogether placed these Institutions in all their details of management,) not only dispelled this humane expectation, but seemed destined, by the secret manner in which it had been prepared, and the sternness of authority with which it had been officially announced, to imprint upon their massive walls, the extinction of the last ray of hope, either for scientific improvement, or the exercise of resident professional humanity, in the District Lunatic Asylums of Ireland.

We conclude our First Article, with a Table, carefully drawn up from various official documents: it will serve, as we proceed, to elucidate our subject, and even in this stage will afford conclusive evidence, that, as they are at present constituted, the Irish Lunatic Asylums are not *hospitals for the treatment and cure of insanity*, but rather *prisons* in which mad people are confined, to prevent them injuring themselves or others.

	Name of District and Number of Counties.	Population.	Original Beds.	Present Beds.	Average per cent. of Cures in Ten Years.	No. of Officers.	Medical Officers—Resident or not.
1	Armagh, with four counties	832,474	104	137	25	3	One Medical Officer, non-resident.
2	Belfast, with two ,,	722,321	104	251	28	5	*One Medical Officer resident, one non-resident.
3	Derry, with three ,,	831,578	104	214	22	7	One non-resident Medical Officer.
4	Carlow, with four ,,	605,169	104	193	17	7	*One non-resident ,, ,,
5	Maryboro, with four ,,	557,578	104	194	13	7	One non-resident ,, ,,
6	Richmond, with four ,,	810,984	236	289	13	10	Three non-resident ,, ,,
7	Ballinasloe, with five ,,	1,418,859	150	310	17	5	One non-resident ,, ,,
8	Limerick, with three ,,	910,303	150	339	17	7	One non-resident ,, ,,
9	Waterford, with one ,,	196,187	100	127	29	7	One non-resident ,, ,,
10	Tipperary, with one ,,	435,553	60	137	21	5	*One non-resident ,, ,,

[Note.]

EXTRACT OF EVIDENCE (PARLIAMENTARY).

470. Were these rules communicated to the respective Governors of Asylums before they were passed?

***Answer.* They were not.**

471. Was any communication had with any of the Local Boards upon the subject, before they were framed?

***Answer.* Not that I am aware of.**

472. Was any communication had with any individual members at those Boards, before they were drawn up?

***Answer.* With the exception of some Medical Officers—none. (a)**

473. Was any communication held with any manager before these Rules were drawn up?

Answer. Not that I am aware of.

(a) Medical Officers are not Members of Boards.

OPERATION OF EXCISION OF THE HEAD OF THE THIGH BONE.

We consider that the cases of Mr. Walton will be interesting to our readers, as they afford further evidence, not only of the practicability, but also of the safety of the operation for the removal of the head of the femur in morbus

coxarius, when the head of the bone is resting on the edge of the acetabulum or on the dorsum ilii. In both the cases death was independent of the operation. Of the propriety, and even necessity, of the operation in many cases, we are bound to state, as practical men having large opportunities of seeing and treating cases of the kind, that we have not the slightest doubt. But, as public journalists, we should neglect our duty to our younger professional brethren if we did not urgently caution them not to operate in any case without giving it the fullest consideration, investigating most closely the condition of the parts about the hip, ascertaining if any other morbid tendencies have been evinced, the condition, as far as possible, of the different vital organs, and how far the powers of the constitution appear capable of carrying on reparative processes. And this we state in the firm conviction, that nothing tends to bring surgery into disrepute more than the performance of operations frequently and speedily leading to a fatal result, and that for diseases which of themselves would not inevitably occasion death. No surgeon will long retain the confidence of the public, whose operations are not generally followed by a successful termination. A judicious operator will most carefully and cautiously select his cases. An unsuccessful operation damages the character of a Surgeon quite as much as a lost battle that of a General. We state this to show how fully sensible we are, that though we strongly advocate the operation in diseased hip, it will, without caution, be as a lost battle. We know Mr. Walton well, as an able and experienced surgeon, and we are quite sure that he will concur with us in the advice we have ventured to give to younger and less experienced operators.

BEQUESTS TO HOSPITALS AND OTHER CHARITABLE INSTITUTIONS.

Our readers, we are sure, will unite with us in endeavouring to obtain a repeal by the Government of the tax of 10 per cent. at present levied on all bequests to Hospitals and other benevolent Institutions. What plea can be set up for the continuance of this impost, it is very difficult, we should think, to define. It seems to us like a robbery upon the poor, and its policy worse than absurd. Perhaps, when legislating on this subject, general principles only were regarded, and thus these cases fell into the common category. But now that we have had time to watch the working of the general rule, and to prove its unjust and injurious effects, there ought to be an anxiety on the part of our legislators to afford relief, and to carry out the exceptions. That such may soon be the case, a very limited effort only will be required on the part of the public Press, and of those excellent individuals, of whom we have many, who take an interest in all matters of general benevolence.

We are glad to find, by a preliminary meeting, held at the London Tavern, on Monday last, that a Committee has been appointed, to make arrangements for holding a general meeting of the inhabitants of London and its environs, to organise Petitions to Parliament for the removal of Smithfield Market, that cultivator of cruelty and fosterer of filth.

DISSECTIONS OF EVIDENCE

TAKEN BEFORE THE SPECIAL COMMITTEE OF THE HOUSE OF COMMONS, SESSION 1848.

TO THE GENERAL PRACTITIONERS OF MEDICINE.

Gentlemen,—We could have no reluctance to the incorporation of the general Practitioners in the London University, if we could believe in its practicability. On the contrary, it would be a satisfactory arrangement only less honourable than admission to collegiate privileges within the classic shades of the venerable and aristocratic Oxford itself. The scheme is seductive; it has the lineaments of grandeur, and flatters the vanity of a burrowing ambition. The zephyrs of Gower-street fan the self-complacency of its denizens. Certificates, medals, and degrees, exhilarate the spirits, and inspire inebriating visions of intellectual heroism and public homage. We can smile at, and consent to pardon the imaginary consequence of men arrayed in so gorgeous a plumage. This sublimation of vanity is apt to develope much smoke, as blinding to the bystanders as to the individuals undergoing the process.

The Graduates of the London University have been lately preaching up the notion, that this Institution might be converted into the "head and home" of the Profession; and the delegates from the Senate, if they meant anything at all, have tried to impress the world with the same opinion. It shall be our business to discover with what good faith, judgment, and liberality.

One of the chief, if not the very chief of the principles contended for by the general practitioners has been the RIGHT OF ELECTION of their governing body. This was the sole right which for twenty years prior to the grant of the last Charter of the College of Surgeons, the members had so indignantly and pertinaciously demanded from the Council and the Government: this was the right which the Council, only partially conceding in their last Charter arbitrarily withheld from the great body of the commonalty of the College, thereby committing a wrong which evoked the bitterest hatred and defiance of the insulted members, and gave birth to that vehement and enthusiastic agitation that raised the cry for an equality of rights in a new College of General Practitioners. Of course, if anything can be gained by union with the University of London, this principle will be achieved. Let us turn to the evidence of Dr. Billing.

Mr. Wakley: "But in that case (connexion with the University) would they have the power of electing the governing body, or have a choice in the election of the Senate?

Dr. Billing: "Not as the University is at present constituted, but at a *future* time they *might* have that privilege."

Mr. Wakley: "That privilege would be restricted to the Graduates?"

Dr. Billing: "Yes."

Mr. Wakley: "Did they appear (the General Practitioners Dr. Billing conversed with. It is remarkable, that nearly all the Doctor's evidence is founded on conversations) to attach some importance to the election of the governing body of the Institution by which they may be connected?"

Dr. Billing: "*I have not entered into that with them;* I have a strong objection to a College of Surgeons being allowed to register their Fellows without any medical examination," &c.

Now, by what rule of logic, as taught in the London University, does the latter part of Dr. Billing's answer stand connected with the question? There can be no doubt that the Doctor felt that he could say nothing satisfactory upon the subject of representation,' and was glad to fly off at a tangent and seize upon the first plausible grievance that would lure his examiner from the scent he was pursuing. The Profession *might* exercise the right of election in the London University, and so they might in a Consistory of Cardinals; and they are just as likely to be connected with one institution as with the other.

Mr. Wakley: "Have you paid much attention to the proposal of establishing a third college, *the one* to be denominated the College of General Practitioners?"

Dr. Billing: "Yes."

This is rather cool, for it could not be ten minutes before that the Doctor declared, that he knew nothing about the Constitution of the proposed college.

Mr. Wakley: "Are you aware that the proposal does not provide for the governing body, after examination, having the power to license those whom they examine?"

Dr. Billing: "They have no power of licensing; they are dependent on the College of Surgeons afterwards."

Now, if this answer is intended to convey the meaning, that the College of Surgeons will have the power of licensing, it is purely false; and, if it do not convey this meaning, it contains no sense whatever. The new College will be no more dependent upon the College of Surgeons than the College of Surgeons will be dependent on it; for neither the one nor the other will have the power of licensing the General Practitioner. A letter of qualification from each College will be required prior to obtaining a license to practise.

Dr. Billing afterwards says, that the new College will be an Apothecaries' Company *mutato nomine*, and that, inasmuch as it will not have the power of licensing, its powers will be even inferior to those possessed by the Apothecaries' Society. I will not accuse Dr. Billing of the gross unfairness which this mode of regarding the subject exhibits, because he was obliged to answer such questions as were put to him; but I do not hesitate to say, that this portion of the evidence is a shabby, insidious, and very clumsy attempt to misrepresent the true bearings of the projected arrangement. None of the Colleges will possess the power of licensing; and in this respect the proposed College should be compared with the other Colleges under the new *régime*, and should be considered as forming an integral part of a general and uniform plan. To stigmatise the new College as inferior to the Apothecaries' Society is one of those assertions better qualified to create laughter than to promote even the wretched designs of an inveterate and acrimonious party spirit. We come now, however, to the richest tit-bit of the evidence.

Mr. Wakley: "Do you consider that there would be any difficulty whatever in constituting a Board of Examiners out of the Colleges of Physicians and Surgeons, and probably nominees from the Society of Apothecaries, who should be thoroughly competent to test the qualifications of Graduates for general practice?"

Dr. Billing: "*It is already done* (!)—the Government did that ten years ago (!!)—in the University of London there are fellows of the Colleges of Physicians and Surgeons, and members of the Apothecaries' Company at this moment constituting the Board I have mentioned, who direct the examination of the Bachelors of Medicine."

It is delightful to see how smoothly the questions lead up to the answers. It is surprising how quickly the instinct of one man will smell out the

lurking sympathies of another. I do not for a moment imagine that there was any collusion between counsel and witness, and that the questions and answers were all ready cut and gummed, and got by heart after the same manner that Dr. Steggall would cram an inexpert student for examination for his University degree. Dr. Billing tells us in so many words, that Medical Reform was given long before it was asked for; that it was originally a lucky blunder; that it is now a great fact, and that we must be as blind as beetles who cannot see it. There it is! shaped in stone and mortar, a positive reality, ready housed and officered, ycleped—the London University! How extraordinary that this large building, with a dome upon the top of it, and a synod of medical examiners inside of it, should not have been stumbled over by some lynx-eyed medical reformer, before Dr. Billing made the grand discovery! It is clear, that the age of wonders has not yet ceased, and will not so long as Dr. Billing retains the faculty of distinguishing a mare's nest. Let the Delegate from the London University, however, understand, that such a Medical Board as he describes was resentfully scouted by the Profession when Sir James Graham proposed it in his Bill; and I can assure him that, as the sum total of Medical Reform, it never will be accepted by the General Practitioners.

The following quotations will wind up the Doctor's evidence, and they will serve to show how very little the Doctor knew about the matter, and how ill qualified he was to express such dogmatic opinions as he urged upon the consideration of the Committee:—

Chairman: "What *more* do they (the General Practioners) expect to get?"

Dr. Billing: "There is so much difference of opinion among them, *that I cannot precisely say what they want.*"

It is obvious, that Dr. Billing could not be considered as an exponent of the wishes or interests of the General Practitioners, and in that view all his evidence was nugatory. It might be expected, however, that the Delegate from the University would be prepared to announce distinctly the views and objects of the Senate of that Institution. After his slashing criticism of the diffident propositions of other bodies, the reader will naturally expect the development of some definite plan of legislation. You are far too simple-minded, gentlemen; a wild ox can do vast mischief in a china shop, but he cannot repair a single saucer.

Chairman: "What would content the University of London?"

Dr. Billing: "I am afraid I can hardly answer that question without a further communication with the Senate."

It appears that Dr. Billing was instructed merely to throw obstacles in the way of a settlement, to exalt the reputation of the University of London, and to scatter obloquy upon other educational institutions; he was expected to suggest arrangements which the University had no power to carry out, and thereby to foment and prolong agitation, by which, in the upshot of events, the University might derive advantage and emolument.

You, gentlemen, will not be deceived by these artifices. You have fought the battle of right against corporate oligarchies up to this time by your own manly efforts, and, by the help of an honest press and a faithful brotherly union, you will eventually triumph. Let no discord, jealousy, or selfish interests divide you; for, remember that the enemy can succeed only by breaking you up into factions, and causing you to turn the sword one against another. You *can* dignify and exalt a new College if you will only believe it, and have confidence in your own great capabilities. Those who tell you that standing alone you must be a degraded body, have not studied their age, and are practically ignorant of the vast progress you have recently made in science, and of the elevation of your class in social estimation. Despise these croaking misgivings ejaculated by the lips of men who, having no merit of their own, desire to be tagged out in the embroidery of another's wardrobe. I have always had the highest opinion of the noble destinies which my order is qualified to fulfil, and have done my best to indicate them to your view.

In defending the true interests of the General Practitioners with possibly some vigour of language, I hope that I shall not be considered as stepping beyond the legitimate boundaries which custom and courtesy have fixed as the fair limits of criticism on public men and official acts. For Dr. Billing, as a practical Physician, I entertain a high respect. If I think his medico-political opinions are unwise and dangerous, I have a right to write up to the strength of my convictions, and to do all I can to blight the influence his dogmas may be calculated to exert.

I remain, gentlemen, yours most faithfully,

V. V.

REVIEWS.

On the Treatment of Ulcers of the Leg without Confinement, &c. By HENRY T. CHAPMAN, F.R.C.S. London: John Churchill, Princes-street, Soho.

Bandaging is the chief point in the treatment recommended by Mr. Chapman. He says, that "the several morbid conditions of an ulcer of the lower extremity" "may be most successfully combated" by "regulated compression, varying from the most moderate degree of gentle support up to actual pressure." In addition to bandaging, the Author advocates the use of "water dressing" on the system of irrigation beneath a sheet of oiled silk. The Author advises, that a compress of lint, folded twice or three times, dipped in cold water, should be first placed on the ulcer, then two or three moistened strips of linen or calico should be super-imposed, precisely in the same manner as the strapping recommended by Mr. Baynton; over these a calico bandage, soaked with cold water, and so supported by pledgets of lint in the hollow parts of the leg as to effect an equable pressure; over all a sheet of oiled silk must be placed. The cold affusion must be renewed from time to time. It is evident that this plan contains nothing very new; its chief merit being its combination. We apprehend that in practice everything would depend upon the attention of the surgeon, and where this is given, even a bad system may be converted into a means of success. The little volume contains many judicious remarks upon the management of these troublesome maladies.

The Brain the Sole Centre of the Human Nervous System. By EDWIN LEE. Read before the Royal Society, May, 1848.

In the preface, the Author states that he gave himself some trouble to write this pamphlet, the subject being one likely to elicit interesting and profitable discussion. The chief trouble appears to have been in reading some of the best works on the anatomy and physiology of the nervous system, and culling from them extracts which could be distorted, by laying stress on certain words, without reference to an extended context, into evidence in confirmation of Mr. Lee's theory. The pamphlet may be read by those who wish to sustain a discussion on the subject in a debating society.

On Perforating Ulcer of the Stomach. By EDWARD YOUNG, M.D. London: Simpkin, Marshall, and Co.

This is a useful practical pamphlet, drawing attention to the comparative frequency of perforating ulcer of the stomach, and the suddenness with which death ensues in such cases, resembling, in this respect, symptoms of death from cholera or poison. Several cases are recorded of a very interesting character.

Cod Liver Oil; its Uses, &c. By JOHN RAYNER. London: John Churchill.

The merits of cod liver oil are here set forth at large, and the particular diseases likely to be most benefited by its use are described. Such monographs are useful to the practitioner.

MR. ROSS ON DR. STEVENS'S SALINE TREATMENT OF CHOLERA.

[To the Editor of the Medical Times.]

SIR,—I request the favour of your inserting the following communication in reply to the recent letters of Dr. Turley on the subject of the Saline Treatment of Cholera; and am, Sir,

Your most obedient servant,

GEORGE ROSS.

To Dr. Turley, Worcester.

My dear Sir,—I have given my best attention to your minute and lucid history of the Saline Treatment of Cholera, especially in connexion with the practice of Dr. Stevens, its originator. The call made upon me in the concluding sentence of your last letter, has, in fact, been already answered, as you will perceive by reference to my former letter addressed to you in explanation of inquiries then made. Desirous of knowing the full scope of your argument before I replied, I refrained, whilst your letters were in progress of publication, from commenting upon the various topics you successively broached, and now find that the only point requiring elucidation from me is the exclusion of Dr. Stevens' cases from my Tables. You state that my third Table is erroneous, and adduce the *proof* that it "finds no support on comparison with the authentic Tables of Dr. Stevens' Treatment of Cholera, which are still preserved in the House of Correction at Coldbath-fields."

The question, then, is, *Are Dr. Stevens' Tables worthy of reliance?* I found them doubtful, and, without seeking to revive the discussion, declined to use them. Notwithstanding your very able pleading for the Doctor's talent, experience, and integrity, (whose possession of those high qualities I am prepared to admit,) I still believe that the credit of his Tables remains impeached. These are my reasons. I quote from official documents published in the *Lancet*, Vol. II., 1831-2, *passim*.

Various contradictory reports, under the auspices even of official authority, had appeared in the papers, to the effect that a second outbreak of cholera had occurred in Coldbath-fields Prison; and, on the 25th of June, 1832, Dr. Stevens casually informed Sir David Barry, at the College of Physicians, that he had seen upwards of forty cases of cholera at that prison within the last twenty-four hours. By an arrangement with Dr. Stevens, Sir David Barry, accompanied by Dr. O'Shaughnessy, visited the prison on the 27th, when, after an examination of the reputed cases, Sir David Barry, in the presence of Dr. O'Shaughnessy, observed to Dr. Stevens, "that he had seen *no* case of cholera in the prison that day; meaning, as Dr. Stevens appeared to allow at the time that he had seen none actually labouring under the characteristic symptoms of the disease."

In consequence of a communication from the Privy Council, the Governor of the Prison informed the Privy Council, in a letter bearing date the 28th of June, 1832, that the "number of persons then labouring under the disease, in its various degrees, was about *seventy*."

By the instructions of the Privy Council, Sir David Barry, accompanied by the Deputy-Inspector of hospitals, John Maling and Staff Surgeon Francis Macann, visited the prison on *that very day*, the 28th of June, and reported that in the

1st Ward.—Nine patients were said to be ill; they found only one unequivocal case, another doubtful.

2nd Ward.—Eighteen said to be ill; only two boys were present, apparently well; the rest were out walking.

3rd Ward.—Six patients reported, five were present: one complained of *constipation*, another had pain in his side and head; no vomiting or purging. There was no appearance of cholera in the others.

4th Ward.—Eleven patients were reported. All present: none had any appearance of disease except

one boy, with slow pulse and depression of look and spirits, who might have had an attack in the course of the night.

Convalescent Ward.—Fourteen patients: all looking well.

The other wards visited gave similar results, I need not, therefore, cite further. The inspectors report, that the *only cases*, with the appearances of cholera, were the two men in No. 1 Ward. The Report, of course, refers only to the time of the visit.

However, in a Report sent in by Mr. Wakefield, the surgeon to the prison, it is stated, that from the 26th to the 29th inst., *extending over the period of the Inspectors' visit, twenty-nine* attacks had occurred. On examination, however, *five* only are called *confirmed* cases, the rest exhibited only *premonitory* symptoms. He further states in a note, that from the 3rd instant to the 29th, *upwards* of 100 cases had occurred of different degrees of severity, 12 of *which had terminated fatally.*

On the 3rd of July Dr. Stevens published his book, in which he stated, that, "from the commencement of this second irruption, there have been *in all about* 81 cases: *many of these had been of the most malignant description.* Out of this number there have been 13 deaths." He then adds in a note that there had been altogether during the second irruption "105 cases and 15 deaths; and there are at this moment in that establishment 22 patients who have *recently* recovered from a state of *complete collapse.*"

On the other hand, Sir David Barry writes on the 27th of June:—"Dr. Stevens, with his two assistants, then conducted Dr. O'Shaughnessy and myself, round his cholera wards, in which there might have been thirty or forty patients, but *not one* in the collapsed stage, though thirteen cholera cases are stated to have been admitted this morning." "I repeatedly begged Dr. Stevens to show a recent case, a case of confirmed cholera—a case of collapse. He replied, that it was unlucky I had come that day," &c. "When asked if he had ever seen even one case of blue collapsed cholera saved, that had been treated by the 20-grain doses of culinary salt, and by nothing else, he candidly admitted that he never had; for that he recommended, in addition to the salt, large mustard poultices, hot saline and opiate enemata, and hot salt and water baths, friction," &c.

The evidence upon which I declined to receive as correct data Dr. Stevens' cases, treated in the Coldbath-fields Prison, is now before the Profession, and it is for them to decide whether I exercised a prudent reserve, or was unnecessarily fastidious in the resolution I adopted. Dr. Stevens talked of *forty* cases; Sir David Barry could not find *one.* Governor Chesterton, on the 28th, reported *seventy* cases; the Government inspectors found only *two.* Again, Mr. Wakefield and Dr. Stevens ultimately affirm respectively that *upwards* and *about* 100 and 105 cases occurred. Who are to be credited? The Government Inspectors or the Prison Officers? It is clear, upon the showing of Mr. Wakefield and of Dr. Stevens himself, that a large preponderance of cases exhibited only *premonitory* symptoms, and nothing could be more deceptive than to adduce such cases as examples of cure by the saline or by any other treatment.

There was a very sensible letter in the *Medical Times* a few weeks ago, written by Dr. Stewart, inquiring the difference in the mode of treatment pursued at Greville-street and at Coldbath-fields, with the view of ascertaining how the treatment might have influenced the mortality. At Greville-street the dependence was chiefly placed in large doses of common salt; at Coldbath-fields, moderate or scruple doses were administered. I apprehend, as I have before stated, that common salt is the most efficacious of all the saline remedies.

I could have wished that the cases that occurred at Coldbath-fields were less exceptionable, as I have great confidence in the saline treatment, and think that there is sufficient evidence to prove its value, even though Dr. Stevens' cases should remain of a doubtful character. I need not say, that if the Doctor's second set of cases be not trustworthy, his first set must be regarded with suspicion. I hope that your excellent letters will be found to be of great use to future inquiries, and remain,

My dear Sir, yours most sincerely,
GEORGE ROSS.

24, Farringdon-street, City, March 24, 1849.

Note.—I have recently had the pleasure of a correspondence with Mr. Alexander Leckie, of Bonhill, Dumbartonshire, who, since the 14th of January, 1849, has treated twenty cases of cholera by salines with only two deaths. One of the patients that recovered took fifty grains of calomel in ten grain doses in the course of three hours. This was the only case in which calomel was administered. The doses of the saline remedies were as follow:—Sodæ carb. ℈ij.; sodæ chlorid. ʒi.; potas. chlorat. gr. viij. Aq. q. s. ft. Haust. There was no consecutive fever in any of the cases.

Mr. Leckie says, "I have only had two deaths; one of which, a dissipated woman, was far advanced in the collapsed stage before I saw her. I put her under the saline treatment, with frequent draughts of cold water and the other appliances as above (viz., friction, mustard-poultices, and jars with hot water). She rallied so far as that the pulse could be felt at the wrist, and was getting warm when her daughter stealthily commenced feeding her with whiskey, after which she sunk and died." In several cases, after taking the first or second draught of the saline and a draught of cold water, it seemed to have a sedative effect, the patients stating, that a great oppression and heat were removed from the stomach. Great quantities of cold water were taken by the patients."

I am glad to be able to add this further testimony to the efficacy of the saline and cold water treatment.

G. R.

ON THE USE OF COD-LIVER OIL.

[To the Editor of the Medical Times.]

SIR,—I concur with Mr. Braithwaite, as to what he has advanced in his concise and excellent letter of the 12th inst., in reply to your Correspondent, relative to the virtues of cod-liver oil; and beg to add some further suggestions. For some years I have recommended the oil, more as a matter of diet than as a medicine, and I prepare it in the following manner, viz.:—Suspend a fresh cod's liver before a gentle fire, at some distance, to avoid empyreuma, receive the drops in a vessel,—the product will be five or six ounces of pure and good oil, at one-fourth or one-sixth the usual price, and by no means so disgusting in flavour or smell as that in common use, or as your Correspondent would infer. Yet it is but a matter of taste. The inhabitants of cold northern climates consider train oil by no means distasteful; necessity and habit has made them feel its use, as it is suitable to the climate they dwell in, because it stimulates without intoxicating, and assists, perhaps, better (when mixed with other food) than any diet, in performing that important function which is essential to animal life,—namely, the supply of carbon, which is consumed in respiration, the presence of which is necessary to health, and the proper development of vital heat.

In conclusion, I would suggest, the deficiency of oily particles in the system is the cause of much disease; and if animal oil was in more popular use in this country, as it is in northern climates, that dire disease would be averted from many, which too often *selects* for its victims the talented, the good, and the beautiful.

I am, Sir,
Yours faithfully and respectfully,
H. BRUNSKILL.

20, Pembroke-place, Pimlico,
March 20, 1849.

CHICORY *v.* COFFEE.

[To the Editor of the Medical Times.]

SIR,—My attention has been directed to an article which appeared in the columns of your Journal a few weeks ago with the above title; and finding that none of your readers have come forward to defend the use of chicory in coffee, I beg to offer you a few remarks on the subject.

Recent articles in the daily *Times* have appeared, the tendency of which is, if possible, to increase public prejudice against the *adulteration* of coffee with chicory This is almost a work of supererogation, as there are few people who would not reject coffee as a beverage, if they thought they did not drink a genuine infusion or decoction of it.

I conceive that coffee is drunk for two reasons. 1st, on account of its agreeable flavour; and 2ndly, because of its pleasing and beneficial effect on the system. Now if chicory enhances the one and does not injure the other, I see no reason whatever that its use should be condemned.

Chicory, as most of your readers are probably aware, grows in great abundance in the south of Europe, and is also indigenous to Great Britain. It flourishes, I believe, principally in England, in the counties of Nottingham, York, and Durham, places in which magnesian limestone is found in large quantities.

In France, and the coffee-drinking parts of Germany, chicory has long been employed, not only to give a flavour to coffee, but to counteract some of its supposed injurious tendencies, and from the Continent its use has gradually extended to England. That it improves greatly the flavour of coffee there can scarcely exist a doubt. Grocers have been driven to employ it from this circumstance, for, were cheapness its only advantage, it would not have come into such general use in so short a time. I have conversed with many respectable grocers, upon whose testimony I can rely, and they assure me, that if they did not mix a certain proportion of chicory with their coffee, they would be unable to sell the latter article, though, from public prejudice, they are obliged to conceal this fact. I, at one time, indulged in the common feeling upon this subject, and was so particular to have my coffee genuine, that I always ground it in my own house, and just before it was used. The flavour, however, was not of so high an order as I could wish; and on one occasion, conversing on the subject with a clergyman, he strongly recommended me to use a small quantity of ground chicory. I mentioned my prejudices to him, at which he indulged in a hearty laugh, and I determined, if possible, to continue to condemn the *roasted dandelion.* One trial, however, was sufficient to remove all my dislike, and ever since, when I drink coffee, I take care to add about one-fourth chicory to it. Let your readers try the experiment, and I do not fear the results. I perfectly agree with the statement of the Chancellor of the Exchequer in the House of Commons the other evening, that coffee is greatly improved by being adulterated with chicory. The honourable Members who then indulged in a laugh have, doubtless, times without number, drank "genuine mocha," composed of three parts of coffee and one of chicory, with high satisfaction.

Chicory, moreover, not only improves the flavour but also the virtues of coffee. This berry of itself has a tendency in some persons to produce a temporary diarrhœa, in others constipation; both which abnormal conditions are obviated by the addition of the root in question, while the supposed nutritious qualities of the berry are by no means impaired.

Coffee, besides other principles, contains, especially after roasting, an empyreumatic oil, and the combination of the chicory with this, in all probability, counteracts its injurious effects. In fact, not only is chicory used in France for the purpose of improving the flavour of coffee, but of correcting its injurious properties.

Caffein, the active principle of coffee, according to Professor Liebig, acts directly in producing bile; the active principle of the chicory operates especially on the kidneys. I have taken some trouble to ascertain the proportions in which *respectable* houses mix the berry and the root in order to suit the tastes and pockets of the public. In the *coffee* sold at one shilling per pound, one-half is chicory, and so on in proportion up to the best coffee, which contains one-fourth of the so-called adulteration. I regret that public prejudice will not allow the respectable tradesmen to acknowledge this admixture.

I remain, Sir, your constant reader,
MEDICO-CHEMICUS.

A WORD IN DEFENCE OF THE APOTHECARIES' SOCIETY.

[To the Editor of the Medical Times.]

SIR,—The Apothecaries Society has long been found fault with, and not without cause, for not exerting the power it possesses of protecting its members from the aggressions of quacks, and the public from gross imposition and ignorant pretenders to the science of medicine; but now that the Company is beginning to exert its privilege, and has shown that this privilege can be made available at a light expense, there are not wanting persons, if I may judge from the letters of your two Correspondents in last Saturday's *Medical Times*, who will use their utmost endeavours to raise a cry to lower the Society in public estimation. Your Correspondent of the National Institute ought not to suppose for a moment that the Apothecaries' Company will lend itself to the indiscriminate prosecution of practitioners in medicine; it has, I believe, distinctly said, that it will respect all British qualifications equally with its own. Again, it appears to be the fashion of accusing the Company of possessing a monopoly; if it is granted that it has, it cannot be said that monopoly has been used to its own pecuniary interest, for it has been remarkably slow in attending to it; but it must be granted, and you have often proved it in your valuable Journal, that the Company has used its power to raise the status and improve the education of the general practitioner. If it had

studied the Society's pecuniary interest only, it could easily, since December, 1846, have prosecuted the 1,500 members of the College of Surgeons, who are practising without the Apothecaries' certificate, and who have stated, that the apothecaries were an inferior grade in the Profession. Within the last week I have heard an old practitioner say, without any hesitation, that it was to his interest to encourage the quacks, for they would call him in to a consultation to protect themselves, and act with submission to his dictation, but the junior practitioners he could not manage; "and for why? Because they were, upon the whole, as intelligent, or more so, than himself," and he would endeavour, if possible, to keep him in the back ground. Such men of the old school Dr. Hope happily describes in one of his introductory lectures, as practical men, contemning the new school, with grisly heads, a dogged look, and, perhaps, knee unmentionables and long black gaiters on, who were assumed to deal in nothing but common sense, in contradistinction to the theoretical tribe of juvenile innovators. But it is well known that the Company has no wish, and will not lend itself to prosecute or persecute any gentleman who has acquired a proper Medical education, and is in the possession of a proper testimonial certifying to his having done so. Thereis a sufficiently large field amongst the quacks,—men not in the possession of any qualification, the great majority of them having no knowledge of the commonest principles of medicine, merely being in the possession of a few recipes, which they indiscriminately apply, acquiring their credit in gulling the public by slandering the upright practitioners, and killing more of our fellow-beings in one short twelve months, "than ever fell on the greatest battle-field." There are no less than four of these gents in my own immediate small neighbourhood, (besides the Coffinites, whose name is legion;) and nothing can be said in favour of the intelligence or moral character of three of them; ignorance and drunkenness are their marked characteristics. The following are a few of the instances of quackery which have happened under my own observation within a few months. A week's retained placenta, the female, from all accounts, apparently suffering liitle inconvenience; a large hand forcibly introduced at the end of that time, and death following, I suppose, from the shock to the system, in twenty minutes. A stout plethoric child, with a slight cough, head symptoms, and no movement of the bowels for four days; treated by strong narcotics; life saved by timely interference. A case of acute pneumonia in the adult; treated in the same manner, and quickly followed by death. Another case of pneumonia after measles—death; in this case, an ounce bottle of dirty rain water was sent, with directions that five drops must be taken for a dose, and a statement that, if it was not cured by that medicine, nothing more could be done for it; truly, a fair joining of the infinitessimal doses of homœopathy with hydropathy. A fatal case of croup treated by a placebo; and a fatal case of puerperal peritonitis treated by an ounce of castor oil, and only once seen by the practitioner. These were all treated by self-styled surgeons; I could enumerate many more instances, but space will not allow me, and I will only allude to a fatal case of peritonitis, where ʒss. of cayenne pepper was given; and a case of acute bronchitis treated by the same remedy, life being saved with great difficulty by a timely bleeding and great care. These two last cases are examples of the practice of the Coffinites. Surely it will be granted, that it is high time that the public should be protected from such dangerous men; and that the Company will be highly blameable if they do not exert the power it has been entrusted with against them. Before time, the Apothecaries' Society has really had an excuse in the want of funds, although much has been said to the contrary; but that excuse is no longer available. I am willing to admit that there are amongst those at present practising medicine without qualification many clever and praiseworthy men, but they have "equally, as much as the veriest quacks, who have succeeded in lowering the science of medicine, even in the opinion of the well-informed," infringed an Act of Parliament, and knowingly made themselves amenable to the law. Surely the present session of Parliament will not be allowed to pass over without equal rights being acceded to all properly educated members of the Profession, and the absurd distinction of grades buried in oblivion. Age and practical experience, or a great superiority of education, ought only to give distinction. One man has no right to assume superiority over another, equally as well or better educated than himself, merely because the sound of one word may be a little more euphonious than another, or the college he belongs to a little more fashionable. The letters L.S.A. sound as well as the letters M.R.C.S., but the word Apothecary does not carry the same prestige as the word Surgeon. The Apothecaries' Society has offered to surrender its privileges to a body superior to itself; but its members very justifiably insist that their licentiates should have equal rank with the other members of the Profession. It cannot be denied that the curriculum of study of the present misnamed Apothecary is as extensive, and his examination as severe and searching, as that of any member of any other of the Medical Institutions of the United Kingdom. With a sincere wish that unanimity and concord may soon succeed the strife and dissension at present existing, I am, yours most respectfully,

L. S. A.

March 12, 1849.

APOTHECARIES HALL *v.* LOBO.

[To the Editor of the Medical Times.]

SIR,—These are not times when Medical men should fall into troubled waters.

1. Upon what principle of law can the Company depute another to bring an action for the 20*l.*?

2. What consequences would be entailed upon the "*trading*" Company if it did?

3. Can more than *one* action be brought against the same defendant? If it can and should be attempted, then by what means could the defendant relieve himself?

4. Could not "grave" questions, of the utmost moment to the Company, be raised upon a rule *Nisi?*

5. Has it not been settled that an indictment may lie against a public Company? If so, what would be the consequences in this instance, if found, tried, and verdict had?

6. Of what value is a County Court decision? *Qud* County Court?

7. What does the ancient law upon a multiplicity of suits mean?

8. Do not manifold principles at common law (both on the Crown and civil sides) show, if brought to bear on the question, that the soundest and safest plan will be to forget the decision, and obtain a good Medical Bill, than fall back upon a decision that will "*ultimately*" produce nothing but disaster by provoking questions that had better sleep? Let the Profession think of this, and not push "*fanciful*" remedies at law "*too close*," or rely upon it, in this instance, "glass is beneath the naked feet."

Very faithfully yours,
H. H. PYKE,
Barrister-at-law, Twelve Years' Standing.
87, Chancery-lane and Verulam Chambers,
Lincoln's-inn.

DR. DAWSON AND THE MEDICAL DIRECTORY.

[To the Editor of the Medical Times.]

SIR,—In your number of the 17th instant, you have published communications from your different correspondents commenting upon a pamphlet entitled, "The London and Provincial Medical Directory Unmasked," published and circulated amongst the members of the Medical Profession, as an antidote to the various libels with which I have been assailed, and to the unwarrantable and unjust attacks upon my professional and private character. If the London and Provincial Medical Directory had been actuated solely by a desire to be correct, why did they omit my connexion with the College of Physicians, while they inserted that of every other "extra licenciate" practising in London? The memory of Mr. Sedgwick has lately been productive of such unhappy consequences to himself, that I may be excused for assisting him to recollect that the date of my admission into the College was in March, 1843. With respect to Mr. Yearsley's letter, I must refer the reader to Mr. Hunt's communication, published in the *Medical Times* of the 27th June, 1846, in which Dr. Tyler Smith is charged with writing the pamphlet in praise of Mr. Yearsley, his brother-in-law. It will then be seen how far the "*family-disagreement*" subterfuge is true.

In reply to Mr. Harvey's assertion, that I have "made an unwarrantable use of his name, and that in no one particular is the statement which relates to Dr. Tyler Smith and himself true," I would observe, that, fortunately, I am in a position to prove, by his own friend Mr. Griffiths, who was present when he, voluntarily and unsolicited, made the statement published by me in "The London and Provincial Medical Directory Unmasked." Having reason to believe that Mr. Harvey had been very much intimidated on Monday, the 12th inst., by a visit from Dr. Tyler Smith and his solicitor, I wrote to his friend Mr. Griffiths, who was present when the statement was made, and I now subjoin that gentleman's reply:—

"You know how anxious I was that nothing should go forth to compromise Mr. Harvey; I, therefore, called on that gentleman to ascertain what his feelings were as to the making the Profession acquainted with the injustice I heard him tell you that he had suffered at the hands of Dr. Tyler Smith. Having a great respect and very friendly feeling for Mr. Harvey, I talked the matter over with him at length, *and distinctly understood that he had no objection to the exposure of the way in which he had been treated.* Moreover, he spoke as a high-spirited man would speak, averring, that he neither courted Dr. Tyler Smith's favour nor feared his displeasure."

Mr. Griffiths, if called upon, which, in all probability, will be the case, will prove what Mr. Harvey has thought proper to deny, and what I published in the "London and Provincial Medical Directory Unmasked."

I trust your sense of justice will secure to this explanation as speedy publicity as the charges preferred against me obtained through the pages of your Journal. I am, Sir, your obedient Servant,

RICHARD DAWSON.

15, Finsbury-circus, March 19, 1849.

THE OUT-DOOR PAUPERS BILL AND THE MEDICAL PROFESSION.

[To the Editor of the "Medical Times."]

SIR,—In answer to the inquiry of "Your Constant Reader," in your Journal of last Saturday, I beg leave to observe, that the Out-Door Paupers Bill authorizes a justice of the peace to empower, not to *order*, a medical man to visit pauper establishments, but makes no provision for his remuneration, nor does any such provision appear to be contained in the Acts alluded to in your Journal of the 17th inst.

But it appears, by the public Press, that, on the Earl of Carlisle moving, on the 23rd inst., that the Report of the Committee on the Bill be received, the Duke of Richmond insisted on the propriety of inserting a clause, giving to the Poor-law Commissioners a power of appointing visiters to such establishments, and of paying them a suitable salary, and that the Earl of Carlisle promised to take the subject into his consideration before the third reading of the Bill.

Your obedient servant,
Lincoln's-inn-fields, March 27. LEGIS.

GOSSIP OF THE WEEK.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, 22th March, 1849:—George James Thurston, Southampton-street, Bloomsbury; Henry Geary, Atterton, Leicestershire; William Carrol Satchell, Newport, Isle of Wight.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 23rd inst.:—"Messrs. Alfred Bowden, Plymouth; Henry Cholmeley, Weinfleet, Lincolnshire; George Tertius Talbot, Kidderminster; Joseph Carpenter Bompas, Bristol; James Dorrian, Ballynahinch, county of Down, Ireland; George Clarke, Bath; Josiah Pritchard, Easton Grey, Wiltshire; Henry Balton Clarke, Magbera, county of Derry, Ireland; Thomas Frederick Clay, Stratford, Essex; George James Brown, Birmingham; John Wilkins, Pawlett, near Bridgwater; and John Gibbons, Dublin.

MEDICAL SOCIETY OF LONDON.—ELECTION OF OFFICERS.—At the seventy-sixth anniversary meeting of the Society, held on the 8th inst., at the Albion Tavern, the Fothergillian gold medal was given to John Milligan, Esq., of Keighley, Yorkshire, and the silver medal to Dr. Willshire. The following gentlemen were elected office bearers for the ensuing session:—President, H. Hancock, Esq.; Vice-Presidents, Dr. Chowne, Mr. Dendy, Dr. Waller, and Mr. Hird; Treasurer, Mr. Clifton; Librarian, Mr. Harrison; Secretaries in Ordinary, Dr. Smiles and Dr. Bowrie; Secretary for Foreign Correspondence, Dr. Davidson; Councillors, Messrs. Eales, Headland, Hutchinson, Linnecar, Middleton, Pilcher, Holding, Roberts, Stadman, Drs. Clutter-

buck, Rowland, Lever, Crisp, Mr. Harvey, Dr. Willshire, Mr. Barlow, Mr. Todd, Mr. Lowe, Dr. G. Bird, and Dr. Cogswell; Fellow to deliver the Oration in 1850, Mr. Hilton.

KING'S COLLEGE HOSPITAL.—On Friday evening last, a meeting was held in the Board-room of King's College Hospital, Portugal-street, Lincoln's-inn-fields. From the statistical records, it appeared that, during the past year, 1,253 in-door patients had been received, while the out-recipients amounted to 19,383; making a total, since the commencement of the Charity, of nearly 130,000.

THE BRITISH ASSOCIATION.—A letter was read from Professor Forbes to the Edinburgh Town Council, as to a proposal that the British Association shall assemble in Edinburgh in 1850. The Professor's request was unanimously agreed to.

OBITUARY.—On the 24th inst., at his residence, Woolwich, Dr. Parkin, R.N., of Cawsand, in the county of Cornwall, in the seventy-first year of his age, Inspector of Fleets and Hospitals, having served upwards of fifty-three years. On the 7th inst., aged thirty-one years, Mr. Daniel Orme, Surgeon, Heavily.

SEAMAN'S HOSPITAL SHIP.—At the anniversary festival meeting of the friends of this Institution last week, it was stated that upwards of 2,500 seamen had been received on board the Dreadnought during the past year, making more than 90,000 who had been admitted on board that ship since its establishment. The total amount of donations received during the evening amounted to £850.

BELFAST, March 19.—The cholera is on the decline here, the average number in town, during the past week, having been thirty less than on the previous week. Two medical gentlemen, Surgeons Dickson and Clarke, have been attacked, but are doing well; the former, indeed, has quite recovered. The management of the disease here is entrusted by the Poor-law Guardians, under the "Contagious Diseases Prevention Act," to the Dispensary Committee, who have six day and one night Visiting Medical Officers, two day Apothecaries, and one night, on duty. The cases transferred to the Hospitals are sent to the Union Hospital, or the General (Town) Hospital, according to the locality,—the town being divided for this purpose. The pay to the District Visiters is three guineas a week; to the night Apothecaries, two guineas; to the day ditto, one guinea; and to the Attending Physician to the General Hospital, one guinea per day. Notwithstanding all this provision for treatment, the cases seldom report themselves in sufficient time. There is a deceptive feeling attending the premonitory stage, in many cases, that delays the patient, and lulls him into fancied security. In several instances, cases have not reported themselves at all, a few of whom were fatal. The preventive sanitary measures of cleansing, and removal of vagrants, are actively carried on by the "Officers of Health" for the parish. Indeed, the people are generally alive to their importance, from the persevering exertions of the Sanitary Committee. The cholera has been, and still remains, though diminishing, in the neighbouring towns of Lisburn, Newtownards, Comber, Carrickfergus, &c.—The following Series of Lectures are now in course of delivery at the General Hospital:—Dr. S. Reed, on Fever, Dysentery, Small Pox, &c.; Dr. W. Moffatt, on Diseases of the Lungs and Heart; Dr. Malcolm, on Diseases of the Skin; Dr. P. Stewart, on Operative Surgery; Dr. Pirrie, on Auscultation; and Surgeon Browne, on Diseases of the Eye. They are, for the present session, open to the pupils of the Hospital without fee.

THE PROGRESS OF THE CHOLERA IN PARIS continues to be slow, and the disease has not changed its mild character. 100 cases have been recorded since its appearance on the 9th inst., and twenty deaths, being an average of seven cases per day. The majority of the persons attacked had been previously enfeebled by sickness.

MEDICAL PHILANTHROPY.—Few villages suffered more from cholera in 1832 than Ans and Glain, in Belgium, the greater portion of whose inhabitants work in the coal mines. Threatened with the disease at the commencement of the present year, it became necessary to establish a cholera hospital; but alas the villages were too poor to provide the means, and the Government granted no assistance. In this emergency, Doctor Anten, the Bourgmestre or Mayor of Ans and Glain, did not hesitate to convert a portion of his own private house into an infirmary, and appropriate it to the necessities of the villagers, Monsieur Jamar contributing beds and linen. Such acts are well worthy of praise, and the name of the truly good Samaritan to be published far and wide.

PHLEBOTOMY IN ANCIENT TIMES.—In the early ages some of the Abbeys had a bleeding house called *Phlebotomaria*, in which they had four general quarterly bleedings; and in the order of St. Victor, the brethren had five bleedings per annum. Half a century ago bleeding was generally in fashion *spring* and *fall*; and surgeons were then never seen without a box of lancets and a red fillet. A fashionable phlebotomizing surgeon has been known to receive above a thousand guineas a year for this operation alone.

MILITARY SURGEONS IN THE FIFTEENTH CENTURY.—Henry V. had only one principal surgeon with him when he invaded France, Thomas Morstede, who was afterwards Surgeon to Henry VI. He was commanded to press as many surgeons as he thought necessary; and, it appears from "Rymer's Fœdera," that with the army which won the battle at Agincourt, there landed only one surgeon. The same Thomas Morstede did, indeed, engage *fifteen* in the same capacity, who were to add a little fighting to the practice of surgery, and three of them acted as archers! He took into his service, also, Nicolas Colnet, as field-surgeon for one year. With such a medical staff, what must have been the state of the wounded after the battle. The pay was ten pounds quarterly, and twelve pennies daily for subsistence. Both Colnet and Morstede could receive prisoners and plunder; but, when the latter amounted to more than twenty pounds in value, a third part of it was to be given to the King.

MORTALITY TABLE.

For the Week ending Saturday, March 24, 1848.

CAUSES OF DEATH.	Total.	Average of Five Winters.
ALL CAUSES	1,048	1,169
SPECIFIED CAUSES	1,046	1,164
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	236	221
SPORADIC DISEASES:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	38	54
Tubercular Diseases	174	203
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.....	130	141
Diseases of the Heart and Blood-vessels.....	41	40
Diseases of the Lungs, and of the other Organs of Respiration	179	243
Diseases of the Stomach, Liver, and other Organs of Digestion	59	67
Diseases of the Kidneys, &c.	18	13
Childbirth, Diseases of the Uterus, &c.....	11	9
Rheumatism, Diseases of the Bones, Joints, &c.....	13	7
Diseases of the Skin, Cellular Tissue, &c.	1	1
Malformations	2	3
Premature Birth.....	26	23
Atrophy	29	15
Age.....	51	73
Sudden	8	14
Violence, Privation, Cold, and Intemperance	30	37
Causes not Specified	2	5

AN OLD CURE FOR THE SMALL-POX.—In the British Museum there is a miscellaneous manuscript of the eighth or ninth century, partly Saxon, partly Latin, in which it is said, that St. Nicaise, Bishop of Rheims, A.D. 453, had been affected with a species of variola, and was at that time favoured with the privilege of curing this disease by means of a talismanic inscription to be suspended about the necks of patients:—"Sanctus Nicasius habuit *minutam varolam*, et rogavit dominum," &c.

EPIGRAM.

A Quack to Charon would his penny pay;
The grateful Ferryman was heard to say,
"Return, my friend! and live for ages more,
Or I must haul my useless boat ashore."

A YOUNG IMPOSTOR.—A delicate lad, aged twelve years, was lately admitted into the Taunton and Somerset Hospital, as a paralytic patient — helpless, often convulsed, and hardly able to swallow. But, on a Sunday, when all the patients of his ward, himself excepted, were attending Divine worship, he was observed (by a person appointed to watch) to steal out of bed, and visit all the lockers in succession, helping himself to the best of everything. On the following morning, the surgeons proposed to try upon him a frightful remedy; and the little impostor then confessed his malady to be feigned.

AN AMATEUR PRACTITIONER.—A person, not of the Medical Profession, but who prided himself in his knowledge of physic, upon one occasion, in the Court of King's Bench, to convince Lord Ellenborough of his importance, said, "My Lord, I sometimes employ myself as a Doctor;" "Very likely, Sir," said His Lordship drily, "but is *anybody else* fool enough to employ you in that capacity?"

TO CORRESPONDENTS.

"Juvenis" shall receive an answer next week.

"Veracity."—We cannot promise to insert the remarks "on Mesmeric Influence," without having first seen them.

"Medicus," (Hoxton.)—Our correspondent is labouring under a mistake, which may be rectified by an interview with the Secretary.

"A Staunch Reformer."—The plan proposed, appears to be good; we shall have no objection to publish it, if our correspondent will favour us with his name and address.

"An Oxonian" is prejudiced in favour of his University. As a medical school it has always been contemptible. Its first Professors of Physic obtained their medical knowledge in foreign Universities, and down to the present time the candidates for the University Medical degrees generally study medicine anywhere but at Oxford.

"Doubtful."—A medical man in practice prior to 1815, though not possessing any diploma, is considered "a legal practitioner."

"Sperans" should go up for examination, either to the Hall or College, without delay. His foreign diploma, obtained without examination, is worthless, and whatever medical Bill may pass the Legislature, he will not be recognised as a qualified practitioner.

"Amicus."—We are not so easily deceived.

"A Constant Reader."—Certainly not. The College of Surgeons has no intention of admitting its members to corporate privileges.

"M.D., Edin.," must excuse us for declining at present to publish his excellent communication in reference to a certain Professor. We shall not lose sight of the subject.

"Edward."—The appointment is in the Government.

"Inquirer" wishes to know, how many colleges are in connexion with the London University.

"Gold Pen."—We think from five to ten guineas.

"H. A. G," on the Manchester Memorial, received.

"W. J. H."—We are not aware of any such appointment.

"Southton."—A Bachelor of Medicine has not a right to the title of Doctor; but he is generally addressed in this way by courtesy. The celebrated *Dr.* Goldsmith was only a M.B.

"Mr. H. Hastings, Stokechurch."—The case of "Puerperal Mania followed by Insanity," shall receive an early insertion.

"H. A. Ramsbottom."—The letter was in type last week.

"N." Narcotic.—The dose will depend on circumstances.

"W. E. G."—A gentleman not possessing a double qualification is not eligible to the appointments mentioned. The Surgical diploma may be from Edinburgh, Dublin, or London.

"A.B."—Yes, if he is engaged in general practice.

"Our Correspondent," who has kindly furnished us with the "Statistics of the Parisian Hospitals," will find by looking into the "Medical Times," that we have already published them.

We hope to be able to publish Mr. Clarke's letter next week.

"Laboratory."—The mixture evolves chlorine.

"N. B."—It is easily prepared by putting pulverulent iodine in aq-ammoniæ. It often detonates spontaneously.

"Omega."—Themison was the founder.

"Dr. Hemmings" shall receive a private communication.

"Caustic" is too strong for our columns.

ORIGINAL LECTURES.

CLINICAL LECTURE ON HIP DISEASE.

By WILLIAM FERGUSSON, F.R.S., Professor of Surgery in King's College.

Delivered at King's College Hospital, March 29, 1849.

GENTLEMEN, — During your attendance on hospital practice, you see many cases of hip disease in all its forms, and as we have recently had many examples of the sort in all stages of the affection under notice, I think this a favourable opportunity of calling your special attention to the subject, particularly as you have seen a practice resorted to which is so far novel that you will not find more than a casual notice of it in the works on Surgery which are commonly in your hands.

The term "hip disease" is applied to a variety of affections in this locality, or rather a variety of stages and conditions of the same affection; and I may refer you to some of the surgical works in your hands for the synonymes that have been used in such cases. In some of the examples which have come to the Hospital, the affection has been so slight that the patients have walked with few of the very striking features of the disease, and with comparatively little distress; but in others the suffering has been extreme, and the slightest movement has caused the most exquisite pain. The disease has been presented to us in its various aspects of the acute and chronic conditions. In one instance, the symptoms have been well marked, and have run their course rapidly; in another, the various stages have been slow in progress, and all the features of disease have been such as to characterize what we usually understand as a chronic affection. Each case has been treated according to its peculiarities, and you have consequently seen some variety of practice.

It is hardly reasonable to expect that in a single case of this description you can meet with all the characteristics of the disease, for in one, many of them prove very different from those in another. From a variety, however, such as you have had under notice, a groupe of symptoms may be collected such as may readily serve for a description of the general features of the disease. It is rare to see an example of the kind in advanced life, and even in middle age such cases are comparatively rare. It is true that we often see instances of alteration of form and structure at these dates, sometimes joined with active disease, but the conditions are of a secondary character,—they are examples where disease of the hip has spontaneously got well, or have been cured under the judicious management of the surgeon. It is in early life, chiefly, that we see the disease, and, for general purposes, it will be best that I should sketch out the symptoms and progress of the malady from such examples as are most frequently under observation. I shall take the case of a child about six or eight years old: at first there is little to be perceived; the child may seem less lively than formerly, and less disposed to play, and the condition may hardly attract attention. It may be noticed, perhaps, that the child does not take his food so eagerly as before, and that he is thinner and paler than previously. If it be not already noticed, it will soon be perceived that he walks lame, and that, invariably, while standing, he rests upon one limb, that which is in a sound state. In consequence of this custom, the lumbar portion of the spine becomes twisted, the pelvis on the affected side drops a little lower than the level of the sound side, and the foot and the knee being pushed some what forwards, the limb has, at a first glance, the appearance of being longer than the other. If, however, the thigh be measured from the spine of the ilium to the outer condyle of the femur, there will be no perceptible difference in length at this stage between one thigh and the other. Soon there will be pain more or less constant in the knee, generally about the inner condyle, and so striking is this feature, that mistakes occasionally occur as to the true nature of the disease. The well-informed surgeon will be on his guard, however, as to this point, and at this time, or soon after, he may readily make an accurate diagnosis. He may now perceive that the limb is much thinner than the other, that it is slightly bent at the knee and hip; that there will be no pain on pressure upon the knee, but indications of tenderness at various parts about the hip. If pressure be made over the head of the femur, the patient will wince, and now the hollow between the great trochanter and the tuberosity of the ischium will be more conspicuous than on the other side; there will be a flatness of the soft parts of the whole hip, which will give apparent prominence to the trochanter, such as to excite suspicion with some that the disease is actually in this protuberance; if the lower end of the femur be seized and pressed upwards, so as to force the head of the bone against the cotyloid cavity, there will be every evidence of great tenderness in the hip joint. Weeks and months may pass over with little sudden changes, yet (and probably notwithstanding all treatment) matters will gradually get worse. There will be little fever at first, but ultimately it will come, and ere long the constitutional and local symptoms of suppuration will be apparent. An abscess in the hip will become conspicuous, for usually it is large. It will burst or be opened, and, during the suppuration, there will be more marked suffering, such as might be expected from an abscess under ordinary circumstances, but aggravated, perhaps, in this instance, in consequence of the long-continued depressing influence which the disease has previously had on the constitution. Now the hip will probably appear more round and full than the other, in consequence of the inflammation and swelling of most of the soft parts. It may now, too, be seen that the limb is shorter than the other, that the trochanter has come nearer the crest of the ilium; possibly the head of the bone may be perceived or felt on the back of the ilium; there will be palpable evidence that luxation of the head of the bone has occurred; suppuration will continue; openings will be made in accordance with the views of the surgeon, or will form spontaneously in front, behind, below, or above the joint; in one instance close upon the seat of disease, in another at a considerable distance, possibly half down the thigh. In some cases, partly from a subsidence of the swelling, partly, perhaps, from an opening being favourable to the exploration, the head of the femur may now be felt on the back of the ilium. If it be not felt, there need be little doubt on the subject, for the attitude of the limb, and various circumstances, clearly indicate that such is the case. This condition is often accompanied with great bending at both hip and knee.

All these changes are accounted for thus: At first the thinness may be attributed chiefly to the want of exercise; latterly, from protracted disease as well; the lengthening, from the condition of the spine and pelvis already referred to; the shortening, at first from luxation, and latterly, if the disease be protracted, from imperfect development. These symptoms and changes may all occur within a few weeks or months, or only after the lapse of years. Generally the early stages are slow in progress, the middle more rapid, and the latter, when the patient is not hurriedly cut off, may be protracted over months or years. It is no unusual thing to see abscesses form in the vicinity of a hip which may have been affected as just described, twenty, thirty, or forty years before, but where the disease is understood to have been cured.

There is greater or less pain throughout the continuance of the malady. In the middle and latter stages there is usually much suffering. Profuse or protracted suppurations will at last induce hectic, and both the conditions are likely to be sustained by caries, the almost certain result of (and which, indeed, characterises) severe hip diseases.

Such is a common course of this affection, but there are many varieties, depending upon the original seat of the disease, upon age, peculiarity of constitution, and many other circumstances which I need not dwell upon here. In one case the proofs of formidable disease within the joint are very soon apparent, in another the bone or bones and soft tissues around seem chiefly affected, and the joint is probably the last part involved. No doubt the cartilage is affected in most instances, at a very early date, but there are some where this structure remains almost untouched to the last. Here is a specimen which I removed after death from the hip of a boy who died of this disease. There was extensive suppuration, and great softening of the tissues before death, yet, although the head of the bone has been more than half destroyed by caries, you perceive the cartilage is scarcely different from its natural condition. An aperture at one side permits a view of the cavity within, where the bone has disappeared. In certain instances the luxation may be downwards; in others the bones may remain in their natural position. In one case there may be but little change in shape; in another the cotyloid cavity may be much altered, and so may the head and neck of the femur.

It is interesting to conjecture whether both bones are affected at once. My own opinion is, that such usually happens, yet I have no doubt that, occasionally, only one bone is diseased, and that may be the innominatum, though I think it more likely to be the femur.

I do not propose to enter upon a minute detail of all particulars connected with hip disease; nor do I intend, on the present occasion, to dwell upon the treatment of the various cases which have come under our notice during the present session. It will be sufficient to state that, generally, the treatment has been such as the acknowledged principles of surgery indicate. I am more desirous, on the present occasion, to draw your attention to an instance in which the treatment has been of a kind which you will not find even alluded to in most of the works on surgery in your possession. Let me read the particulars to you as set down in the case book.

"Elizabeth Vigoen, aged 10, has always enjoyed good health until the date of her present complaint, which commenced two years and a half ago, when she was pushed down by another girl; in her fall she struck her left hip, and was lamed at once by the accident; for this she was confined to her bed and blistered, and she soon recovered the use of her limb. Two months afterwards, without any cause, fresh irritation was set up in the joint, she suffered very severe pain, and there was much swelling of the buttock. After a little time the affected limb appeared to be shorter than the other; she limped with the foot inverted, the knee thrown in, and the toes only put to the ground. Whilst in this state she was taken to St. Thomas's Hospital, where she remained two months. Abscesses burst round the joint, and she suffered much from pain and swelling extending from the knee along the back of the thigh. Twelve months after the disease began, her parents one morning observed that her thigh was altogether flexed upon the abdomen, and that she was unable to move it from this position. Fresh abscesses now appeared around the joint, and the suppuration which ensued, and the constant pain, destroyed her health, and she became weak and emaciated to the last degree. In this condition she was taken, seven months ago, to a cold-water establishment, when she gradually regained strength, and was enabled to get about on crutches. Here she remained six months; her parents then hoping for a permanent cure, brought her to King's College Hospital, to be under the care of Mr. Fergusson. She was admitted January 4, 1849. The left buttock is naturally prominent, smooth, and tense, and over the back of the ilium there is a hard globular swelling, which is evidently the head of the femur, dislocated upwards. Around this are various sinuses, burrowing in all directions, and communicating with the carious head of the femur. Some of these sores are situated on the groin, and some over the sacrum; a very large continuous one extends down the thigh; much unhealthy pus is discharged from them. When the patient is lying quiet she feels tolerably easy, but upon any movement, or the least pressure being made over the part, she suffers great pain. She lies upon the sound side of the body, throwing the diseased knee over the opposite thigh. The motion of the hip-

joint is very limited, being confined to the slightest amount of flexion and extension. She looks pale and weakly: her appetite is good, and she sleeps well.

Jan. 11.—Mr. Fergusson, at the visit to-day, enlarged an opening over the head of the femur, and removed a portion of necrosed bone, which was loose. The head of the femur was detected in a curious condition. After a careful examination, Mr. Fergusson considered that the head of the bone was the part mainly affected, and he therefore resolved to remove it.

Jan. 13.—At 1½ Mr. Fergusson excised the head of the femur. He began by making a perpendicular incision over the upper end of the bone, about four inches in length, which cut through the skin and adipose tissue—this was joined by another transverse cut; the soft parts, which were found much thickened and altered in their appearance, were then dissected away from the bone; the limb was then rotated inwards, so as to throw out the upper end of the thigh as much as possible, and the saw was applied below the trochanter major, and the head with that process removed. (a) The cotyloid cavity was found in a healthy condition; in fact there was hardly any trace of it, as it was filled up with new bone. The edges of the wound were brought together by stitches, and the patient was put to bed. No vessel required a ligature. In the evening she complained much of pain, particularly in the knee; she had vomited, in consequence of the chloroform used in the operation.

Jan. 14.—There had been a good deal of oozing of blood from the wound throughout the night; pain is not so great. To apply water dressing.

Jan. 16.—Slept well last night; feels no pain; wound is suppurating, and looks well; appetite pretty good. To take beef-tea and wine.

Jan. 18.—The wound is looking very healthy, and is granulating from the bottom; good pus is discharged. The patient feels and looks very well. The wound, which has hitherto been dressed with water-dressing and simple ointment, is to be lightly strapped.

From this time the case went on admirably; the wound gradually approximated, the sinuses, which were so numerous and so ugly, healed up, and the upper end of the bone, which was exposed in the wound, began to granulate over. On Feb. 20, she got up and moved about the ward on crutches; the limb had become much straighter, and her health almost restored.

Feb. 27.—Is able to put the toes to the ground, and to support her body in some degree upon them. The limb is much straighter and longer. The wound had not firmly cicatrized yet, but a wonderful amount of motion was restored to the limb, flexion and extension being used to a great degree. She was allowed to remain in the house for a few weeks longer, and was sent into the country, on the 22nd of March, in excellent health.

There is little comment needed on such a history as this. Here was a poor girl who had been suffering for more than two years, from this most distressing and painful disease, and to whom there was little prospect of relief by the ordinary aids of surgery, cured by a very simple proceeding, strictly in accordance with the precepts of modern surgery, rescued from her distress, and in the short space of six weeks, so far restored to health, that she could sit up in bed, walk about on crutches, and move her limb on the affected side, as she had not done for years. But there is no description required to convince you of the benefit conferred on the poor girl. Her appearance during the latter part of her stay in the hospital (and I may add, the grateful expressions of her parents,) was such as to satisfy us all on this score. Only glance at what would have been the probable course of this case, had this treatment not been resorted to—after years of suffering a spontaneous cure might have ensued, or what is more probable, the continued irritation arising from the disease, or possibly from disease of some other organ coming on, chiefly in consequence of the exhaustion and defective development induced by this continued misery, would have consigned the patient to an early grave.

Let me now draw your attention to the circumstances which induced me to follow the course pursued in this instance. Here is the cast of the hip of a boy who was under my care in this hospital some years ago. Hip disease in its most aggravated form was present, the boy was fast dying, there was an opening on the hip through which I could detect the head of the bone more distinctly than I could in the case just narrated. The bone was bare, and presumed to be in a carious condition; there was no evidence of disease elsewhere. I thought the opportunity an admirable one for carrying out those views regarding the treatment of caries which I believe may be said to be characteristic of the improvement of modern surgery, views which induce the surgeon to remove carious bone by an operation when and where he can safely do so, so soon as he is satisfied that nature unaided is not likely to effect a cure.| I thought, that if this cause of irritation were removed, the remaining parts would speedily heal, and I resolved to give the boy this chance of relief. I did not, however, come to this resolution on the spur of the moment. It was, after mature reflection, and after consultation with my colleagues, and others competent to give an opinion on such a question. I had even a precedent for the proceeding, and I beg your particular attention while I read the first case of the kind which ever happened. The case is less known than it ought to be, and such of you as may not have read through the Surgical Dictionary of Samuel Cooper will not have seen, in the Article on Bones, by that able and much-lamented Professor, the interesting history of this case:—

"John West, a twin of delicate make, was born and resided in Westminster. When between four and five years old, he suffered from scrofulous inflammation of the left hip joint, which passed through the stages of elongation, dislocation, and subsequent retraction, and the femur was subsequently lodged in a very high position on the dorsum of the ilium.

"About three years subsequent to the commencement of the disease, and when he was about eight years old, I first saw him. He was very much emaciated; several abscesses had formed during this period around and over the diseased structures, leaving many fistulous openings, through which the probe easily detected the surface of displaced bone to be in a state of caries, and several small exfoliations had occurred from the ilium, ischium, and os pubis, over which bones abscesses had formed. In the progress of the disease the knee of the affected limb had become inverted, and firmly imbedded on the lower and inner part of the opposite thigh, from which position it could not be removed, and every attempt to do so was accompanied with exquisite pain. All further attempts were abandoned, and the limb left undisturbed. He had now lain nearly three years on the opposite side, with the body considerably incurvated, and without the power of changing his position. A profuse and debilitating discharge was constantly issuing from the numerous apertures leading to the carious surface of the displaced bone. In other respects, the health of the boy was tolerably good. Reflecting on this poor boy's case, it was evident, that, unless the knee could be removed from its firm lodgment on the opposite thigh, he must remain in the position above described during the remainder of his life, and this could only be effected by removing the upper portion of the femur, which, from its trifling mobility, induced the belief that a firm union was taking place between its under surface and that of the ilium, with which it had been long in contact, and the form of which was very apparent under the thin integuments with which it was covered. Considering, also, that as an entire destruction of every texture which forms a healthy joint, had taken place, no danger could be reasonably entertained from medling with parts in their existing condition, and attempting the removal of the head of the displaced bone; and further, that the strength of the boy, from the profuse discharge kept up by the caries of the bone was never likely to be restored. I was induced, after mature reflection, to propose an operation for the removal of the upper part of the femur, as far as it should be found in a state of caries, which, from examination with the probe, appeared to extend probably a little lower than the great trochanter. If this could be accomplished, it would set free the lower portion of the bone, embedded on the opposite thigh, and enable me to draw outwards the whole limb, and possibly place the boy in a condition equally favourable with those cases where a similar disease had occurred, or in which a compensatory joint is formed, on which locomotion is effected with or without the aid of a crutch. I propose to divide the integuments covering the bone, beginning above its head, which was easily detected, and carry downward in the centre, as low as might be found necessary, and separate the soft parts from the shaft of the bone on either side. I then proposed to divide the bone at the lowest exposed part with a small saw, and to elevate it with a lever from the dorsum of the ilium. I hoped the wound would heal over the divided end of the bone, which (now being set free,) might be brought into a straight line, and which motion would incline deeply into the wound the end of the divided bone. The wound itself was to be treated as a common incision, with adhesive plaster and bandage, and rigid quietude. My colleague, the late Mr. Morel, saw the case, concurred in the proposition, and offered to be my assistant. The late Mr. William Smith, Member for Norwich, and to whom the mother of the boy was well known, informed the late Sir E. Home of the present operation. The boy, at his request, was conveyed to St. George's Hospital; and after an examination of the case with his colleagues, a written document, signed by him and them, was given to the mother of the boy, declaring that, not only would the operation be useless, but impracticable; and, most likely, if attempted, be attended with loss of life. I was not present at this consultation, and only knew of it by being shown this document, or protest, by the boy's mother. Of course, with such a published declaration, I abandoned the case altogether. After a lapse of some months, Mr. Travers, whilst attending at Mr. Smith's house in the City, to which the boy West had been removed with his mother, was requested to look at him; and being told of the proposed operation by the mother, who was an exceedingly intelligent person, at once saw and understood the plan and principles of the proposition. He subsequently wrote me a note, expressing his entire concurrence in the measure, and kindly offered to assist me in the operation, notwithstanding the formidable protest which had been issued shortly before.

"Glad of the concurrence of so distinguished an individual, and my own opinion as to its practicability being unchanged, I gladly accepted the offer. A lodging in Westminster was procured for the boy and his mother. We met in consultation, and an early day was fixed for the operation.

"In April, 1821, we met; and the boy being placed on a table of convenient height, I proceeded to divide the integuments covering the bone, carrying the incision from an inch above the head directly along the middle line of the bone, about two inches below the greater trochanter: this was completed at one incision down to the bone. The integuments were dissected inwards and outwards, thus leaving the bone entirely bare, a little lower down than the lesser trochanter, which was distinctly visible. A spatula was now placed under that part of the bone which was intended to be sawn through, so as to protect the structures underneath: this was readily accomplished. A smaller spatula was then introduced into the space made by the saw, and used as a lever to raise the bone, which, with a little dissection, was removed from the dorsum of the ilium. No vestige of the acetabulum remained, neither was any caries of the ilium discovered.

"The thigh was now readily brought into the straight line, and the knee liberated from its position on the thigh. The wound was closed with adhesive plaster, and no part of the bone left exposed. Splints and an eighteen-tailed bandage were applied, and the limb placed in the straight position. The boy bore the operation well, and not more than two ounces of blood were lost. The head, neck, and trochanters, were very apparent, the caries being superficial, and not extending lower than the lesser one. The case proceeded very favourably, and in a few weeks every sinuous opening had healed, and also the incision made in the integuments. The patient rapidly acquired strength and flesh. At the end of two months, I began to examine the parts, to ascertain if they had formed any attachment to the surrounding structures; and on attempting to move the limb in different directions, I discovered that the boy himself had the power of raising the thigh upwards, which power gradually increased; and, finally, a very extensive motion was accomplished by the spontaneous action of the muscles. I now proceeded to examine whether he could bear pressure upon his foot without inconvenience, which was the case at the expiration of about four months from the time of the operation.

(a) The head of the bone was much reduced in size, and carious.

He was put on crutches, and, in a very short time, could bear considerable pressure on the foot, and, at the end of the year, could walk on a high stirrup without his crutches. Finally, it was clearly ascertained, that a new and useful joint had been formed, the boy being able to walk several miles without the aid of a crutch or stick. He acquired great latitude of motion, except in rotating the thigh outwards, and separating the thigh laterally outwards. He was apprenticed to a lady's shoemaker, and, five years after the operation he became phtyisical, and died of diseased lungs in the Westminster Hospital.

"The limb was removed and half the pelvis, and is in possession of the Royal College of Surgeons; but the parts have not yet been examined, in order to ascertain the changes which had so usefully been employed in giving almost a perfect joint as a compensation for the original. The shaft of the femur appeared to have lost the power of further elongation; for, on frequent admeasurement, during the life of the patient, it was discovered not to have increased in length. Probably the fact is not generally known, that bones do not increase in length after the amputation of their heads."

In addition to the opinions of my colleagues who saw this case, and concurred in my views, I was favoured with that of my friend, Mr. Coulson, who is well known to have devoted much attention to disease of the hip, and is the author of an able work on the subject; and I also saw Mr. Anthony White, who, after explanation, advised the operation, and would have been present on the occasion had his health permitted. The operation was performed, and the result fully realised all that I had anticipated. The case was afterwards brought before the Royal Medico-Chirurgical Society, and was honoured with a place in the Transactions for the year 1845.

The features of Mr. White's case and this one were almost identical, and you may perceive a great resemblance to them both in the instance which has lately been under notice in this Hospital.

It is not my intention to enter upon a history of the operation of excision of the head of the femur. The proposal is not mine, although I may claim the merit (such as it is) of reviving it in this country. The proceeding has been suggested for other conditions than those resulting from hip disease. To those who are much interested in the subject, I have much satisfaction in recommending an interesting Essay, which was read some years ago, by Mr. Henry Smith, before the Medical Society of King's College, and which was afterwards published in a more elaborate form in the *Lancet* for April, 1848.

My friend, Mr. Smith, was formerly a pupil of King's College, and not long since served as House-Surgeon in our Hospital; and, as you will find by reference to this essay, he has paid particular attention to the history of the operation, and has collected all the facts which have hitherto been published regarding it. This is not the occasion to pass a marked eulogium upon that gentleman; but with regard to this very matter, it has struck me that the following quotation will be applicable to him; it is from the late Mr. Liston; you will find it in the Preface to the first edition of the "Elements of Surgery," published by that gentleman in 1831, at a period when he had already acquired much of that justly-earned reputation which ultimately placed him among the first Surgeons of his time:—

"Years are not the measure of experience. It does not follow, that the older the Surgeon is, the more experienced and trustworthy he must be. The greatest number of well-assorted facts on a particular subject constitutes experience, whether these facts have been culled in five years or in fifty."

The operation has been frequently repeated since I first performed it; but I shall at present rest content with referring only to such cases as I have myself had to do with. I have now seen the operation performed five times; thrice by myself, once by my friend Mr. French, who is Surgeon to the St. James's Infirmary, and once by Mr. Smith. In two of my own cases the result has been eminently successful; in the third, it has not been so satisfactory. The case was published in Mr. Smith's Essay already referred to. The immediate relief was most conspicuous, and the boy was placed in comparative comfort. Some of the sinuses never closed, however; and there is reason to apprehend, that either all the diseased bone was not taken away at the time, or subsequent mischief ensued. Latterly, this boy has been under our notice in the Hospital; and, had it not been that his liver was enlarged, (a condition which has come on since the operation was performed, eighteen months ago,) I should, probably, have removed some more of the bone in this case. Unfortunately I preserved the trochanter major in this instance, for I had not then formed the opinion which I now hold, that it is better to remove this process even where it is known to be in a healthy condition, both because by doing so the acetabulum can be brought more under immediate observation, and because it is a hindrance to the free discharge of matter, as well as to the closing of the wound by cicatrization.

In Mr. French's case, the recovery has been in every respect as satisfactory as Mr. White's case, or those above referred to; and, although Mr. Smith's patient did not ultimately recover, the result was such, that no unprejudiced person could reasonably bring forward the case as an argument against the operation. Mr. Smith has detailed the particulars of this operation in the *Lancet* for November, 1848.

I am anxious, gentlemen, that you should not misunderstand me about this proceeding. Do not for an instant suppose that I bring it forward as the treatment for hip disease. I advocate the practice as applicable to certain cases only, and these cases seem to me so few in number, that years may be passed in active practice ere such an instance may come under the surgeon's notice; but when such are met with, I conceive that the principles on which we treat caries, when there seems no disposition to a spontaneous cure, are as eligibly applicable here as in all other parts of the body where we are in the habit of cutting away carious bone. The necessary wound is small compared with what you might suppose it, from judging of the anatomy of the hip as you see it in the dissecting room,—the glutei muscles are wasted by previous disease, hardly a third of them will be met with in the larger portion of the wound;—the depth of the parts requiring division, the extent of surface to be explored are not so great as for excision of the head of the humerus; perhaps not equal to structures involved in the well-established operation of excision of the elbow-joint. There are no important structures in the way, no large vessels or nerves; the whole operation need not occupy more than a few minutes, and happily, now a days, as you saw in the instance which has called forth these remarks, may be performed without the consciousness of the patient, under the "sweet oblivion" of chloroform.

These remarks are chiefly applicable to instances where the head of the bone is situate as it was in all the instances to which I have referred. I shall not, on the present occasion, offer an opinion upon the propriety of the operation under other circumstances. Even in such examples as those to which I have specially referred in this lecture, the proceeding should not be undertaken without a full consideration of all the circumstances,—the condition of the patient's system generally should be seen to, and the integrity of every organ ascertained in as far as lies within our power. Such an investigation would not be more than good surgery would dictate; but the local disease will naturally be the chief object of anxiety, especially if it should appear that the system was healthy elsewhere. It may be possible to form an accurate opinion as to the original site of disease; but, in the generality of instances, there will be doubts, and the condition of the bones of the pelvis naturally calls for especial notice. The interior of the joint being either primarily or ultimately involved, it is probable that the acetabulum (whether the bones of the pelvis have originally been affected or not) may be implicated as much as the head of the femur. I am of opinion that such is usually the case; but when dislocation occurs, I have no doubt whatever that the acetabulum occasionally loses all trace of active disease,—whatever acute form of action has been there at first, ceases in the latter stage, and no trace of disease, either of cartilage or bone is left. The cavity is, of course, in such instances, much altered from its natural shape,—the bold margins giving its cup-like appearance have disappeared, and the surface presents a level appearance, with a tissue upon it like thickened periosteum, with loose fibrous shreds projecting from it; these floating loose in the abscess, which is kept up by the carious head of the femur, or possibly being attached to the neck of the femur, or smaller trochanter, which process in many instances lies exactly opposite the original socket. I am often questioned on this very subject; and it has been stated by some, that if caries of the joint be once established the patient *must* die.(a) I have been much astonished at such an assertion, and if it be correct, the majority of the Profession must not yet be agreed as to what condition the term "caries" really applies. It is not always easy to draw the distinction between ulceration of cartilage and ulceration of bone. If cartilage disappears under acute inflammation of a joint, ulceration is usually said to be present; the surfaces of the bones are left bare, they grate upon each other when friction is applied; there may be, and generally is, a profuse discharge of matter; if a probe can be pushed against the bare ulcerated bone it is pronounced to be carious. Even in instances where there is no external escape of pus, when roughness can be felt during attrition, caries is usually thought to be present. Of course I here exclude those chronic affections of joints which we meet with in persons advanced in life, or of a rheumatic or gouty habit. I hesitate, myself, in applying the term "caries," in some of these cases, although I believe it is a very general acceptation. But there are instances in which all seem agreed that such disease is actually present, and, although every one agrees regarding its untractable character, I was not aware until lately that any surgeon doubted the possibility of an occasional cure in some shape or other. A former teacher of my own, with whom I had the honour of being intimately associated in early life, the late Mr. Turner, first Professor of Surgery in the University of Edinburgh, used to say in his lectures, that all diseases of joints got well in the long run, provided the constitution could bear up in the temporary struggle; but he admitted that this rarely happened, and that unless some means could be resorted to to remove the disease by some local proceeding—excision or amputation—premature death must inevitably happen. Such have been my own views since I had a thought on such matters, and, though I freely admit that a cure without such active interference is of comparatively rare occurrence, I fancy that I should mislead you greatly were I to state positively that such never takes place. Referring to the hip joint, here is a preparation where you see the head of the femur has got anchylosed in the cotyloid cavity. The patient, from whose body I took this preparation had, some six years before, undergone the usual treatment of hip disease. The cartilages, no doubt, must have been ulcerated. Caries, in the usual acceptation of the term, must have been present, yet the disease had been cured for six years. Here is another preparation illustrating the same subject, the innominatum and femur seem as one Such preparations appear to be rare and curious in the estimation of Chelius, as he mentions having two in his possession. My own experience in museums leads me to say, that they are common. But some might deny, that caries was present in these instances. Here, however, is a preparation of anchylosis in the wrist; and he would be a strange pathologist who would say that caries had never been present in this instance. The bones of the forearm, carpus and metacarpus, are in a manner fused together. I can state, with almost as much certainty as if I had seen the person from whose body this was taken doubtless after death, that violent inflammation must have been present; that there would be a copious suppuration; that there would be openings in the surface leading to bare bone; and that the various bones would at one time have grated

(a) Lancet, March 10, 1849, p. 266.

upon each other, as if they were so many pieces of sand-stone. Yet the caries of the wrist must have been ultimately cured. This disease seems to get well in various ways; sometimes by an action such as must have happened in these instances, and sometimes by separations of some of the carious portions, as must have happened in this example which I now hold in my hand. It is a preparation of the tarsus, with the bones joined to each other, as well as to those of the leg and metatarsus, much in the same way as must have taken place in the wrist just referred to. In addition, however, various portions of bone must have been discharged, as you may perceive by the deficiences at different points. Here, too, there must have been a cure. But the table is covered with preparations, illustrative of the same subject. It seems a waste of time to attempt to prove what all people (with some extraordinary exceptions) seem to admit. I must beg your attention to this preparation, however. Here has been a gun-shot injury of the knee, and the bullet has lodged in one of the condyles, where it has remained for many many years. The cavity of the joint must have been involved in the original wound, the probability of inflammation, suppuration, ulceration, and caries is recognised by all authorities in such cases. Doubtless all must have been present, yet this limb had been saved. Anchylosis had taken place, and the carious joint has thus been cured. But I need not multiply examples,—museums abound with them, and you cannot walk the streets without frequently seeing living examples of cure of caries. That condition of the spine seen in hunchback, in describing the progress of which Percival Pott (a) frequently applied the term caries, gives us a good illustration, and in which cases undoubtedly caries is frequently present, affords a remarkable instance of the possibility of caries being curable. The very examples in the living body to which I have referred, as occurring to Mr. White and myself, are instances of cure of caries in the acetabulum. I see no good reason why either Mr. White's statements or my own should be doubted on this subject. But it may be said that further proof is wanting, and I may refer to the preparation of Mr. White's case in the Museum of the Royal College of Surgeons, which has, since it was placed there, been carefully dissected, and now shows (as who could doubt from reading the history) that all disease had ceased. But here is a preparation which strikingly illustrates the propriety of the operation which I advocate as being applicable in certain instances. Observe the side of an adult pelvis, with the head of the femur dislocated, and lying on the upper margin of the cotyloid cavity. The head of the bone is in a carious condition, exactly resembling this beautiful specimen of the disease which I show you at the same time—(the head of the femur removed by Mr. Smith.) The capsular and round ligaments have disappeared, the cotyloid cavity is nearly filled up by fibrous tissue; there is no trace of caries now, although in all probability the whole surface of this cavity at one time resembled the surface of the head of the femur as now seen. There is, however, and I beg your particular attention to the fact, a portion of dead bone lying in the centre of the remaining cavity quite loose, and which I could lift away as readily as if it were on the surface of the table. Supposing the individual from whose body this preparation has been removed after death, to have been otherwise sound, who can doubt that excision of the head of the femur might have saved life. The carious bone would have been removed, and, had this been done, the piece of dead and loose bone would have been as palpable as it now is. Here would have been conjoined the legitimate proceedings of cutting away caries and lifting away necrosis, and, in so far as morbid anatomy serves to permit one to form an opinion on points of practice, I might have searched all the museums in London, and not have fallen upon a specimen so valuable for my present purposes.

But even the hip-joint itself, I may refer to examples in the living body. We have in the house at present, an instance not unlike that of the girl on whom the operation has recently been performed. But here a spontaneous cure has been the result. There are indications of extensive suppuration having at one time been present. Cicatrices are large and numerous all around, and who can doubt that caries must have been present here; yet a spontaneous cure has happened and anchylosis is the result. Every surgeon of experience must have met with many cases of this kind. Not long ago my colleague, Mr. Partridge, had under his care a young patient with violent inflammation in the tarsus. Copious suppuration occurred, abscesses were opened, carious bone was felt with the probe, the bones grated upon each other. I myself fancied that the best thing for the boy would be amputation at the ankle, but Mr. Partridge did not urge the operation upon the friends, who were averse to its performance; ultimately, and that ere long, the violence of the disease abated, the boy improved in health, and the foot got quite well. The boy has recently been seen running about as if the foot had never been the seat of so formidable a disease. I have occasionally, in my clinical observations on these subjects, had occasion to state, that no one objects to excision of the head of the humerus in cases of caries, on the score that the glenoid cavity may be in a similar condition. Undoubtedly it often is, and yet the operation is considered a legitimate one, due instructions being given to cut away the carious portions. There is some analogy, it will be admitted, between the hip and shoulder-joints. In reality, on the living body, during the operations above referred to, the cotyloid cavity is as easily reached with gouge and cutting forceps as is the glenoid cavity, and this I affirm from personal experience on both joints in the living body. I do not by this imply that I should not be deterred from operating had I indubitable proof that the bones of the pelvis were affected. On the contrary, I would hesitate to resort to such a proceeding under the circumstances. What I mean is, that as it might happen that the surgeon must interfere in the cotyloid cavity, he has it in his power to do so, in so far as regards the proximity of that part to the wound required for the removal of the head of the bone.

You will, I trust, have in view that I do not advocate the indiscriminate application of this proceeding; on the contrary, I would earnestly caution you to use your utmost care in selecting your cases. If this be done, there need be little doubt of the result; and I have no hesitation in saying that judicious interference in some of these cases must tend as much to characterize good practice as any of the other excisions which are admitted amongst the most brilliant achievements of surgery.

It rarely happens that any striking novelty in our Profession is introduced and received without some opposition. This has happened at all periods in the history of improvement. The opposition has sometimes arisen from the absence of proper data, sometimes from sheer ignorance, and at other times from less questionable motives. Listen to what a great modern authority has written on one of the most admirable operations in surgery. After describing excision of the head of the humerus, without making a single exception to the operation, the author proceeds :—

"The *elbow-joint*, on account of its exposed condition, is generally regarded as the most favourable for excision. As to the truth of this opinion, there is great room for doubt. The affections of the joints of the upper extremity are much more manageable than those of the lower, and may generally be prevented from proceeding, so far as to end in destruction of the apparatus. By care and good management disease will be arrested, and the functions and motions of the parts restored and preserved; or the articulation may become stiff, and even though the anchylosis be complete, the limb will be very useful if the joint have been kept in a good position. The health, if previously undermined, is renovated so soon as the local disease is arrested. But some bad cases are met with, in which all the parts surrounding the articulation are involved, and the strength wasted; in these, amputation is the only safe and effectual procedure.

"It is only when the soft parts are not much diseased, when it is ascertainable that the affection of the bone is only to a limited extent, and when the usual means of cure have had a fair trial and failed, that excision is admissible. In determining on the operation, the time of life and the worldly circumstances of the patient are to be considered; a poor man requires his limb to be serviceable in labour; handsome appearance without utility is to him of no value. The motion and usefulness of the arm may be in a great measure preserved, if only a part of the bone of the arm, or a part of those of the forearm, entering into the articulation, be removed; but if large portions of all these be taken away, the muscles will lose their support, the motions will never be restored to any extent, and the motion that is will be weak and vacillating; the joint will remain loose and powerless, and the limb will prove to be but a useless incumbrance. Such, at least, is the result of my experience on this subject; and I am sorry to add, that all which has been written on it is not deserving of unreserved belief. Many patients have, after long and severe suffering, preserved the arm to little purpose; others have been necessitated to submit to another operation—amputation after all; some have died after the first, others after the second mutilation. The operation is attended with no difficulty in execution, and this in some measure accounts for its frequent, and, it is to be suspected, indiscriminate performance of late years. By the sanguine supporters of this operation, the after treatment is advised to be conducted so as to secure motion in the new articulation. From this I would dissent; for, if the articulating ends of the bones have been actually cut off, the motion may be extensive enough certainly, but both joint and limb will be almost altogether impotent. It would be better to procure anchylosis in the bent position, than to have the arm dangling like a flail; in the one case the limb will be useful, in the other ornament, and that, too, of an equivocal kind, is all that it can boast.

"Even anchylosis, in most cases, can be brought about only after the lapse of a long period. In the more severe affections of this joint, amputation of the limb is the operation which must ultimately be had recourse to if the patient survive; and it is better to perform this at once than after the experiment of excision has been tried and found wanting. I am well aware that parents have had to regret and mourn bitterly their having departed from sound advice and lent themselves to such experimental trials on their offspring."

This was uttered by Mr. Liston in 1831 (a), after all that had been done and written by the Moreans, Park, and others, and at a time, too, when, after the revival of the operation in Edinburgh, it was rapidly acquiring the high character which it has since worthily sustained. Yet that distinguished and lamented surgeon lived to be one of the greatest advocates of this very operation. To take another example. I myself, in 1842, published as follows:—

"Although on the dead subject, the foot may be readily separated at the ankle, and the proceeding has, at least on one occasion, been accomplished on the living subject, it is an operation liable to so many objections, and presenting so few advantages, if, indeed, any may be claimed for it, that its consideration may, with all propriety, be omitted in such a work as this."

But mark the sequel: in 1846, I had reason to write thus :—

(b) "Although on the dead subject, the foot may be readily separated at the ankle, and the proceeding has occasionally been performed on the living body, it is an amputation which has not as yet attracted much attention among practical surgeons, nor, indeed, has there been much inducement to follow it until these few years, during which time it has frequently been performed by Mr. Syme, and other surgeons in Scotland, with results sufficient to attract the attention even of the most sceptical. Though the operation has received the sanction of Sabatier, Lisfranc, Velpeau, Baudens, and others, the mode of procedure seemed to offer such poor promise as to the condition of the stump, that one cannot be surprised at the indifference shown on the subject. The coverings to the ends of the tibia and fibula were saved from the skin over the arch of the foot, and that behind the ankle, and sometimes from the sides of the foot below the malleoli. It is easy to perceive that these, however simple in extent, would be

(a) On the palsy of the lower limbs.

(a) Elements of Surgery, 1st edition, p. 404.
(b) 1846. Op. Cit. 2nd Edition, p. 392.

so thin as to form a very imperfect cushion to support the weight of the body, and, judging from the comparative extent of the ends of the bones, even after the malleoli are cut away, as well as the defective protection to them above alluded to, we cannot be astonished that amputation in the leg should have been selected in preference.

"The operation proposed and performed by Mr. Syme does away with such objections, however; and, in so far as I can judge, is one of the greatest improvements in modern surgery, as regards the subject of amputation. The principal feature of the operation in question is, I imagine, that of retaining the skin on the lower part of the heel to form the end of the stump, and, as this is the part originally intended by nature for the body to rest upon, it is most likely that it will still form the very best, though the heel bone is removed. Mr. Syme performed his first operation of the kind in September, 1842, and published the particulars in the *London and Edinburgh Monthly Journal of Medical Science* for February, 1843. He has since, in a series of notices in the same Journal, most ably elucidated the subject, and, as the crowning merit, has adduced a large number of cases most successfully treated in this peculiar manner by himself and others."

These quotations may serve to show how cautious surgeons should be in offering an opinion regarding the doings of others, who, from their standing in the Profession, are as much entitled to the confidence of their brethren, as those who presume for the time to criticise the views and conduct of their contemporaries.

Finally, gentlemen, setting aside my own humble name in this matter, I hope, for the credit of the surgeons of the nineteenth century, that the assertion, that the operations to which I have referred in this lecture have been "no less erroneous in theory, than objectionable in practice," (a) will never be repeated; for these are operations with which the names of Anthony White and Benjamin Travers must ever be associated.

ORIGINAL CONTRIBUTIONS.

REMARKS ON CEREBRAL DISTURBANCE THE RESULTS OF UTERINE DISORDER.

By G. CORFE, Esq., M.D., Middlesex Hospital.

Amidst the extensive field of observation and of practice which this and similar institutions affords, there are a series of diseases, and varied phases of the same disease, that continually present themselves to the eye of the mind, which it becomes every public officer to note and to relate from time to time, for the benefit of his professional brethren, and for the alleviation of the sufferings of his fellow-mortals. These diseases, and their varied types, shades, and colourings, are so scantily spread out through the professional career of the country or private practitioner, that he has neither time, nor opportunities, nor data, sufficient to enable him to deduce any practical benefit from the study of them. It is the hospital physician or surgeon who obtains the privilege of collecting a large mass of valuable facts together, and who may derive thereby some of the most important and useful matter for instruction to the younger branches of the Profession, but which the country gentleman is quite unable to accumulate, or methodically arrange, even if he possessed the opportunity and the time so to do.

During the last few years, my mind has been much engaged in observing a singular train of symptoms which the climacteric period in females commonly induces. These symptoms are nowhere classified, as far as I can find, by medical authors, nor are they traced up, when noticed by writers, to their true source.

It is not my desire, in thus heading the present communication, to lead the Profession to suppose that I have discovered some new malady, neither is it with a desire to excite the attention of the curious that I have thus designated the few remarks I am about to make; but rather, my motive in so doing, springs from a wish to impress upon the mind of the practitioner that there are a peculiar train of symptoms which arise in the female constitution, which are wholly referrible to disordered uterine functions, and which are rarely met with in the male subject; and as it has fallen to my lot to witness many distressing instances of the disorder in question, I am desirous of presenting a few remarks upon the subject to the readers of the *Medical Times*, the more especially as I cannot ascertain that any author has attempted to lay the subject before the Profession in the same light, or with similar views.

The disturbance which is now alluded to I may at once describe. The subject of it is usually from 30 to 45 years of age, and it ordinarily occurs more frequently in those who have had no family, or are unmarried; in those, however, who are married, and have borne children, the disease usually succeeds the climacteric period of life.

The symptoms, as far as I have hitherto observed, are ushered in with occasional flushings of the face, succeeded by more or less perspiration, a sense of faintness, and subsequent depression of spirits; sudden pain then ensues either occipital, frontal, or in the course of the longitudinal sinus, where, as with some women, the hair is parted; the sensibility of the scalp is increased, and the pain is oftentimes momentary in its onset, and partial in its seat. As the disorder advances there is more or less noise in the head, described as humming, buzzing, singing, or rumbling; then comes on deafness of one ear, muscæ volitantes, palpitations, irregular action of the heart, an oppressed pulse, a weight over the forehead, or at the back of the neck; a frequent sense of formication over the face and chest, especially whilst the person is warm in bed, and about to lose themselves in sleep, cramps in the legs, transient numbness in one arm, usually the left, and pain passing down the hand, and into one finger. Extreme mental and bodily depression, a peculiar feeling of dread hangs over the mind whilst the attack is hovering about them, and the least excitement, as the slamming of a door, or the double knock of a postman, will throw them into a most distressing fit of nervous suffering. The disorder is attended oftentimes with a species of fit, not unlike that of epilepsy, and anæsthesia, or paralysis, or both, of one arm and leg may occur and remain for several days.

One lady with whom I am acquainted has been seized, in addition to the above symptoms, with sudden pain in the lumbar region whilst walking the streets; and on two occasions has fallen down screaming piercingly with the attack; on another occasion it was brought on by being hurried into the carriage of a train which was in motion, and the alarm which she caused to the rest of the company was of no ordinary character. She is the mother of a large family, and is capable of undergoing great mental exertion when free from these symptoms.

The period of time at which the attack comes on, or is aggravated, is also worthy of remark. If the individual does not rise in the morning with these cerebral disturbances, they will come on in the after part of the day, and they are especially aggravated if a sense of hunger ensues and it is not speedily gratified. I should observe, also, that there may be flatulence, some obstipation of the bowels, and a capricious appetite. A spontaneous separation of crystals of pure lithic acid, will oftentimes remove the distress for weeks, when it recurs with equal severity.

The individuals who appear most prone to these distressing symptoms are those who inherit a gouty diathesis, who live freely on animal food, and who have been the subject of great mental exertion. The stomach is the first organ which developes the attack, although the uterus, it should be observed, is the viscus originally in fault. There has been menorrhagia, or dysmenorrhœa, with more or less debilitating leucorrhœa.

The catamenia have been "dodging" the patient for some months, and, under an apprehension that this secretion was about to terminate altogether, the patient has kept silence upon the matter, and sought for no medical advice, until the constitution has become unstrung, the fluids vitiated, the stomach deranged, the mind harassed, and oftentimes not until then, have they been compelled to seek for medical aid. The physiognomy in such instances is frequently very instructive; there is a sallow tint around the eye, a heavy expression of face, and a general sadness depicted in the countenance. They tell you that they are often seized with partial dimness of sight, duplex vision, or that they are deprived of the power of distinguishing one-half of another person's face, just as the late Mr. Abernethy was wont to describe to his class, when speaking of injuries of fracture to the crista galli of the ethnoid bone. One gentleman, Mr. A., used to remark, "could never read my name on the door; he always saw 'Aberne,' but no 'thy;'" and a patient now before my mind can sometimes discern the chin, mouth, and nostrils of any one before him, but the upper half of the face is covered with a mist; at another time, only the longitudinal half of the face can be discerned, and this symptom will remain for two hours or more, and be succeeded by an intense headache.

I am by no means disposed to assert that similar disorders of the nervous system do not spring up in the male subject also, but I consider these as incidental to the sex, whilst they are peculiar to the female sex. The gentleman just alluded to is of a very nervous temperament, ex-sanguine, and the subject of great mental excitement from time to time. He suffers from a constant sense of acidity on the tongue, and the saliva is strongly acid to litmus paper.

Many instances of the above malady have been erroneously classed under the titles, "apoplexy," "cerebral congestion," "threatenings of cerebral effusion," &c., and the lancet, with local depletion, have been unsparingly employed. Such antiphlogistic measures have invariably added to the mischief, and have increased the patient's sufferings.

The explanation of these morbid changes and symptoms appear to be this: that the catamenial secretion, from some constitutional cause, which is probably seated in the organs of assimilation, becomes altered in quality and in quantity;—the elements of this fluid are thrown back on the circulation, and morbid bile on the one hand, and a lithic acid diathesis on the other, is the ordinary result. There is no organ in the female economy that so readily partakes of disturbance from uterine irregularities as the liver; and the instances are not few where protracted menorrhagia has resisted astringents, quinine, and the ordinary treatment, whilst it has yielded to brisk and frequent purgation, with small intermediate doses of calomel, &c. In such cases the uterus takes on the action of the liver, and so long as the latter viscus is allowed to remain in its torpid condition, so long also will the uterus continue to pour out an undue quantity, or an altered quality of dark venous fluid, and the patient becomes enfeebled, harassed, and distressed; hæmorrhoids are not unfrequently induced also. But no sooner, oft-times, do the remedies tell upon the hepatic branches of the portal system of the liver than the intestinal portion of the same system becomes relieved from its congested state, and the uterine discharge is shortly subdued.

It is from such observations that my mind was originally led out into the study of these painful attacks of the nervous system, and I can confidently assert, that a very large number of women, who would have been treated ten years ago with frequent bloodletting, and other antiphlogistic remedies, have been perfectly convalescent from a totally opposite method. The stomach, liver, and kidneys, appear to be the principal organs which suffer from derangement, and, in order to restore to the former viscus its healthy tone and vigour, scrupulous attention must be paid to the diet. Veal, pork, salt meats, fried and broiled fish, vegetables, except potatoes, tea, pastry, and made dishes, or ragouts, wine, bottled beer, or any liquor containing a free acid, or gaseous matter, appear to aggravate the disorder in a marked degree. Mutton, roast and boiled, fish, poultry, fresh game, cacoa nuts boiled, or coffee, not too strong, and draught porter, is the most agreeable diet for such a stomach; but the benefit derived from taking six or twelve fresh

(a) Lancet, 10th March, 1848, p. 266.

oysters without any other food, or additions, as pepper, vinegar, &c., or even bread, upon an empty stomach, as for luncheon, for instance, has been most remarkable in some severe cases which I have witnessed. Their alkalescent character has removed the morbid acidity of the stomach, whilst it has restored its tone and vigour, and the following draught has been ordered to be taken every morning on rising.

℞ Ammoniæ hydrochloratis, grs. x.
Extr. taraxaci, ʒss.
Dec. aloes comp.
Mist. gent. comp. aa. ʒv.
Sodæ pot. tartratis ʒi.
Tr. lavandulæ comp. ɱxx.
fiat haustus.

If this aperient should not prove of sufficient activity, it must be repeated in the middle of the day; but, on the other hand, if it is too active, the draught may be only taken every other or every third morning, yet it is of greater importance that the alimentary canal should be freely acted upon once or more daily, than that it should be allowed to continue in a torpid condition.

The alvine evacuations are usually offensive, fetid, and so dark, that I have known them to partake of the character of the motions of a patient with melæna for several days together, and I am inclined to think that is from the fact that practitioners do so rarely submit these excretions to ocular examination, that many cases of this disorder are misunderstood, and therefore mismanaged.

Another useful remedy is to clothe the loins with the emplastrum opii, (Ph. Lond,) or else with a long strip of new flannel; and, in order to assist the liver in its healthy functions, a warm bath and occasional friction over the skin with sand-soap or a horse-hair glove usually promotes the healthy action of the abdominal viscera.

Whenever the urine ceases to deposite lithates, and becomes a pale canary colour, and the evacuations from the bowels present a healthy appearance, and cease to emit a penetrating fetor, there is a co-existing amelioration in the sufferings of the patient. Her spirits are more buoyant, her mind less distressed, her appetite more even, and her whole frame less weary.

Thus have I briefly sketched the outline of this disorder, which, although I am sensible is but imperfectly done; yet, if it should be the means, please God, of leading the minds of some of my professional brethren to ponder over the concurrent testimony of such a train of symptoms when they meet with them, and pause before they rashly conclude that they are wholly referrible to vascular congestion of the brain, and require active depletion, &c., for their alleviation, I shall be satisfied that my time in writing these lines has not been altogether thrown away, if the perusal of the same should be profitable to them as well as to their fellow creatures.

OUTBREAK OF CHOLERA AT LIMERICK.

By Dr. KIDD.

The sudden breaking-out of cholera in specific localities, as the other day at Tooting, and during the present month, with not less fearful results, at Limerick, must lend some countenance to the opinion every day gaining ground, that the disease is more or less contagious,—more correctly, perhaps, that this fearful scourge is capable of importation in a folded-up or dormant state; and that, like the germ in the seed, it requires but certain physical arrangements for its development. Or, perhaps, we may read the matter in this wise,—that sundry local circumstances long at work, the first faint touch of some wide-spreading epidemic influence is but needed to set the disease in motion; to fire the train, so to speak, so sedulously laid by neglect of sanitary and other matters,—to fire the train and lay everything in ruin.

Bursting somewhat after this manner on this devoted city, within the last few days, without making its appearance in any of the intermediate towns towards the eastern coast, the ravages of this dreadful disease have been perfectly frightful. Out of a population of 60,000, almost every one has been suffering, more or less, under the malign influence of the poison, and over a thousand already have been swept away in its wide and wasting march. Some cause, other than that creeping so steadily along for some time, appears clearly in operation; what it may be seems not so easily determined.

Among the few facts well established, I believe, with respect to this formidable malady, is that one, —that cholera has a tendency to hang about large bodies of men, often in a half-dormant state, springing into life under certain circumstances; nay, more, that it is even capable of being generated by large crowds of people. The circumstances mentioned by Mr. Rogers to the London Sanitary Commission on this point are very remarkable.

In India, he states, where all sorts of people come together to the ridiculous native festivals,—the cholera as usually makes its appearance also! At the feast of Juggernaut it is an invariable attendant. The little town of Pooree contains 35,000 inhabitants, the number of pilgrims amounting sometimes to 150,000. "The inhabitants are usually quite healthy before the occurrence of the festival, but, immediately on the arrival of the pilgrims, and when the lodging-houses are literally crammed, cholera suddenly breaks out, and, in the course of a few days, hundreds are cut off by it." And he adds: "This is not an occasional or accidental occurrence,—it is an invariable one."

Something not dissimilar has occurred in this city. All the cases, for the first few days, came from one frightful locality, the resort of drunken sailors, abandoned women, and people of that class; and some of the most marked and fatal cases happened in crammed-up lodging-houses during the Assizes, which were holding at the time. Since then the poison has become, it is true, more generally diffused, and has been spreading into the country parts with singular regularity, the city appearing the great centre of all the radiating lines of infection.

Many cases have occurred, seeming to bear out the opinion of the disease being contagious; while facts of on opposite kind, familiar to every one,—such as the immunity of the attendants at the various hospitals,—the escape of many of the residuary members of the family when some has been seized, —the freedom of the medical men, &c.,—go very strongly to prove the opposite. My own impression, after studying now over a thousand cases, is, that, if contagious, it is so in a very low degree; and that, like consumption, and perhaps some other diseases, it is chiefly so in the latter stages, when decomposition has set in.

An animal substance in a state of decompo sition it seems, I think, now well established, has a tendency to communicate that condition to other bodies brought into peculiar contact with it. A particle of the matter of glanders, small-pox, &c., are striking and fearful instances in point. That cases of cholera have arisen in some such way, from the tendency to the disease being communicated about the period of death, to other bodies open to the disease, seems, I think, better proved than that no such communication is possible The cases originating in cast-off clothes, bedding, &c.; the many instances I have seen myself of one, two, and three of the same family, one after another being seized with the disease, and, as a matter of safety to the rest of the family, put into the same bed, and go through precisely the same shades and grouping of symptoms, leave little doubt in my mind on the subject.

That cholera is in any way contagious in the sense of the term, or the degree that we speak of it in scarlatina, typhus, &c., appears to me a manifest absurdity; and that, after all, if men would but understand each other better, and observe and argue, not for a little triumph, but for the sake of truth, we should arrive at the real state of matters.

The character of the disease at present in Limerick, as compared to that of 1832, seems, I think, on one or two points different. It appears more contagious, and certainly more deadly: the mortality up to the present moment has been quite frightful. The wretchedly miserable condition of the people, after the last two years of suffering, may in some measure account for this, a large majority of those attacked sinking at once, from want of mere re-active force in the system; and yet, even in persons far removed from this class of life, the same has been observed, as if the disease had an acquired virulence that nothing could check.

In what was considered the dreadful visitation of 1832 in this city, out of 1,365 patients, in six months, 448 died. A far larger number have been already swept away in half as many weeks! The miserably debilitated state of the unhappy victims, —many suffering under dysentery and the effects of fever,—many existing in a state removed scarcely one degree from starvation,—many dragging out a doleful existence in the wards of the workhouse,— would appear quite sufficient to make one shudder, —any one but persons every day accustomed to such scenes. The destroying angel has indeed gone over the abodes of the poor, and no one but a person who has seen the thing and felt for these most miserable of human creatures, can have the most remote conception of it. The visitation of cholera was, indeed, the only matter wanted to fill to overflowing the bitter cup of their bitterest adversities. At such a moment, and amidst such sorrowings, one's thoughts are not his own, statistical arrangements telling that all those seized are swept away, and treatment, telling the same dismal tale, becomes useless. I have myself prescribed for some five or six hundred cases, and visited as many more. I have looked through our hospitals till the thing has become positively frightful. I have met nothing but death. The recoveries have been few, indeed, compared to the numbers seized. What the proportions will ultimately be I shall be able, perhaps, after a little to ascertain.

ON THE TREATMENT OF TOOTHACHE, WITH PRACTICAL REMARKS ON THE REMEDIES TO BE EMPLOYED FOR ITS CURE.

By C. STOKES, M.R.C.S.

Among the various painful affections to which mankind is liable, not one, probably, is more severe in its character, or more universal, than toothache.

It must be admitted that the treatment of toothache, more perhaps than any other human malady, has been hitherto determined by an ignorant empiricism, rather than by cautious scientific observation; and, therefore, we may cease to be surprised that the variety of professed cures for toothache should have fallen into such general and merited disrepute.

The remarks in this paper being essentially practical, it will not be expected, that I should discuss the numerous theories which have been from time to time advanced, to account for the appearance of caries in the human teeth, each opposed to the other, and leading to no practical inference, beyond, indeed, proving the obscurity in which the whole question is still involved, and the necessity for further, and careful investigation.

Hunter, (a) speaking of caries in the human teeth, says, "this disease has not hitherto been accounted for;" again, after alluding to the improbability of caries beginning "on the inside of the cavity," this eminent physiologist declares, "that it is a disease arising originally in the tooth itself."

Bell, (b) is of opinion, that "when from cold, or from any other cause a tooth becomes inflamed, the part which suffers the most severely, is unable from its possessing comparatively but a small degree of vital power, to recover from the effects of inflammation, and mortification of that part is the consequence;" thus dental gangrene, or in other words caries, commences. Chemical action has been supposed by French, as well as English writers, to be the chief agent in this destructive affection, and they add, that it is to a loss of vital action

(a) Practical treatise on the Diseases of the Teeth, by John Hunter.

(b) The Anatomy, Physiology, and Diseases of the Teeth, by Thomas Bell, F.R.S.

in the tubes of the dentine, by which they become unable to resist external influences, combined with the disintegration of the dentine by chemical action, that all the phenomena which we remark in caries are to be attributed.

It will be seen, from these various and conflicting opinions, that the cause of caries is at present by no means well established, and that the presumed cause is based more upon conjecture, than on well-ascertained facts. But however uncertain our actual information, as regards the real cause of caries, the effect of its continued action on the human tooth is sufficiently well known. For practical purposes, odontalgia or toothache may be advantageously divided into three well-marked stages, or periods.

The first stage occurs when caries has advanced far enough into the body of the tooth to lead to the exposure of the membrane contained within the cavitas-pulpæ, and is known by an increased sensibility to the action of heat or cold; a violent darting or throbbing pain is felt in the tooth on the contact of any substance with the exposed membrane; sweet or acid matters also produce severe pain when taken into the mouth. Such is genuine toothache.

The second stage, in addition to the above symptoms, more or less modified, is characterized by the discharge of a secretion from the cavitas-pulpæ, having a peculiar odour, somewhat analogous to that which is perceptible during the exfoliation of bone.

The third stage, in which the periosteum investing the fang of the tooth becomes the seat of inflammation, is the result of the long continued action of those morbid conditions of the tooth, which are found to occur in both the first and second stages; and may be considered as the extension of the inflammation from the centre of the organ, to its periphery. This stage is indicated by constant pain, which is especially severe when pressure is applied either vertically or laterally; mastication is therefore almost impracticable from this cause; the affected tooth is also generally felt to be longer than the adjacent teeth, more especially after several hours have been passed in repose. Under all ordinary circumstances, these three periods or stages are sufficiently well-marked, to determine the appropriate treatment; so that by reference to them, the practitioner may be guided to the curative measures.

The question has often been asked—is toothache cureable without the painful alternative of extraction? reasoning from the treatment hitherto relied on for its cure, we could not well answer this question in the affirmative. The vegetable and mineral kingdoms have been equally taxed for remedies. Ice and the actual cautery, powerful mineral acids, vegetable poisons, succedaneums, terro-metallic pastes, and anodyne cements, have successfully aided to swell the list of cures for this painful affection; and if they have generally failed to afford relief, the cause of failure may be attributed to their injudicious application, the essential nature of the morbid change in the tooth being overlooked or misunderstood.

Let us examine the question more clearly. The cavitas-pulpæ being exposed by caries, symptoms supervene indicative of an inflammatory condition of the membrane contained within it, which, if not speedily subdued, passes with more or less rapidity into that condition which I have designated the second stage, in which, in addition to the general symptoms of inflammation of the pulp, we have likewise the peculiar and distinctive sign before alluded to,—viz., the secretion from the cavitas-pulpæ. Now, in this condition of the affected tooth, should we employ any compound whatever, by which the free exit of this secretion shall be permanently impeded, very severe suffering will assuredly follow. Again, when the cause of pain arises from an inflamed state of the periosteum of the fang, which I have mentioned as contributing to form the third stage of toothache, it is equally obvious, that no form of stopping, whether of gold, metallic paste, or anodyne cement, can possibly produce any alleviation of pain, since the cause is an inflammatory condition of the periosteum, thickened also by the deposition of lymph, and constantly being aggravated by the pressure of the tooth into its bony socket. From disregard, therefore, to the essential nature of the organic malady, has the effectual cure of toothache become so generally doubted, or altogether denied.

In a succeeding communication I purpose to submit to the Profession a plan of treatment which has been tested by long experience, and in which the peculiar forms of morbid change in the affected tooth are the indices to the appropriate treatment, as well for the speedy alleviation of pain as for the ultimate safety and preservation of the tooth itself; in a word, to distinguish between the cases in which, through the judicious application of therapeutic agents, relief is attainable, and those in which extraction is the sole but barbarous remedy.

Lower Brook-street.

[To be continued.]

ON SCARLATINA.

By J. W. TRIPE, M.D., M.R.C.S., and L.A.C., London.

(Continued from page 413.)

The three Decembers in which the comparative mortality was in excess had a high temperature in all; the five Decembers that presented a minus, had a minus of temperature in three, and a plus in two. The months in which the actual number of deaths and the mean temperature were in excess, present a mean comparative mortality of 83·7; the months in which the temperature was minus and the mortality minus, of 67·0; and the months in which the temperature was minus and the mortality plus, of 73·7. The average comparative mortality for the five months in which the temperature was in excess is 78, whilst the average for the three months in which it is in a minority is 70.

These data do not afford such good grounds for drawing a definite conclusion, as could be wished; nevertheless, the balance is in favour of the assumption, that a low temperature in December will induce an unusual decrease in the mortality from this malady; whilst a high temperature will retard the reduction that ordinarily occurs in this month as compared with the last.

Table B. c. β. 16. Autumn.
FOR THE METROPOLIS.

	No. of Deaths from Scarlatina, corrected.	No. of Deaths to 100 in preceding Month, corrected.	Mean Temperature.
1838	777	157	45·2
1839	1088	128	45·6
1840	490	66	42·9
1841	209	93	44·0
1842	595	132	44·4
1843	809	131	45·2
1844	948	85	42·4
1845	288	107	46·1
1846	339	150	44·2
1847	759	236	47·4
Mean.	630	128	44°·7

On glancing over the two first columns of this Table we cannot but be struck with the great amount of variation exhibited by both; and on comparing them with the third column, we become convinced, that whatever relation exists between them, yet that the variations in the third column cannot explain the variations in the others.

The absolute average mortality, corrected for the autumn, being fixed at 630, we find that it was plus in five, and minus in five quarters. The mean temperature for these ten autumns being ascertained to be 44°·7, we perceive that it was above it in five, and below it in five. The mean comparative mortality being 128, four were above, four below, and one equal to this number. In the five autumns that showed an excess in the number of deaths, the temperature was plus in four, and minus in one, and in the five that showed a minus, the temperature was minus in four, and plus in one.

The temperature was plus in three, and minus (— 0°·3, and — 0°·5) in two of the autumns, in which the comparative mortality was in excess, was plus also in one in which it was mean, and was minus in three, and plus in one of the autumns in which the comparative mortality was below the average.

The years in which the temperature was below the average present a mean comparative mortality of 105, whilst those in which it was plus had a mean comparative mortality of 151.

The mean comparative mortality for these ten autumns agrees pretty closely with that in England and Wales for the autumns of the five years 1838-42; in the former, being, as just stated, 128, and for the latter 136.

There, therefore, cannot be much doubt but that a warm autumn induces an increased mortality from scarlatina, whilst a cold autumn causes a comparative decrease in the number of deaths.

Although it is evident that a certain definite relation exists between the mean temperature of the air and the increase and decrease in the number of deaths from scarlatina, yet it is also equally as evident, that other causes must be in operation in all the months of the year which influence the mortality almost as much as the temperature; and, as no definite conclusions have been drawn as to the particular degrees of the thermometer, above or below which the mortality increases or decreases, an examination of the following Table will be useful, as it presents at one view all the results that have hitherto been worked out:—

A Table showing the Corrected Actual and Comparative Mortalities from Scarlatina, and the Mean Temperature in each of the Twelve Months, for the Years 1840-8.—4 Weeks in each Month.

	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Total No. of Deaths from Scarlatina, corrected	861	964	1223	1411	1557	1905	2222	1967	1527	1122	1050	939
Mean of the above	95·6	107·1	136·2	156·7	173·0	211·6	246·9	218·4	169·6	124·6	116·6	106·5
Comparative Mortality—mean	89	112	127	115	110	122	116	89	76	79	94	91
" mean for the warm months	91	112	127	122	116	111	140	88	80	86	114	94
" mean for the cold months	88	111	127	109	106	136	96	88	70	72	83	85
Mean Temperature	° 47·2	° 54·8	° 60·2	° 61·5	° 61·3	° 56·9	° 49·6	° 44·8	° 40·0	° 37·4	° 38·3	° 42·8

The month of April has been placed first, instead of January, because it presents the zero of mortality.

The first and the second lines of the above Table, showing the total and mean number of deaths from scarlatina, during the years 1840 to 1848, prove that the disease is less fatal in April, and more fatal in October than in any other months in the year, and that the number of deaths increase from May to October inclusive, and decrease from November to April, both included; and they also show that neither the increase or decrease occur in a geometrical, or in an arith-

metical ratio. They also show that the mortality in October is nearly treble that in April. The decided diminution that happens in November, and especially in December, shows that some cause, which has the power of retarding the progress or of reducing the fatality of the disease, must be in active operation during these months; and as it has been shown, and as the Table also shows, that a temperature below the mean in December, January, February, and March, is attended with a very decided and almost invariable reduction in the mortality from the malady, we are certainly justified in attributing part of this diminution to the reduction in the temperature.

The Table of the comparative mortality is exceedingly interesting, as it shows not only the mean increment in the mortality in each month, as compared with that of the preceding—that of the preceding, as before stated, being always taken at 100—but also the mean proportionate increase for each month accordingly, as they were above or below the mean temperature. Thus, to take February as an illustration, we perceive that the mean comparative mortality for this month during those years was 94; for those months which presented a temperature above the average—38°·3—it was114; whilst for those months in which the temperature was below the average, it was only 83.

Further, the difference that obtains in March, in which the mean mortality for a cold month is 85 to 94 in a warm month; and the less difference that exists in May where 114 deaths occur in a cold month to 115 in a warm, and the occurrence of the same number in a hot or cold month of June, all point to the same result. It is, however, worthy of note, that although the actual mortality still continues to increase, yet it does not do so as rapidly in the months of July and August when the temperature is at its highest, as it does in June and in September when the temperature is lower. In June 127 deaths happening to 100 in May, in July only 115 to 100 in June, in August only 110 to 100 in July, whilst in September 122 occurred to 100 in August.

To complicate the matter still more, and, in fact, almost to show that little or no relation obtains between the temperature and the actual or the comparative mortality for these months are the facts that 122 deaths happened in those months of July which were above the mean temperature, to 109 in the months which were below it; in the warm months of August 116 deaths happened to 106 in the cold months; whilst in September 111 deaths only occurred in the warm to 136 in the cold months. All these numbers are deduced from the comparative number of deaths, and not from the actual numbers, so that they show the effect of temperature, if any, on the mortality from the disease, without reference to the sporadic or epidemic form of the malady.

We thus see that in September the greatest increase in the number of deaths from scarlatina above those of the previous month, happened in those months which were below 56°·9, whilst in July and August the greatest increase took place in the months that presented a temperature above 61°·5 and 61°·3 respectively.

As before stated, the greatest number of deaths from this disease happen in October; but although the actual mortality was higher than that of September, yet the increase was less, as in the former it was 116 to 100 in the latter; whilst it was 122 in September to 100 in August. The greatest increment in the deaths occurred in the hot months of October, when the mean temperature was above 49°·6; whilst, as before stated, the greatest number happened in the cold months of September, when the temperature was below 56°·9. Taken by themselves, these facts would show that a temperature between 49°·6, and 56°·9, was more favourable to the spreading of scarlatina than a temperature above or below these points; but the data for the months of July and August are opposed to this conclusion, and we can, therefore, only conclude that these were little other than coincidences.

In the month of November, we find a great reduction in the actual amount of deaths, and also a great reduction in the comparative mortality and in the temperature, the mean of the latter being 44°·6. The comparative mortality in the warm and in the cold months is nearly equal, but rather in excess in the cold months. In December the mortality is not only lessened considerably, but the number of deaths in the cold months are much less than in the warm; and the same obtains in regard to January, February, and March, the temperature for these months being 40°·0, 37°·4, 38°·3, and 42°·8 respectively.

From these data, we may conclude, that a temperature below 44°·6 is adverse to the progress of scarlatina, whilst a temperature above that point increases the mortality. It is also, perhaps, as well to bear in mind, that the greatest mortality for the year happened when the thermometer ranged between 49°·6 and 56°·9, and that the greatest decrease in the comparative mortality happened when the thermometer was below 40°·0. These temperatures apply, of course, to the mean for the months in which they occurred. We must, however, bear in mind, that the increment in the mortality did not, under any circumstances, occur in the same ratio with the increase in the temperature; nor did a diminution of the temperature take place in the same proportion as the decrease in the number of deaths; the closest correspondence happening in the months of December, January, and February, when the mean temperature was 40°·0 or below.

[To be continued.]

HOSPITAL REPORTS.

ST. BARTHOLOMEW'S HOSPITAL.

CASE UNDER THE CARE OF E. A. LLOYD, ESQ.

Reported by T. M. GIRDLESTONE, Esq., M.R.C.S. Surgeon to the Blenheim-street Dispensary. Formerly House-Surgeon to St. Bartholomew's Hospital.

CONCUSSION.

William Turpin, a temperate man, aged 27, on the evening of November 22, 1847, fell from the loop-hole of a warehouse on to the pavement, a distance of twelve feet. He remained insensible for a quarter of an hour, when he commenced vomiting, talking incoherently, and restlessly moving his hands and arms. He was admitted into St. Bartholomew's Hospital, under Mr. Lloyd, about ten minutes after the accident. He had two contused wounds on the top of his scalp, which bled freely; the bone was bare at both of them. His pulse was slow; pupils dilated and inactive; he could not answer questions.

He was ordered to have his head shaved, and cold lotion constantly applied.

On the third day from the accident, he still remained in a half-stupid, sleepy state. His bowels had been freely opened by a purgative. He could walk to the water-closet with help. He could not answer questions, and only said that his head ached. His pulse had risen to 80, and there was slight heat of skin.

Hirudines, xii. temporibus; hydr. c. cretâ gr. iij. sextâ quâque horâ.

Dec. 6th.—The mercury has been continued, and his mouth has been affected by it for the last six days. The leeches have been repeated once, on account of increased action of the heart. A blister has been applied between the shoulders.

There is now some slight improvement in his capability of understanding what is said to him; he will now for the first time put out his tongue when he is told; but only answers "yes" or "no" to questions. His bowels are open daily; tongue clean; skin natural; pulse 80. There is healthy suppuration from the wounds on the scalp.

The back of the head and neck to be blistered; the surface dressed with mild mercurial ointment. Omit the hydr. c. cretâ.

Dec. 18th.—The blister has been repeated several times, and the mercurial ointment was applied for four or five days. He is now greatly improved, can sit up in his bed, and talk rationally, though he cannot always think of the words he wishes to make use of. Has pain in his head occasionally.

Blister allowed to heal.

Jan. 1, 1848.—He left the Hospital, having nearly recovered his mental powers.

I saw him on January 15, when he told me he felt able to return to his occupation, which is that of a warehouseman. He said he could read and write nearly as well as he could before the accident, but that his memory was not so good as it used to be.

ROYAL INFIRMARY, EDINBURGH.

CASE I.

PNEUMONIA AND GANGRENE OF THE LUNG.

[The following Cases were all under the Care of Dr. Paterson, Senior Physician to the Infirmary.]

Anne Newton, aged 23, of irregular habits, admitted Nov. 11, 1848. With the exception of a severe attack of typhus fever, about two years ago, has always enjoyed good health. Has never previously suffered from cough or any chest affection. About a fortnight ago, after exposure to cold, became affected with severe pain in lower left side; this yielded, after a few days, to medical treatment, but, about a week afterwards it returned, was more severe than at first, and accompanied by hard and almost constant cough, and, shortly afterwards, by expectoration, at first free from fetor, but, latterly, becoming extremely offensive.

On Admission.—Cough continues. Pain acute in lower left side, increased on cough or full inspiration. Expectoration abundant, tenacious, in some places rusty, in others purely bloody mucous; occasionally, some purulent matter is expectorated. Breath and expectoration extremely fetid.

Percussion of right front and back normal; respiration throughout healthy, but somewhat exaggerated; under the clavicle, almost puerile. Under left clavicle the percussion is good, and it continues unimpaired till below the border of mamma, where it becomes somewhat tympanitic in character, with a decided increase of resistance. In left lateral region there is impaired percussion. Over left back, from the angle of scapula downwards, there is a marked dulness.

On Auscultation in upper part of left front there is abundant subcrepitant and fine mucous *râle*. Below the mamma the crepitation becomes finer in character, almost amounting to fine crepitation.

In lateral region, the crepitation is mixed with friction sound. Below the angle of scapula, abundant fine crepitation is audible.

Pulse ninety, small; tongue whitish; bowels open; and tendency to looseness for a few days past.

Venæsectio ad uncias sex.
℞ Calomelanos gr. ii.
Opii gr. ss.
Cons. Rosæ Gal. q. s. M. Fiat pilula.
Sumat unam talem tertia quâque hora.

Blood formed a firm cosgulum, slightly buffed.

November 14th.—Stitch in side not returned since bloodletting. Fetor of expectoration not so offensive. Physical signs not altered.

16th.—Applicentur hirudines xii. infra claviculam sinistram.

17th.—Mouth slightly affected. Fetor of breath and expectoration still well marked. A little vomiting and purging this afternoon. Crepitation behind more abundant and extends higher up; audible over the body of scapula. Near the spine there is slight bronchial respiration, and there the voice has something of the same character. Expectoration abundant; plentiful; more frothy and less rusty. Pulse ninety-six, very small and feeble. To have four ounces of wine.

℞ Aqua Chlorinei ʒvi.
Aqua Fontanæ, ʒvi.
Sumat ʒj. quater in die.

18th.—Omit calomel et opium.

25th.—Has now no pain. Nights undisturbed. Expectoration diminished in amount, frothy and colourless; not altogether free from fetor. Respiration over both fronts healthy, except below left mamma, where a sub-crepitant *râle* is audible, still some dullness over left lower back, and coarse crepitation is still heard over the dull space.

Jan. 1st.—Patient has continued to improve; has, on one or two occasions, had a return of pain

in side, but this has been relieved by leeching. Is at present taking two grains of sulphate of quina thrice daily.

26th.—Feels well, is almost free from cough and expectoration, and entirely free of pain. Respiration everywhere natural, except at one point below the left mamma, where, over a space about the size of a crown, an occasional sub-crepitant *râle* is still audible.

Is to-day dismissed cured.

CASE II.

ACUTE RHEUMATISM: PERICARDITIS.

John Hudson, æt. 30, groom, admitted December 1st, 1848. Generally enjoys good health, but of very intemperate habits. Five years ago had an attack of acute rheumatism, which confined him to bed for six weeks. Neither at that time nor since has he suffered from any uneasiness or palpitation of the heart. Regained his health and strength completely after the attack of rheumatism. About three weeks ago he first began to have flying pains in joints and limbs. Eight days ago they became more severe and permanent, occurring chiefly in shoulders and wrists, accompanied by some febrile excitement and by great thirst. A few nights ago he perspired a good deal; in doing so he thinks he caught fresh cold. Next day the severity of the articular pains had increased, and, in addition, he felt a sense of weight, with uneasiness, not amounting to pain, in the left side of chest. Some degree of cough was also excited.

On admission, pains are worst in knees and ankles, but are still felt in large joints of arms, smaller joints are free from pain. Sense of "weight" in left side continues, but he has no acute thoracic pain; urine scanty and high coloured; tongue coated with yellow fur; bowels open; pulse 90, fair strength; cardiac dullness is extended. From upper sternum to sixth left rib percussion is impaired. Laterally, below the nipple, the dullness is 4½ inches in diameter. Apex of heart beats exactly at nipple; a loud and well-marked friction sound accompanies both the systole and diastole of the heart; most distinctly heard at apex, but also distinct at base.

Fiat Venæsectio ad ℥xiv.

Sumat formâ pilulæ calomelanos gr. ii. cum
Opii gr. j. secunda quâque hora.

4th.—Still complains of pain in wrists and knees, these are less severe; pulse 84, soft; right ankle alone swollen; tongue clean; heart's action moderate; still a well-marked double-friction sound general over heart.

℞—Bicarbonatis Potassæ ʒii.
Aqua Acetatis Ammoniæ ℥ii.
Vini Colchici ʒij.
Aquæ Cassiæ ℥iiiss.

Sumat unciam ter die.

Continuentur pilulæ.

6th.—Mouth slightly affected; pulse 84; pains only felt in shoulders and wrists; friction sound continues distinct.

Cont. pilula mane et vespere
Sumat etiam mane haustum catharticum.

7th.—Mouth decidedly sore; pulse 96; friction still distinct.

Omit pilulæ.

9th.—Applicetur vesicatorium regioni cordis.

11th.—Pulse soft; skin cool; pains less; mouth still sore. Friction heard over a more limited space, principally towards sternum; softer in character.

18th.—The sound of pericardial friction has now entirely disappeared. At the apex a soft bruit accompanies the first sound of heart. (This bruit was, in all probability, of old standing, having been disguised by the pericardial friction.)

A few days afterwards was dismissed *well*.

CASE III.

CHOREA.—MUSICAL BRUIT, WITH FIRST SOUND OF HEART AT APEX. VENOUS MURMUR IN NECK.

John Paton, aged nine, admitted November 28, 1848. Father a very healthy man. Mother has three times aborted; she appears delicate and anæmic; does not enjoy good health.

This boy escaped all infantile diseases till last spring, when he suffered from a slight attack of scarlatina; it was followed by troublesome enlargement of the cervical glands. He had completely regained his health, when, about three weeks ago, he received a severe fright, from being witness to an injury sustained by a woman falling down a flight of steps. Since that time he has been very irritable, afraid of being left alone, and, in other respects, manifested much uneasiness and anxiety of mind. Five days ago his friends observed, for the first time, that he had lost voluntary power over the left arm; and that, when grasping objects with the right hand, he was unable, though desirous, to assist it with the left. Left leg then became affected, and afterwards right arm and leg. Speech also became less articulate. He is a well developed and intelligent boy; has never seen any one affected with chorea. A younger brother is the only member of the family now alive; he enjoys good health.

The patient, when a child, was believed to suffer from worms. At present, bowels are regular; tongue clean; pulse eighty-six, good strength. Occasional abdominal pain, and grinding of the teeth when asleep; has a little cough, with expectoration of mucus. A few sibilant râles heard over both fronts, especially the left. Cardiac dulness not increased; impulse of heart natural; sounds at base normal. At the apex, a loud and prolonged murmur of a musical character accompanies the first sound. A humming-top sound is heard over veins on right side of neck.

Ordered a purgative, with equal parts of castor oil and turpentine.

30th.—℞ Olei crotonis gij.
Micæ panis q.s.
Fiat pilula.

Sumat unam talem omnibus noctibus alternis.

Dec. 13th.—Involuntary movements less marked; murmur over heart continues.

Sumat solutionis arsenicalis (Fowler.) gr. ij. ter die.

Jan. 10th.—Has been gaining in flesh and strength; choreal jactitations almost gone; abnormal sound of heart distinct; arsenic has more than once been suspended on producing its physiological effects, and again renewed.

18th.—Chorea entirely removed.

Venous murmur in neck, and abnormal sound of heart less distinct.

Is to-day dismissed.

PROGRESS OF MEDICAL SCIENCE.

GERMANY.

ABORTION ARTIFICIALLY PRODUCED BY THE WARM UTERINE DOUCHE.

Dr. Grenser, of Dresden, recommends, in the November number of Schmidt's Jahrbuche, page 232, the warm douche applied directly to the uterus as a safe and efficient means of bringing on premature labour, when indicated by the state of the parts, or the general condition of the mother. In illustration, he gives the case of a female, thirty-three years of age, in whom, on account of a narrow pelvis, abortion had on a previous occasion been brought on by means of plugging the vagina. In the present instance the douche was resorted to in the eighth month, and was applied seven times in three days, and by means of a small canula. The water, he tells us, is to be at a temperature of 34° R., equal to 104° F., and the force with which it is to be projected equal to a fall of eight feet. It is important that the canula be introduced well into the vagina, and that the removal of any obstructions be carefully attended to. In the case related, the parts became thoroughly relaxed, and parturition ran the normal course; the lochia was fairly established, and the mother did well. The child required turning, but was born alive and lived nearly twenty-four hours.

ON THE INTERNAL USE OF THE URATE OF AMMONIA.

In the same Journal, page 111, Dr. Baur informs us, that he has used, for the last three years, the urate of ammonia as an internal remedy, and he speaks highly of its value in certain affections. He believes it to act especially on the respiratory and alimentary mucous membranes on the one hand, and on the cutaneous coverings of the other; in the former it is useful in catarrhal affections, and in the latter in hyperæmia, with serous and purulent exudation. The effect of the remedy is more visible and marked, the more nervous symptoms predominate. Thus, it is found valuable in influenza, in infantile remittent fever, and in pertussis, after the subsidence of bronchitic symptoms. It is recommended for endemic cholera, in which enemas, containing three or four grains, are said to operate, not by checking the abnormal, but by restoring the normal secretions. The dose in which Dr. Baur gives the urate of ammonia internally is from half a grain during the day, gradually increased; and, owing to the rapidity with which it appears to exert its influence, it is said to offer great facilities for experimenting. The dose appears small, but larger doses are stated to produce immediate excitement.

We much fear that Dr. Baur has permitted his imagination to bias his judgment; the more so, as the class of cases in which he considers the urate of ammonia of special value, are the very affections in which any or every remedy, according to the bias of the practitioner, may be said to effect a cure. We must require much stronger evidence in favour of the remedy, before we can even be prevailed upon to prescribe half a grain per diem of urate of ammonia.

BELGIUM.

DEVIATIONS OF THE MAGNET DURING EPIDEMIC CHOLERA.

A correspondent at St. Petersburg writes as follows to the Editor of the *Abeille Medicale*:—"During the height of the cholera, the magnetic power was completely neutralized, while it gradually recovered its intensity as the disease subsided. Thus, a magnet of eighty pounds power, during the period of cholera, could only suspend a weight of thirteen pounds, while the operation of the electro-magnetic telegraph, when the epidemic was at its height, was completely suspended."

At a late *séance* of the Academy of Science of Paris, the same fact was stated by M. Arago, who read a letter from St. Petersburg, in which it was stated that, during the time the cholera prevailed in its greatest intensity, the magnetic needle had been in a state of constant vacillation—except during a violent storm, when the anomaly had entirely disappeared. In the *Presse Medicale*, Dr. Hannon relates, that he had determined to observe the force of his magnets during the invasion in Belgium by cholera; and as no similar observations had been made in any of the localities attacked by the disease in 1832, it became a matter of great interest to determine whether the disease of 1848 presented, in this respect, any peculiarity worthy of notice, particularly as it is known that there is some analogy of direction between the course of the cholera and the great magnetic lines of the globe.

The cholera, however, appeared in Holland without any disturbance of the power of Dr. Hannon's needles; it visited Mons, Bruges, Liège, and Antwerp, in Belgium, but still the magnetic intensity was not affected. Finally, it arrived at the very gates of Brussels, and the same weight was, nevertheless, supported by the magnets. How can we explain this? There is no decrease in magnetic force. Must we, then, suppose that Monsieur Demidoff had palmed an error on the Academy of Sciences? This latter proposition is inadmissible; and we suspect that the phenomena observed at St. Petersburg, were occasioned by certain electric conditions very common in northern regions. The aurora borealis is never noticed without aberrations of the magnetic apparatus being observed. Might it not, then, have been, that certain meteorological states of the atmosphere had temporarily weakened the magnets at St. Petersburg, without our being under the necessity of referring this incident to the effects of cholera? The subject is one of great moment, and highly worthy of the attention of the Profession; for, should the

magnetic force really suffer any diminution from the same cause that excites the cholera, the following important remark suggests itself:—The flow of the nervous current is diminished towards the surface of the body in cholera, and the circulation ceases in the capillary vessels, from the paralysed state of the ganglionic nerves; hence cold results, as there is no chymical action where there is no circulation of blood. The nervous and magnetic forces would therefore appear to display a considerable analogy, as they suffer the same modification from the same cause.

We shall carefully watch Dr. Hannon's further remarks on this subject; and we beg our readers in the cholera districts to give the subject their earnest attention. A common horse-shoe magnet is sufficient to test the truth of Monsieur Demidoff's observation.

POISONOUS PROPERTIES OF THE TUBERCLE OF THE DAHLIA.

Some persons having recommended the root of the dahlia as an article of food, Monsieur Henri Delpierre determined to try its effects upon himself. He nearly fell a victim to his temerity, and describes the poisoning as resembling that of acrid narcotics.

IRELAND.

[From our Dublin Correspondent.]

MR. ADAMS ON CONGENITAL LUXATION OF THE UPPER EXTREMITY OF THE RADIUS.

In the Article on "Abnormal Condition of the Elbow-joint," contained in Todd's Cyclopædia, Mr. Adams advocated the existence of such a lesion as that named above. The possibility of this affection was first promulgated by Dupuytren, who mentions, in his Lectures, a case in which he found, on dissection, both radii dislocated in a manner so similar, that he could not believe them to be the result of injury. Cruvelhier, in his valuable work on Pathological Anatomy, has given drawings of an abnormal condition similar to that described by Dupuytren; but he seems to have disagreed entirely with the celebrated Surgeon of the Hôtel-Dieu, advancing it as his opinion, that it would be much more natural to suppose that the cases described by Dupuytren were not congenital, but rather very old luxations, a long time left unreduced. The latter opinion seems to have been the most ordinary one amongst pathologists, both before and after the publication of Cruvelhier's work. Thus, Sandifort, in his beautiful Museum Anatomicum, has given drawings of similar cases, and describes them as having the bones of the forearm anchylosed, the form of the capitulum of the humerus lost, the head of the radius luxated completely backwards, the ulna alone remaining in articulation with the humerus; and he attributes these conditions to the effect of injury. In the Museums of the Royal College of Surgeons in Ireland, and of Guy's Hospital in London, Mr. Adams has found specimens exactly according with the description of Dupuytren and the delineations of Sandifort and Cruvelhier, labelled as luxations of radius, long unreduced. He was persuaded, however, even at the time of writing the Article we have referred to, that all the examples quoted were really instances of congenital malformation. His reasons for coming to this conclusion were, that even admitting, for argument's sake, that, from long disease, the form of the capitulum might be altogether lost, when the radius was no longer in contact with it, and that the acquired breadth of the sigmoid cavity of the ulna observed in all the cases was the result of a natural effort to compensate for the loss of strength the joint suffered from the dislocation of the radius. Still, it could not be considered likely that both elbow-joints should be similarly affected by accident or disease, as they were in Dupuytren's cases. Again, how is it possible, unless the abnormal condition be supposed congenital, that the alteration and great elongation of the neck of the radius, existing in every instance, could have been produced? We know of no process which could take place in the head and neck of the radius after it had been dislocated which could satisfactorily account for the elongation of the radius which has been remarked in these cases. For these reasons, as early as the year 1836, Mr. Adams was led to adopt the opinion first broached by Dupuytren.

Since that period, Mr. Adams has met with cases which, in his mind, has set the question at rest, and convinced him that the specimens to be found in museums, and described as luxations of the radius from accident, a long time unreduced, are truly examples of congenital malformation. At the meeting of the Dublin Pathological Society, held on the 10th of March, he exhibited casts of individuals now living, who labour under this deformity, and communicated the particulars contained in the remainder of this article. We shall give his own words:—"Dr. Robert Smith," said Mr. Adams, "has lately shown me two casts he possesses of the right and left forearms of an adult, who had congenital dislocation of the upper extremity of the radius backwards on both sides. The motions, the forearms were susceptible of in this case, and the general signs of the dislocation, corresponded much with those described as belonging to the ordinary accidental luxation backwards. The forearms could be neither fully flexed nor completely extended, and seemed habitually to remain in a middle state between pronation and supination; and, while the latter was very limited, the movement of pronation was complete and perfect; so that the man enjoyed good use of his hands.

"When the forearm was semiflexed, the head of the radius could be seen and felt to form a conspicuous convexity immediately beneath the outer condyle of the humerus, and to be much approximated to the olecranon process. When the thumb was placed on the rounded head of the radius, and pronation was increased, the dislocated bone could be distinctly felt to roll. In both forearms the head of the radius had ascended preternaturally high, towards the highest point of the olecranon process. Both forearms were nearly in a similar condition, and, as to their muscular structure, fairly developed; but the features of the congenital lesion were better marked in the right elbow than in the left.

"I shall now," continued Mr. Adams, "beg leave to lay before the Society another case of congenital luxation of the head of the radius backwards in both forearms of the same individual. The subject of it is a lad, aged 16, at present an inmate in the North Union Workhouse; and I owe to Dr. Monaghan the opportunity I have had of seeing it, and of being enabled to lay before the Society casts of the affected joints. The lad is very intelligent, and informs me, that he was told by his parents that he was born with the deformity that may now be observed to exist in both of his elbows and forearms. When we look at the boy as he stands before us, his arms hanging by his sides, both his forearms are observed to be so much pronated, that the back of the hands are presented towards us, instead of the palms, or radial edges. If we take one of the hands, and endeavour to rotate it outwards, we find this motion of supination to be impracticable, while we can rotate it inwards to an extent that would be impossible in a normal arm.

"When the front of the bend of the elbow is examined, this region appears quite natural; but about the middle of the forearm there is an appearance of torsion, caused by the crossing of the bones in this situation. The upper head of the radius may be felt and seen to be dislocated behind the outer condyle of the humerus, and to be placed nearly midway between this and the olecranon process. This becomes very evident if we flex the forearm to a right angle, and then place the thumb on the head of the displaced radius, and attempt to increase the pronation, we find the radius to move. We can now ascertain the relative position of the radius and olecranon; and by measurement it will be seen that the head of the radius reaches to within a quarter of an inch of the level of the summit of the olecranon. So that in this case, as in almost all the others recorded, the radius has ascended above its natural level.

"This lad can fully flex and completely extend the forearm on the arm; he can perform all the motions of the forearm except supination, which is to him altogether impossible. When the upper extremity is fully extended, the humerus being fixed, if we endeavour to move the forearm from side to side, we find we can communicate a lateral movement of abduction and adduction of the forearm at the elbow joint,—a movement this articulation does not normally enjoy."

Mr. Adams proceeded to say, that, although the subject of this case was in the poor-house, he did not see anything to prevent him earning his livelihood. The only motion he cannot perform is that of supination, which is one easily dispensed with. The most remarkable feature in the case is the mutual crossing or decussation on each other of the radius and ulna, so that the forearm is always strongly pronated. The head of the radius in the left arm moves so very little when the attempt is made to rotate it, that it seems very probable, that, if anchylosis has not been as yet perfected, this process has already commenced, and will be ere long completed, as we find it was in the two casts delineated by Sandifort.

At the time that Mr. Adams wrote the article on this subject in "Todd's Cyclopædia," he had not seen, nor could he find any notice of in Author's, living examples of congenital luxation of the upper extremity of the radius. The two cases now adduced appear to him, therefore, of peculiar interest. They show the symptoms of an abnormal condition of the elbow-joint, the anatomical characters of which had been well made out by anatomists, although they were not aware of the true nature of the cases they were describing and delineating.

"If," said Mr. Adams, "we examine the engravings of Sandifort's two cases, and observe how the radius and ulna cross each other; and can carry our imagination so far as to suppose those bones again covered by their soft parts, I think we would have a repetition of the appearances presented in the case of the pauper boy, whose symptoms I have described. Or, on the other hand, if we could see naked, the bones in Casserly's arms, I feel persuaded that they would be very similar to the skeletons delineated in the Museum Anatomicum. Sandifort speaks of his cases, as of two individuals who had met with dislocation of the radius backwards, which had never been reduced; but, it is plain, that he was not in possession of the history; and, as one is a delineation of the right arm, and the other of the left, it is not, perhaps, carrying conjecture too far to suppose that both his cases were congenital; that both dislocations of the radii had occurred in the same individual. Finally, if it be allowed to me, that all the eleven cases which I have collected and described were of congenital origin, we may say, that in the greater number the abnormal condition was double; that, generally, the radius was preternaturally elongated upwards; that, in none, could the motion of supination be performed; that they presented the ordinary signs of accidental luxation backwards of the head of the radius. In the case of the pauper lad, however, the forearm could be more fully flexed and extended than it can ordinarily be in the unusual accident of luxation backwards of the head of the radius.

JENNY LIND having declined to accept a testimonial which the inhabitants of Worcester proposed to present to her, in token of the admiration which her noble and disinterested generosity had excited in giving a concert for the benefit of the Worcester Infirmary, it has been determined the amount of the subscription shall be given, as a mark of gratitude to her, to the Worcester Dispensary and Ophthalmic Institution.

KING RICHARD COME AGAIN.—The *Leicester Chronicle* says, on Wednesday night the wife of Mr. John Kelly, the well-known sweep, was delivered of a daughter which had two full-grown teeth on the front of the lower jaw. Mrs. Kelly has had seven children, and five of them have been born under precisely similar circumstances.

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THE MEDICAL TIMES.

SATURDAY, APRIL 7, 1849.

NECESSARY for the public good, ardently desired by the Profession, with Societies innumerable formed expressly to aid its progress, and a Government willing to assist in its advancement, Medical Reform, like Abbé Sieyes' Constitutions, "won't march."

The distinction between the benefit to accrue to the public, and that to be rendered to the Profession, by any reform in the Medical Institutions of the country, has not been kept sufficiently in view; and, as a consequence, there has been a want of clearness in defining the object to be attained by legislation on the subject, and impediments without number to the settlement of the question.

Non-professionals and Secretaries of State have turned, in dismay, from Physicians, Surgeons, and Apothecaries,—English, Scotch, and Irish; General Practitioners in Medicine, Surgery and Midwifery; Graduates M.B. and M.D. of London, Oxford, Cambridge, Durham, Edinburgh, Glasgow, Aberdeen, St. Andrews, and Dublin; all eager to retain their present privileges unshorn, and the majority having claims for fresh privileges to urge. Confused by their various and conflicting statements, and anxious to gratify the wish of all, Ministers have lost sight of the wants of the public—wants to which all considerations for existing corporate rights, class dignity, and collegiate wealth must bend; and they have regarded Medical Reform as a question about which the Doctors had to agree before the Legislature ought to interfere.

WAS THE CONSENT OF OLD SARUM ASKED BEFORE IT WAS PLACED IN SCHEDULE A?

We propose briefly to inquire into the grounds for the assertion with which we set out, limiting ourselves at present to the proof, that Medical Reform is *necessary* for the PUBLIC GOOD.

The public require a class of well-educated Practitioners in Medicine, Surgery, and Midwifery, to whom, on all occasions on which they need the aid of a Physician or Surgeon, they may resort, capable of undertaking the most dangerous diseases, and the performance of the most difficult operations.

The peer and the peasant are equally interested in maintaining this high standard of qualification for the General Practitioner. What avails it to the Right Honourable the Earl of Dash, down at his country seat, and suffering from strangulated hernia, that he can have the sergeant-surgeon from London, if *in extremis* when that skilful operator arrives?

Tom Styles, the carter's boy, has incipient hip disease. No Sir Benjamin from London, no second opinion can be paid for, no hospital is within many miles; he MUST be cured or lamed for life by the General Practitioner.

Secondly, the community demand that there be provided for their ordinary or extraordinary use a more highly educated class of Practitioners in both Surgery and Medicine; men who, by a liberal preliminary education, by an extended course of medical study, and by finally devoting their undivided energies to the practice of one branch of the Profession, shall acquire a more intimate knowledge of that particular division of Medicine, than can possibly be obtained by the man who, however talented he may be, gives his attention equally to Medicine, Surgery, Midwifery, and the superintendence of a pharmaceutical establishment.

Lastly, the public have to be guarded, as far as possible, against the imposition of uneducated quacks.

Let us now see whether the existing bodies commissioned for the purpose, by Royal Charters and by Acts of Parliament, do efficiently perform the functions we have above laid down as necessary for the public welfare.

There are two Corporations in England, to the Licentiates and Members of which the safety of the limbs and lives of the great body of the community is entrusted; and, if we prove, as we believe we can, that these two bodies—that is, the Apothecaries' Society and the College of Surgeons—are, by their very constitution, or their own confession, unable or unwilling to ensure the fulfilment, in the best possible manner, of the purposes for which they were created, then, we think, we shall have made out a strong claim, on public grounds, for the early adjustment, by the Legislature, of the question of Medical Reform. The Apothecaries' Society are, we maintain, unable to afford to the public the necessary guarantee that their Licentiates are fitted to practise medicine, because, being limited in the choice of examiners to members of their own body, they are obliged to exclude from the examinership all who make one division of the many branches of physic the object of their especial study. Conscious of this defect in their constitution, the Society have endeavoured, by enforcing on the student an extended, lengthened, and expensive course of study, to compensate for the inefficiency of the examination. To test the acquirements of the future Practitioner of Medicine in botany, chemistry, pharmacy, therapeutics, certain parts of anatomy, physiology, morbid anatomy, and pathology, *viva voce* questioning for one, or, at most, two hours,—if, indeed, it ever lasted so long,—is deemed enough. Fagh! the whole thing is a farce, and a clever student might play them the artful dodge in time alone. (a)

Nor is it any answer to the above arguments to affirm, what we readily grant and would most loudly proclaim, that a large number of General Practitioners are really highly accomplished Physicians, because, all we are maintaining is, the license of the Society is no *guarantee* of the fitness of its possessor to practise medicine.

The license of the Society, even though the examiners were as rigid and the examinations as lengthened as they ought to be, from the names of the Court of Assistants and the Court of Examiners being equally unknown to fame and the public, would fail to inspire that degree of confidence in its holder which it is absolutely necessary the public should repose in the guardians of their health. And, lastly, surgery occupying no place in the necessary legal qualifications of a Medical Man, many engage in the practice of their profession, whose knowledge of one-half of it is *nil;* and, as a consequence, we have known femoral hernia treated by a member of the Hall as simple obstruction of the bowels.

Moreover, the apprenticeship clause in the Act of Parliament, which confers its present privileges on the Society of Apothecaries, is a serious impediment to the general and medical education of the Licentiates of the Society.

So much, then, for the ability of the Apothecaries' Society to execute the trust that, unfortunately, for general good, devolves upon it?

Before the Board of Examiners, appointed by the Council of the Royal College of Surgeons, perhaps nine-tenths of the general Practitioners of England have presented themselves. Custom, almost as binding as law, rendered it necessary for them to submit to this, so called, voluntary examination. In one brief hour the well-paid, we cheerfully own, most able examiners, fathom the Candidate's anatomical

(a) What student of St. Bartholomew's, of some twenty years back, does not remember Bob ———, the pleasantest, but the idlest of fellows, and delighting more in the fun of the Ring, the Pit, and the Rainbow of those days, than in the serious matter of the lecture-room and dissecting tables. How Stanley growled at him; how Abernethy frowned at him, nay, sometimes swore at him; Wormald cut him, and Skey laughed at him! But, nevertheless, Bob got his certificates, and go up to the Hall he must; for he owed much money, which "the Governor" would not pay unless he passed. But how to pass. He possessed some smattering of Medicine, Medicines, and Midwifery,—not his fault, poor fellow, but that he had served an apprenticeship, and to a master who worked him to spare, not his patients, but himself; but of Physiology and Anatomy he knew nothing, and Latin was an unknown tongue to him; and how these were to be got over no one knew. Bob knew, however. In those palmy days, they always examined, at the Hall, in Anatomy and Physiology, on the subject of the Latin matter they gave to translate. Bob knew this, and well got up two pages of the Latin book—he could translate them by heart, and knew the subject in all its bearings. The book was given him, but not opened at *his* place. But what matter? Bob—the coolest fellow living—let it fall with much seeming agitation; then, trembling, picked it up,—turned over several leaves to find *the* place, until he found *his own*. "Is it here, Sir?" asked he, half crying. "Go on," was the reply; and so Bob passed the Hall.

and surgical knowledge, or pretend to the public that they do so; then give him a Diploma, whereon is plainly engraved, that its possessor is qualified to practice the art of surgery. To this they append their signatures and the seal of the College.

So far, then, it would seem, that the public had warrant sufficient for trusting themselves to the hands of the holders of the College Diploma; and so the members imagined the Council of the Royal College of Surgeons intended the public to believe. Foolish members! Foolish public! All that the Council of the College meant by diploma, signatures, and seal, was, that the holder thereof was qualified to undertake the care of trifling surgical affections. If our friend Tom Styles, the carter's boy, meets with an accident, and it becomes expedient to tie the external iliac artery, neither he nor his master are to suppose that the diploma of the College of Surgeons is any proof that its owner *ever* possessed anatomical and surgical knowledge sufficient to enable him to perform the necessary operation. (a) The following celebrated passage from the letter of the Council of the College of Surgeons, dated April 3rd, 1845, and addressed to the National Association of General Practitioners, proves that we have not misrepresented the opinions of that Body: "The examinations of the College have always been, and must ever be, conducted on the principle, that the majority of Surgical Practitioners shall be required to possess at least, but not necessarily more, than that amount of information and skill which is *absolutely required* for the *ordinary exigencies* of surgical ministrations."

The Council of the Royal College of Surgeons thus confess, that *they have failed* to supply to the public, a body of gentlemen capable of acting as *Surgeons* to the great mass of the community; and, if among the General Practitioners of England are men, whose names would do honour to the Council itself, the public owe no gratitude for such an accident to the College in Lincoln's-inn-fields.

We would, then, in conclusion, earnestly entreat Sir George Grey, in framing any Act for the better regulation of the Medical Profession, to be guided by the same great principle which led the then Ministers to press forward with an unflinching hand the questions of Parliamentary and Commercial Reforms,—*the public good, real or supposed, required them.* Compared with this, the money interest of one College, and the supposed dignity of another, are utterly insignificant. If the wealth of the College that covets cash, and the dignity of that which regards any connexion with men who practice pharmacy as undignified, can be increased, AND the public served at the same time, thrice happy, nay, "*terque quaterque beati,*" should we be to add our leaf of praise to the green coronet that would encircle the brow of the proposer of so happy a plan; but, if one or more of the existing Institutions must be remodelled to meet the requirements of the public, or if made of such ancient materials that its rusty hinges will not allow its portals to be thrown open wide enough to admit the throngs who wait to find a home within them, then let it perish; and we would remind its heads, that it is far more dignified to fall when resistance is unavailing, like Cæsar, even at the foot of Pompey's statue, than to die, sword in hand and harness on back, in a fruitless contest for individual or class interests.

(a) That the *better* class of medical students utterly repudiate the possession of the licence of the Society of Apothecaries, and the Diploma of the London College of Surgeons, as a guarantee of their fitness to undertake the duties of their calling, is very evident, from the fact so well known to all frequenters of hospitals, that all of them, with scarce an exception, are heard to say,—"Now, having passed the College and Hall, I must try and learn some practice."

A press of matter compels us for the present to discontinue this subject; and that, although it be of surpassing interest, not only to the Profession, but to the public at large. We shall soon, however, return to it, and then we will tell Sir George Grey, not only why the Profession requires reform, and explain to him the present position of the Licentiates of the Apothecaries Company, the Fellows and Members of the London Colleges of Physicians and Surgeons, and of the English, Scotch, and Irish Graduates; but, also inform him what are the just demands of the Profession, and examine, for his information, into the *real* causes of the repeated failures of the attempts to reform that "*genus irritabile,*" the Medical Profession.

DISTRICT LUNATIC ASYLUMS IN IRELAND AND THE GOVERNMENT SYSTEM OF NON-RESIDENT MEDICAL CONTROL.

In our last Article on this subject we gave a Table showing several important facts connected with the Asylum Department of Ireland. In that Table opposite "Belfast," there is a statement which requires some explanation:—"One Medical Officer resides, and one does not." The Resident Manager (Dr. Stewart) of Belfast is a Medical Graduate of Edinburgh, and, when appointed by Government, the Board of Belfast Asylum, in accordance with the spirit of progress and enlightenment which have long stamped on the town the classic appellation of "The Irish Athens," resolved that Dr. Stewart's services as a Physician should be directed to the benefit of suffering humanity. In this resolution, they were *ably* and *honestly* supported by Dr. Thompson, the eminent Physician, who attends as Visiting Medical Officer, and who, in the most laudable and self-denying manner, sacrificed the mock responsibility of an "impracticable" duty to what he considered, and every just and enlightened man must consider, the good of society and the advancement of the character of his adopted city. Notwithstanding the incessant efforts of a clique, Dr. Stewart, Dr. Thompson, and the enlightened Board of the Belfast Asylum, *in the teeth of Rules* and Parliamentary Reports, have succeeded in placing their Institution in a position too safe for further assaults; and Belfast Lunatic Asylum, *with a Resident Medical Superintendent-in-Chief*, stands out as the best commentary, with its high *curative* character, on the absurdity of Rules unknown, in many of their essentials, within its walls—so much for uniformity in this precious code of Regulations!

Now, we implore our calm and philosophic readers to pause and reflect on the above extraordinary fact. If well considered, it may serve as a key to many of those dark recesses which, taken together, make up what Englishmen have been in the habit of calling "The Irish difficulty."

Here are ten great and costly public charities, built for an especial purpose by the British Parliament, handed over, by that Parliament, to the Irish Executive in Dublin, modelled by that Irish Executive in such a manner as to make them in practice *diametrically opposite* to the mode in which similar institutions are regulated by England on her own soil. One Irish institution, situate in Ulster, under its local authorities (nominated and removable by Government) places itself in unison with the spirit of the age, declares the play of "Hamlet" incomplete without its principal character, adjusts itself in harmonious action with the maxims of Conolly, Jacobi, and civilization; but, in doing so, has to set itself at open war with the Irish Executive, its rules, and its lunacy legislators! *and does so successfully!* Could such a state of things exist in any other country under Heaven, save in Ireland?

Now, had the standard of Belfast Asylum, in cures, been universal (and under vigilant and experienced inspection, with a relief from idiots and harmless incurables, it might probably be* twice that number), 28 per cent. would take place then in every District Asylum in Ireland; and had 28 per cent. taken place generally, what an amount of human suffering and destitution would have been arrested or altogether prevented; and if 28 per cent., *at the very least*, did not take place, vigilant and impartial inquiries should be made, to explain such serious defect. It is useless to attempt to mystify this solemn and important subject, by the old means of ridicule, sarcasm, or abuse. This mode of dealing with the facts of an adversary's argument, has long prevailed and seriously corrupted public taste and temper in Ireland, whenever opinions disagreeable to popular fallacies or personal views are whispered by some bold innovator. That demoralising evil is, however, fast fading away; ridicule is no longer a substitute for reasoning, or abuse a convincing proof of truth. Every question is likely henceforward to be weighed in the balance of public opinion, to stand or fall on its intrinsic merits, and Institutions, costing the country some 40,000*l.* per annum, with a certainty of having that amount nearly trebled, will, therefore, demand a more serious and searching notice than has hitherto been devoted to them; or we will add, demanded by those to whom such inquiries especially pertain.

In the Limerick Lunatic Asylum, 20 deaths from cholera took place, according to the Limerick papers, during last week. This Asylum, by a reference to the Table in our last Article, will be seen to contain 339 patients. It has, however, only *one Visiting Physician*, and who, as a *private* Practitioner, must devote to other avocations a considerable portion of his time; *sixteen hours per month* is the *Parlia-*

* The last Bethlem report gives 58 per cent. cured.

mentary Return of Medical *time* given to Asylum duties for this Institution.

Is there no English Member to ask a question of the Government in reference to such a state of things?

A LIBERAL OFFER.

While we watch, with a steady gaze, the progress of Science, and are ever anxious to give it that due prominence in our pages which the public interest demands, we would by no means neglect the minor, but little less important, interests of the Profession. We therefore give insertion to the following Advertisement, copied from a local Paper:—

TO MEDICAL MEN.

Wanted, as Medical Officer, a duly qualified Practitioner, to attend the poor of a district of the Woburn Union, containing nine adjoining parishes and the Union Workhouse. Population, 6,185. Area, 15,000 acres. He must reside in the district, conform to the rules and regulations of the Poor-law Board, be prepared to take upon himself the duties of the office immediately upon appointment, and produce the required qualifications, &c. Salary, including workhouse, 120*l.* a year, exclusive of fees allowed for fractures, &c. The appointment will take place at noon, at the meeting of the Guardians, to be held on the 13th of April next. Applications (if by letter) to be addressed (under cover) to the Clerk of the Union.—Woburn, March 28th, 1849.

And first we observe, that a "duly-qualified Practitioner" is required. Good: whoever is called to practise an art so potent as the Medical, should be "duly qualified." Upon this point we have only to remark, that the cost of obtaining a qualification, from school to diploma, amounts to a large sum. And next let us notice the duties to be performed. To attend upon a population of 6185, scattered over nine parishes (villages), and in addition, the Union Workhouse; "thrown in," like the bargain by the Vicar of Wakefield's wife. Then, there is the area, occupying 15,000 acres. We come now, in the advertisement, passing by smaller matters, to the salary—120*l.* a year! We beg our readers to attend to this point. We are not over-excellent at figures, but we will try our hand: here we have 6000 individuals, the subjects of Medical attention, for 120*l.* (including the Union Workhouse), and we believe that sum ascends to an average of 4¼d. each. Now we will suppose, that only 1 in 100 (little enough we think in a class of paupers) requires attendance each day, here therefore will be at least 60 daily patients, not forgetting the Workhouse. A very pretty practice!

We know Bedfordshire tolerably well; we know that some parts are ancle-deep in sand, while others are deeper still in clay. We have found it enough to walk over a farm containing 500 acres between breakfast and nooning, but here are 15,000 acres; and it must be remembered that there is no going as a crow would fly. The old paths, often oddly enough out of the way, must be followed. How, then, are the patients to be visited? Even if the nine villages and the Union Workhouse lay within a ring fence, the extent would be more than a man's legs could accomplish! A horse, then, must be kept; nay, we think two. For even a good nag will not do more than twenty miles a day; and the extreme points, in and out, would exceed that distance. And if only one horse, then a groom, day and night—for sickness waits not upon time. Behold, then, the splendid remuneration this gentleman would receive—not quite 7*s.* per day for himself, his horse (only one), and his man. There are many mechanics, we believe, in the very establishment where our Paper is printed, who, for themselves alone, would be far from content with any such sum. As to the fees for fractures, &c., Bedfordshire is not a particularly break-neck part—we would not farm them for five pounds a year. But we have not yet told all our tale, although we think we have settled the Salary question. This gentleman is required to conform to the Rules and Regulations of the Poor-law Board, and subject himself, of course, to the supervision of the Board of Guardians. We pity him. There are amongst rural Boards, we know, men of superior education and refined manners; but the majority is made up of the tenant-farmers. And whilst some of these, of modern mould, are fit and proper men, yet, as a class, we know not of any who are so overbearing, dictatorial, and unruly. These qualities seem incident to their occupation; arising, in some degree, from their isolation, and from the low condition of their labourers; which we regard as a great evil. Thus it will be conceded, we conclude, that the successful candidate for the office we have brought before our readers, considering all these circumstances, will have attained no very enviable position. And yet, we can conceive that it is an object of desire and contention. But we say, most emphatically, that it is neither right, just, nor politic so to treat the Medical Man, and so to place the Poor. Should our remarks give pain to any of our toiling and ill-treated brethren, they have our sincerest sympathy; but we know of no better plan to procure relief, than thus pungently but faithfully to represent the case.

THE OUT-DOOR PAUPERS BILL.

We observe that the Lords' Amendments to this Bill have been assented to by the Lower House. They empower the Poor-law Commissioners to appoint a temporary or permanent Visiter of any Pauper Establishment, not being a Union or Parish Workhouse, who is to inspect and report thereon. It is not, however, unlikely, that the duties may be most efficiently discharged by the present Inspector of the Metropolitan Unions. The General Board of Health are also empowered to appoint a Superintending Inspector of any such establishment, who is to have full power to examine the officers, servants, assistants, or inmates; and the analogous powers and provisions of the Public Health Act, 1848, are to be applicable to such examination. The 7th section of the last-mentioned Act will probably be considered to provide for the salaries of these Inspectors; we see no provision for the remuneration of the Visiters to be appointed by the Poor-law Board; but the probability is, that the liability will rest on the respective parishes from which the paupers are sent. There can be no doubt that these two provisions are very valuable additions to the Bill, and it is to be hoped will prevent the recurrence of any events similar to those which have, of late, so painfully excited the attention of the public.

OCHLESIS.

The Eastern despot promised a reward to the man who should discover a new pleasure; doubtless, the College of Physicians will be equally liberal to the discoverer of a new disease. However, jesting apart, the Medical Profession must, at all events, feel much indebted to Dr. Gregory for the very lucid and able monograph, contained in our last Number, on the disorders generated by the accumulation of the sick in crowded hospitals. We must, however, take the liberty of objecting to the application of a generic term, implying unity of disease, to what appears to be, in fact, a number of different diseases; having, indeed, one common characteristic—that of appearing sometimes, it may be, with peculiar symptoms in apartments crowded with sick persons, but by no means peculiar to such situations. Let this common characteristic be designated by a common *epithet*, "ochletic," if you will; let us speak, to use Dr. Gregory's own expressions, of "ochletic erysipelas," "ochletic diarrhœa," &c. And, if the "pure fever of a low type," &c., mentioned by Dr. Gregory, be a malady solely or principally manifesting itself under the circumstances above indicated, it may be well to give this a definite *name*. But let us not, by the use of a common appellation, confound diseases in themselves essentially distinct.

The above remarks must not be esteemed mere verbal trifling. Our knowledge of things is derived in great measure from the names they bear; if the name be inappropriate, there is danger that the knowledge will be inaccurate. In the case of an old-established nomenclature, this disadvantage may have to be borne with; it should be avoided in establishing a new one.

THE SUPPLY OF SUBJECTS FOR DISSECTION.

We have much pleasure in learning, that the attention of the Council of the College of Surgeons has been turned to this important point since the Article upon the subject which appeared in this Journal a few weeks back. We believe that the Council, in conjunction with some of the London Anatomical Teachers, are at present occupied in devising some means by which the present defective supply may be remedied, and the student in London may be enabled to gain that practical knowledge of anatomy which the present system has rendered almost impossible.

We need scarcely say, that we wish the College every possible success in their attempt, and hope, that next Session every dissecting-room will be as crowded, both with students and subjects, as the importance of this branch of Medical Education so emphatically requires.

THE HUNTERIAN LECTURES,

DELIVERED AT THE ROYAL COLLEGE OF SURGEONS.

BY PROFESSOR OWEN.

It affords us great satisfaction in being able to announce to our readers, that in the new Volume, which will commence on Saturday, April 14, will be published a Course of Twenty-four Lectures, now delivering at the Royal Col-

lege of Surgeons, by the celebrated Professor Owen. The first Lecture will appear with the first Number of the Volume, and the eminent Lecturer has kindly consented to revise the proofs of our reporter's notes. These discourses, as our readers are probably aware, relate to the Generation and Development of the Invertebrated Animals, and will prove of surpassing interest, not only to the members of the Medical Profession, but to the scientific world generally.

We present our readers with an outline of the two Introductory Lectures, which will be published in the first Number of the forthcoming Volume :—

Lecture I. and II.—Introductory.—Innate desire to know the origin and cause of things. Finite minds can only penetrate to secondary causes. Essential conditions of generation. Development of the germ. Power of repair and of propagation *sine concubitu* in the ratio of the retention of germ-cells: this power strongly manifested in larval forms. Examples of virgin-propagation in Polygastria, Polypi, Acalephæ, Entozoa, Mollusca, and Insecta. Explanations of the *Lucina sine concubitu* by Reaumur, Leon Dufour, and Morren. Comparison of the generative phenomena of the larval Aphides with those defined by Steenstrup as examples of "alternate generation." The claims of the "generationswechsel" theory as explanatory of the phenomena examined. Relation of gemmiparous larvæ to their bud-offspring. Steenstrup's explanation of the procreative virgin *Aphides* tested by the known structure of their generative organs. All ova are Uniparous or Multiparous. Gemmation compared with procreation from ova. Essential conditions of both; and of the power of re-producing limbs. Generative phenomena of the plant, the polype, and the aphis compared; and their analogies applied to the exposition of the true "individual" in each. Final purposes of the metamorphosis of the individual, and of the change in its mode of generation. The known phenomena of the development of the germ yield an explanation of the procreation of many individuals from one impregnated ovum.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—March 27, 1849.

Thos. Addison, M.D., President.

A paper was read, entitled,

"*A Case of Cervical Paraplegia, in an Infant,*" by Henry Davies, M.D., Consulting Physician to the British Lying-in Hospital, &c.

Eliza A. B., aged 12½ months, had been weaned three months without trouble, and had cut the two lower central incisors. On the 17th November, she had been particularly lively all the day, had taken her usual exercise in the baby-jumper, and was put into her bed in the evening apparently in good health. When the nurse went to bed, she appeared restless, and crawled into the nurse's bed from her own, which was close beside it. At five o'clock in the morning she sat up in bed and ate a finger-biscuit. At half-past five she uttered a peculiar cry, for which some Dalby's carminative was given, without relief. The child shivered slightly. At six o'clock she was put into a warm bath, and had a dose of castor oil. At eight o'clock she took a basin of bread and milk. At ten o'clock she was violently sick, turned cold, and looked blue about the mouth, nose, and eyes. She was now put into a second warm bath, when she appeared to lose the entire use of her limbs, and her countenance became vacant. From this time she lay prostrate. When seen by the Author, on the evening of the 18th November, she was perfectly conscious, her head was cool, and the temperature of the surface generally natural, the pupils contracting under the influence of light. Pulse moderately frequent, small, and languid. Tongue slightly coated. The upper extremities were devoid of all power of motion or sensation, even from pinching or pricking with a pin; but the lower extremities were drawn up on her feet being tickled. Nothing unnatural was detected in the course of the spinal column or any other part. Two leeches had been applied behind the ears. A blister was put between the shoulders. Aperients and a saline mixture, with ammonia, given. During the five weeks that the child lived, no change took place in the paralytic symptoms, and she remained perfectly conscious to within a few hours of her death. She was much weakened by diarrhœa, which set in on the 9th of December, and from that time she became emaciated, and was restless and feverish, while the lateral incisors came through the gums. During the five weeks she cut six teeth. The body was examined twenty-four hours after death. The dura mater, as well as a portion of the brain, was torn in opening the head, and about ℥iss of sanguineous fluid escaped. The vessels on the surface of the brain were somewhat fuller than natural; the cerebrum itself healthy; the cerebellum and medulla oblongata, as well as the nerves at the base, were particularly firm. The medulla spinalis was equally firm, its investing membrane tough, and vessels tinged. There was no fluid in the ventricles of the brain, and no lesion was discovered either in the brain or in the spinal cord. The viscera of the thorax and abdomen were generally healthy in appearance.

The Author remarks, that paralysis, coming on suddenly, not preceded or accompanied by any apparent disease of the brain, is by no means uncommon in children between the first and tenth year. In all cases, he believes the predisposing cause is the process of dentition. The exciting cause has, in the majority of cases, appeared to be some derangement of the digestive organs. But in the case now related, which is peculiar from the sense of feeling as well as the power of motion being lost, he believes the exciting cause was the succession of shocks received by the spinal cord through the use of the baby-jumper. He adduces some arguments and quotations from authors in support of his opinion, and, in an appendix, gives a brief account of other cases of paralysis in children.

Dr. Marshall Hall: I should make the same remark on this case as on another which has been laid before the Society. There can be no question that a case of infantile paraplegia is one of extraordinary interest and difficulty. Generally speaking, it is observed to be attended with more or less of spasm,—in which case I should denominate it spasmodic paraplegia. It commonly arises from dentition. Either one arm, or one leg may be affected, or both; sometimes both legs. The case now read differs from the other to which I have alluded in two particulars, viz., that both arms were affected, and that there were no spasms. But, however this may be, the cause of spasmodic or of infantile paralysis, is of extreme difficulty to determine. In this case, there were no *post mortem* appearances; unfortunately, the membrane was ruptured, so that any fullness of the brain would disappear; but still there appeared to be no organic disease of the brain or of the spinal marrow. From all I have observed of these cases, I believe them to arise from dentition. Having watched some with great accuracy, I think there will be observed a contraction of the muscles about the face and neck; and my notion is, that the muscles contract on the veins and fill them. Paraplegia is an affection involving either the inferior extremities only, or the superior; in one case, there was a state of paralysis of both superior extremities; but then the disease was of the vertebræ. In this manner I account for paralysis of both superior extremities; but that was a slow case, and therefore the nature of the disease was easily determined. The most remarkable thing in the paper is, that there was no spasmodic affection in the beginning. But I doubt this. In the first place, the patient was awoke from sleep; second, there was shivering; third, she was probably not well observed before she was put in the bath. I am very sceptical as to the effect of baby-jumpers; if there had been concussion of the spine, it must have involved the inferior extremities. I wish now, before I sit down, to advert to a circumstance which occurred at our last meeting. The last speaker on that occasion (Mr. Streeter) animadverted in a manner I think quite unjustifiable on M. Flourens. I believe that gentleman to be a most honourable man, quite incapable of writing anything which he does not most conscientiously believe to be the truth; and I may say, that I have repeated the experiments which he has made, and came to the same results. In the experiment of slicing off the substance of the cerebrum and cerebellum, I have never seen any mark of pain, or suffering, or spasm; and I attribute to Flourens the discovery of the insensibility and inexcitability of the brain, and the excitability and sensibility of the spinal marrow. Not a day passes in my life but I have great pleasure in thinking of M. Flourens, as of one who has added light to my path in diagnosis. That diagnosis is this—If there is no pain or spasm, the conclusion is, that it is a case of pure cerebral origin; but if there is pain and spasm, then it is one of spinal origin. I need not mention to this meeting, that it is of the utmost importance in these cases to be able to say—This is an affection of the brain; or, This is not; This is in the brain from the beginning; or, This is in the spinal marrow from the beginning; and for this result, I believe we are largely indebted to M. Flourens.

The President (interrupting Dr. Hall): I think it is hardly just now to renew a discussion which has passed over.

Dr. Hall: Then the remarks at the previous meeting ought also to have been stopped.

The President: I am not conscious of any irregularity taking place on that occasion which ought to have been checked, and which was not.

Dr. Hall: I of course bow to the decision of the Chair, but I think that M. Flourens ought not to have been so criticised without remark.

Mr. Streeter: I will not now revert further to the experiments of M. Flourens; but as it has been so pointedly stated that I made remarks injurious to the character of that gentleman, I beg to say that I am utterly at a loss to know what they were; I never so intended them. This defence of Dr. Hall's is a perfectly volunteered one; I could quote from Gall many remarks in favour of M. Flourens; but I must enter my protest against the notion, that any man, be he who he may, is free from criticism in this Society.

Dr. Hall: There can be none in this meeting who have listened to Mr. Streeter with more pleasure than I have at this moment.

Dr. Baly: I rise to correct an error into which Dr. Hall has fallen in respect to the case read. Both arms and legs were paralyzed. The mother, in her account of the child states, that the patient appeared to lose the entire use of her limbs.

Dr. Hall: I received my impression from Dr. Davies himself.

A second paper was then read, entitled—

Cases of Perforation and other Lesions of the Stomach occurring in connexion with Diabetes Mellitus; with Observations on the Gastric Origin of that Disease. By William Macintyre, M.D., Physician to the Western General Dispensary, Lisson-grove.

The Author commences his paper with some general introductory remarks on the unsatisfactory results of anatomical researches in diabetes, which have hitherto thrown so little light on the nature of this obscure affection, that a theory founded almost solely on a consideration of the phenomena observed during life, in which the assimilating processes are supposed to be impaired or perverted, has, from the earliest times, received very general assent. Adopting this view of its proximate cause, he then proceeds to relate three fatal examples of the disease which fell under his own immediate observation, and in which *post-mortem* appearances were met with in the stomach, strongly significant of that organ having been, at some period, subjected to a special morbid action. The first case was that of an adult male, in whom the disease was not recognised till about a year before the Author was consulted. The symptoms were highly characteristic. Death took place under a state of obstinate constipation. On a *post-mortem* inspection, among other lesions, the left upper lobe of the lungs was found broken down in its centre into a softened purulent mass, more like the disorganisation from unhealthy inflammation than a tubercular vomica. The stomach was greatly dilated, and its walls very thin; its cardiac extremity presented a dark appearance, and its lining membrane was softened. The blood-vessels of this viscus were unusually large and turgid. The kidneys were much enlarged, and double their ordinary weight. The right freely admitted a wax injection; the left exhibited, under the microscope, the natural structure. The subject of the second case was also an adult male. He had been getting thin and weak for some months before he was seen by the Author,

and died, labouring under an extensive aphthous affection of the mouth and fauces, accompanied with symptoms of intense irritation of the stomach, pain at the epigastrium, eager craving for cold drinks, and incessant vomiting. The real nature of the complaint was not detected till two days before death, when the urine was found to be profuse, limpid, of specific gravity 1,038 degrees, and strongly saccharine. On inspection, the organ presenting the principal lesions was the stomach, which was remarkably capacious, and on being lifted up for examination, gave way posteriorly at its large curvature, allowing the escape of a dark-coloured fluid into the abdominal cavity. Its walls around the rent thus caused were very soft, and, throughout the entire splenic division, reduced to extreme tenuity, being, in some places, almost diaphanous. The subject of the third case was a little girl, only five years old, who had been for some weeks under treatment in the country, for what appeared to be remittent fever, and was brought to town for advice, when the urine was found to be very copious, of great density,—the specific gravity ranging between 1,040 degrees and 1,045 degrees,—and abounding with sugar. The constitutional symptoms corresponded with the character of the urine, and the child sank rapidly, and died exhausted. On dissection an unusual dryness of all the tissues was observed. The kidneys appeared to be perfectly sound. No tubercles could be discovered in the lungs, but a coffee-coloured fluid, to the amount of several ounces, occupied the lower part of the pleural sac. When this fluid was removed, the cavity of the chest was seen to communicate with the stomach by one large irregular hole in the walls of that viscus, and several smaller perforations in the diaphragm. The openings in both corresponded exactly, but without any adhesion between the opposed surfaces. The structures bordering on the perforation were black, ragged, and thin, and the parietes of the stomach, throughout its whole splenic division, partook more or less of this attenuation. The fluid removed from the chest was inodorous, and found to consist chiefly of blood, epithelium, and textural detritus. After briefly remarking on the treatment of these cases, the author goes on to review the appearances found on dissection, dwelling principally on those observed in the stomach—viz., the extreme attenuation of the coats of the organ in all the cases, and the lacerations and perforation in two of them—conditions allying them to each other, and denoting, apparently, but different stages of a kindred disorganisation. In considering the nature and import of these changes, the great question to be solved is, whether they are to be regarded as pathological lesions, or cadaveric changes. As respects the actual perforations in the last case, the author considers them to be *post-mortem* consequences. But though, under this view of their production, they might naturally be classed with the perforations or erosions which were attributed first by John Hunter to the digestive or solvent action of the gastric juice, he feels more disposed to rank them with those analogous changes which, since Hunter's time, have been noticed to occur in connexion with various diseases, some of decidedly gastric character, but the greater number not primarily referable to the stomach. The facts thus brought into notice add much to the interest of the subject, and, considering the force of various objections urged against the opinion of the great physiologist, would seem to lead us to take a modified view of the theory of solution, and regard the successive changes from softening to attenuation, and from attenuation to complete loss of substance, as the work, not of a gastric secretion in a normal and healthy state, but as the effects either of that fluid in an altered or vitiated state, or of other products secreted by, or generated in, the stomach, and endowed with corrosive properties which do not come into full play till after death, when the tissues are already enfeebled and wasted, and no longer defended by the vital forces. In diabetes, the sugar existing in the primæ viæ suggests a fertile source of products possessing most active qualities. Those which we are most acquainted with are the lactic and oxalic acids, both of them hostile to the constitution, the latter eminently so. It is admitted, however, that for the confirmation of these views and opinions, though they are entertained by high authorities, the evidence of demonstrative chemistry is still wanting. How far they are countenanced by the limited number of facts brought forward in the paper, the author leaves to be determined by future and more extended observations.

Mr. Hewett: I beg to correct an error in the paper read, namely, that I had not seen in *post-mortem* examinations a case of perforation of the stomach, or of solution of the stomach. This mistake must have arisen from Dr. Macintyre asking me whether I had seen such perforation *in cases of diabetes;* but that I have seen it in other cases, there can be no doubt, as I have put several such up in St. George's Hospital; and I can now recall to mind one or two cases in which the perforation has gone through from the diaphragm into the chest, and one through the pericardium. However, this question can be easily settled; for throughout six years, I have kept notes of my cases, and should be happy to send them to Dr. Macintyre.

Dr. Copland: Diabetes is not now to be imputed to disease of the kidneys. It has long ago been settled that the kidneys have nothing more to do with it, than in eliminating matter from the blood. The question is, whether diabetes is a primary or secondary disease. The circumstance of the connexion of diabetes with the lungs and liver has been settled; for there are very few cases in which there is not disease of the lungs or of the liver, or of both, and the question then is, whether this is primary or secondary as respects diabetes; and it will rest in this way,—whether the *post-mortem* appearances are effects already taken place in life, or owing to the *post mortem*. I believe they are attributable to the latter. This appears especially from the third case in the paper, where there appears to have been *post-mortem* solution of the coats of the stomach. The disease does arise in children where there is a softening, not only of the digestive canal, but where it goes down the alimentary canal to the anus; this I have frequently observed, and numerous such cases have been published by Cruvelhier and others. Creasote was employed in this disease many years ago. In one case of my own, some years since, I could not obtain it at home, but had it from Germany, and prescribed it for my patient; he afterwards had ox-gall and creasote, and under these remedies was enabled, for several years, to preside in a court of justice in the North. Sugar was found in his urine. Under this treatment, however, he was preserved in comfort for several years; but subsequently married, when the disease returned, and in a few months he died. I also know an instance in which diabetes was determined so far back as the time of the late Dr. Latham. The subject was a lady. After Dr. Latham retired from practice, the case was under me; and that lady is now alive, but never menstruated afterwards.

Dr. Macintyre: I am sorry that I should have made any statement which is not correct; but I have given in the paper a *verbatim* copy of a letter from Mr. Morton, in which the statement is made; and how it could have occurred I know not. In that letter Mr. Morten states, that he had spoken to Mr. Hewett, and that the latter gentleman stated that he had not met with such a case.

Mr. Charles Hawkins: I am enabled to bear Mr. Hewett out in the statement he has made, for I saw such a case a few days ago; but whether that perforation took place before death or after, I am not in a condition to say; but should rather refer it to the latter. A few years ago I became acquainted with a gentleman who had had diabetes for twenty-five years. He is still alive, though it must be thirty years since he was first attacked.

The sitting was then adjourned.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

J. N. Thompson, Esq., in the Chair.

PUNCTURED WOUND OF ANTERIOR TIBIAL ARTERY AND OPERATION.

Dr. Massey brought under notice of the Medico-Chirurgical Society an interesting case that had occurred in his practice, where he ligatured the femoral artery for a wound of the anterior tibial.

A gentleman, aged 66 years, standing on a ladder pruning a tree with a sharp pointed clasp-knife, accidentally made a deep incised wound of the soft parts at the upper and anterior portion of the right leg, about three inches to the outer side of the crest of the tibia, between it and the fibula, having the latter bone one inch and a half externally; the upper extremity of the wound being immediately below the head of the fibula corresponding to the situation of the anterior tibial artery, immediately after its passage through the interosseous ligament, and covered by extensor communis digitorum and tibialis anticus muscles, which muscles the knife had pierced and transfixed the artery. Very profuse bleeding followed the injury, which he staunched by tying his neckerchief round the leg, and walked home with difficulty a distance of about a mile. His wife, who had been accustomed to dress ulcers on the other leg, applied strapping and bandages, and no further bleeding took place for twenty-four hours. On the day following the accident he was visited, the bandage being found to have been well applied, and also, on inquiry, that the edges of the wound had been well brought together. As there were no symptoms of further hæmorrhage, the dressings were not removed, but rest strictly enjoined. On the third day, previously to the visit of Dr. Massey, further hæmorrhage had taken place, and again ceased. On examining the wound, and making moderate pressure with the fingers, in order to ascertain what the character of the bleeding was, there was no recurrence of it, but an exudation of serum, the wound presenting an angry appearance, with commencement of suppuration. On the fourth day a small abscess had formed in the wound; matter and blood escaped on the punctured wound being enlarged. Oozings of blood and matter were discharged at intervals for several days, and occasional small hæmorrhages. On the tenth day, the doctor was hastily summoned, in consequence of a sudden bursting forth of the bleeding. About eight or ten ounces of florid blood, evidently arterial, had been received in a basin, and more had been lost on the napkins and bedding. The patient was found now to be faint and exhausted, and unable to bear further loss, and it became apparent that more effectual means must be speedily adopted to prevent a further drain on his debilitated constitution. Consultation was held with Mr. William Wright, Surgeon to the General Hospital, and it was agreed that the femoral artery should be tied without loss of time, and this Dr. Massey effected in the usual way.

After the operation, from which resulted no untoward symptom, the patient began gradually to improve; there were no further hæmorrhages from the punctured wound, which soon assumed a healthy appearance, and in the course of a week the leg was quite well.

As the treatment adopted in this instance is very unusual,—and we do not remember to have seen a similar case recorded, in which the femoral artery has been tied for a wound of the anterior tibial,—the question presents itself, whether some other operation less than ligature of the femoral artery would have succeeded. In reply, it must be stated, that, if the hæmorrhage had not abated at the outset,—if the character, whether venous or arterial, had been clearly ascertained,—and if there had been sufficient space to tie the wounded artery on the proximal as well as distal portion, it would have been in accordance with customary practice to have cut down upon and secured both ends of the artery at the seat of injury. From the facts above stated, it is evident this could not be done at an early period; and the difficulties were enhanced at a later stage by the inflammatory and suppurative processes around the vessel, most probably involving the coats of the vessel itself. Next, would it have been advisable to have tied the popliteal? Against this plan must be adduced, that, in cases of aneurism, the ligature of the femoral artery is almost universally preferred, as being of easier application; and being free from branches which might interfere with the formation of a plug, is therefore less likely to be followed by secondary hæmorrhage. It is interesting, also, to note the peculiarities in the distribution of the arteries of the lower extremity, which have been so ably displayed by Mr. R. Quain. This author states,—"The deviations from the ordinary disposition observed in the main femoral artery ARE EXCEEDINGLY RARE and few in kind;" whereas in reference to the popliteal "the lower part of the artery is *not unfrequently double*, from the knee-joint downwards." It will at once

be seen that this has a most important bearing on the comparative merit of the two operations.

Since the performance of the operation, the patient has enjoyed an uninterrupted and lengthened period of good health, and pursues his usual avocations and exercise without the least inconvenience. This result corroborates the plan of treatment recently advanced by Mr. Critchett, of the London Hospital, and is opposed to the universality of the principle which has been laid down by an experienced military surgeon, that all wounded arteries are to be treated by ligature at the wounded part.

A discussion took place after the reading of the paper, in which Mr. Higginbottom and Mr. G. M. White took part, the latter noticing that wounds of the anterior tibial artery were of great rarity, and that operations on the large arteries of aged individuals were frequently unsuccessful.

ETHNOLOGICAL SOCIETY, March 28.

George Bellas Greenough, Esq., Vice-President, in the Chair.

ON THE NATIVES OF GUINEA INHABITING THE GOLD COAST.

By Rev. A. W. HAWSON.

That portion of Negroland to which the name of the Gold Coast has been given, may be regarded as extending from Cape Lahu on the West, to the Rio Volta on the East. The extent inland of this district cannot be determined with any degree of certainty, though, probably, we shall not greatly err, if we adopt the Kong Mountains as the natural northern boundary, a district of about 300 miles square. Here exist several petty independent States, claiming respectively distinct sovereignty, and each extending over a defined extent of territory. With the Addus, who inhabit the tract of country between the river Lagos a little west of Cape Lahu, and the river Seni at Asani, and with the Ahantas, whose territory lies between that of the Addus and of the Wassa, which is from the river Seni to the Pra, I am not acquainted. I shall, therefore, confine my remarks to the remaining tribes, — the Wassa, Asins, Fantes, Asuantes, Aguna, Akems, Akoapems, Akoamus, Accras or Ghàs, and the Adampes. The Effutus scarcely deserve distinct mention, for they have never pretended to any right of sovereignty; but appear to be held in consideration by their neighbours, from their devoting themselves to the priesthood of the Fetish craft. They are of the Fauté tribe, and the error in representing them as an independent people is evidently owing to their having invented a mongrel dialect, in order to work upon the superstitious of their kind, and into the mysteries of which they are careful never to initiate others. The bases of this jargon are Fauté and Accra or Ghà. I refer these several Gold Coast Tribes, with but one exception—the Accras or Ghàs, to the Asuantes, and they may be all classed under the national name of Akans, for they were originally one people, and inhabitants of the interior of the country. They speak a common language, with but slight dialectical differences: certain etymological data are to be gathered from their traditional history, and the same account is current among the several communities designated as being ori inllay one nation. These facts are of great interest when we consider the palpable physical variances between them, which are so apparent that the merest tyro in observation can readily discern them. The symmetry in form of the Akan is perfect, no part appearing as if it would betray the slightest disproportion in the nicest measurement. In complexion they are far from being invariably of a jet black. Very many are of a decided, though dark, copper colour, which may perhaps give rise to the assumption, with which I have somewhere met, that they are not pure negroes, but the mixed descendants of the Portuguese and other early European settlers. If this needed or deserved a serious reply, might it not be asked, where, then, is their long nose, their habits, their religion, their laws, where, in one word, is there any trace of any such comparatively advanced civilization as is pre-supposed in such a notion. Such a supposition, however, is at once and entirely overthrown, by the fact, that the proportionate number of those who are of a copper-coloured complexion is greater in Asuanté, and Akem, and Asin, districts to which Europeans have seldom penetrated, in which certainly none have ever settled, than in any of the maritime parts of the Gold Coast. Although the head of the Akan presents generally the well-known characteristics of the negro type, it may not be uninteresting to remark, that the nasal bones do not, as is generally supposed, meet, or nearly so, on the same plane; and that it is by no means uncommon to see, especially among the Asuantes, really handsome men and quite beautiful women, both as regards fineness and delicacy of figure and limb, with features approaching to the Grecian mould, and clear bright eyes well set in the head. The several communities comprehended under the name of Akan, seem to have deserted from the Kingdom of Asuante in consequence of political oppression. The several Governments are modelled exactly after the pattern of Asuanté. They have each a King, a body of nobles, and a class of military commanders. The character and moral tendencies of the Akans may be described in a very few sentences. They are not predisposed to excessive exertion, either of body or of mind, nor is it necessary they should, for with little labour they can well enough cultivate a small plot of ground sufficient to produce a bountiful crop, and continued supplies of corn, yams, casada, sweet potatoes, plaintains, and such other vegetables as are indigenous. In addition, the land produces a variety of fruits, such as pine-apples, bananas, papas, several varieties of plums. The country also abounds in many varieties of deer and of the feathered tribe; the wild boar; countless shoals of innumerable varieties of fish. They are polite and hospitable, and remarkably cleanly in their person and apparel, brave and warlike, and, in religious tendencies, superstitious in the extreme. Yet they distinctly entertain a general idea of a Supreme Ruler of the Universe, to whom the attributes of creation, providence, and the ultimate appointments of human destiny pertain. They believe, that, subordinate to this God, there are many other gods; and that to these subordinate deities the Supreme Ruler commits the minutiæ of the control of human affairs, and that these subordinate gods—whose habitations they suppose to be, some in the clouds, some upon the mountain tops, some in the ocean caverns, some in the deep recesses of the groves—are always accessible to human approach, by means of a suitable offering, presented through the medium of such of their countrymen as devote themselves to their service and priesthood. There is nothing approaching to anything like moral instruction among them, excepting evening rehearsals by individuals more than ordinarily gifted with a command of language and a lively imagination, with a view to inculcate love of country, reverence for the gods, obedience to parents, submission to rulers, and contentment with their lot in life. The Accras, or Ghas, differ from the Akrans in language, religion, and in mode of government, and in physical character. Their religious observances indicate that they once inhabited a territory readily accessible to Mohammedan influence. In stature they are a taller, stouter, and more muscular people, and capable of enduring a greater degree of bodily fatigue. Whence these maritime Ghas came, will form a future subject for the Ethnological Society.

PENCILLINGS OF EMINENT MEN.

JOHN HUNTER, F.R.S.

In pursuance of a promise made some weeks since, when noticing the Oration annually delivered at the Royal College of Surgeons, in memory of the distinguished founder of the Hunterian Museum; and, at the request of many valued correspondents to continue our "*Pencillings*," we now proceed to give a short biographical sketch of the illustrious individual whose name adorns this page, whose discoveries and philosophic views of the actions of living bodies in health and disease, have accomplished more than the efforts of any other single mind for the advancement of medicine and surgery, whose biography becomes the history of the foundation of medicine as one art, based on the highest order of science.

John Hunter was born on the 14th of February, 1728, at Long Calderwood, a small estate belonging to his family, situated about eight miles from Glasgow, in the parish of Kilbride, East Lanarkshire, and was the youngest of ten children, descended from the ancient family of Hunter, of Hunterston, a part of which property they had received from King Robert II. At the age of ten years he lost his father, and was left to the care of a fond and over-indulgent mother. The consequence was, that being, in a great measure, master of his own actions, and having little taste for books, he prefered engaging in country sports to studying those elementary branches of knowledge which are best acquired in youth. Though neglectful himself of the advantages of study, he was not insensible to the pride and gratification expressed by every member of his family, on hearing of his elder brother William's success in London, and the pleasure which that brother's letters gave to all around him. These feelings made him ashamed of his idleness. Accordingly, in the twentieth year of his age, he wrote to his brother, expressing his desire to enter the profession, and offering his services as an assistant in the dissecting-room: the reply was favourable, and contained a kind invitation to visit London. He lost no time in complying, and arrived in London a fortnight before the commencement of the autumnal course of lectures. No long time elapsed before John's skill was put to the trial, in preparing for the lectures a dissection of the muscles of the arm. the young anatomist succeeded in producing an admirable preparation, in which the mechanism of the limb was finely displayed. This at once showed his capacity. William Hunter had not formed a very high estimate of the talents of his hitherto idle brother, and little foresaw that he was ere long to eclipse his preceptor. He was, however, so well pleased with his pupil's first essay, that he soon after entrusted him with the preparation of a similar part, of which the blood-vessels were to be preserved, as well the muscles. In this also he succeeded so well, that his brother, who was all neatness and order, foretold that he would soon become a good anatomist, and promised that he should never want employment. From this time, therefore, Hunter may be considered as engaged in the dissecting-room, under the instruction of his brother's assistant, Mr. Symonds, where he pursued his studies with such zeal and diligence, that by the next season he was able to take the charge of directing the pupils in their dissections; thus by his rapid progress, showing what may be effected by great diligence, and adding another to the examples furnished by Cheselden, Haller, Albinus, Abernethy, Baillie, and a host of others, that the surest foundation for future professional eminence, is an early and extensive knowledge of anatomy.

In the following summer, Cheselden, the celebrated lithotomist, by the request of Dr. Hunter, permitted John to attend at Chelsea Hospital, where he had ample scope for his inquisitive mind, in tracing, under so distinguished a master, the progress of nature in all her operations of disease and restoration, where he would probably have remained some time; but in the following year Cheselden was obliged to resign his appointment, in consequence of an attack of paralysis, and Hunter entered as surgeons' pupil at St. Bartholomew's Hospital, in 1751.

In the year 1753, Hunter entered as Gentleman Commoner in St. Mary's Hall, Oxford. What his intentions were at that time we cannot learn from any of his biographers, and he is not reported to have kept any terms. It was most likely, in accordance with the wishes of his classical brother, that he took this step, rather than by his own inclination, as, in speaking of this period of his life some years afterwards to the late Sir Anthony Carlisle, then a student at the Hospital, Hunter said, "They wanted to make an old woman of me; or that I should stuff Latin and Greek at the Uni-

versity; but," added he, significantly pressing his thumb nail on the table, "these schemes I cracked like so many vermin as they came before me."

In 1754 he entered as surgeons pupil at St. George's Hospital, of which he became House Surgeon in 1756, having, in the previous year, been admitted to a participation in the lectures delivered by his brother.* Hunter's object in entering as a pupil to this Hospital was to secure for himself a chance of election at some future day to one of the London Hospitals. His prospect of obtaining the appointment of surgeon to Chelsea Hospital was too uncertain and too remote to be calculated on; and at St. Bartholomew's it would have been necessary for him to serve an apprenticeship of five years to one of the surgeons, which, at his age, and with his occupations, was quite out of the question.

Hunter's extensive acquaintance with anatomy was now generally known and appreciated, and he was not unfrequently applied to by others to assist them in clearing up any difficulties they might encounter in their researches. It was on an occasion of this kind, and about this time, that the important discovery of the mode of connexion between the placenta and uterus was made. The honour of solving this anatomical problem was laid claim to by each of the Hunters, and the dispute to which it gave rise, twenty-five years afterwards, caused a breach between them that was never healed until William was on his death-bed. The reader will find John Hunter's account of the transaction in his work on the "Animal Œconomy."

In the spring of 1759 his health began to suffer seriously from his incessant labours, and he was attacked with inflammation of the lungs, which left behind it symptoms that threatened to end in consumption. He was, therefore, strongly advised to leave London for a time, and seek a more southerly climate; with this view he applied for an appointment in the army, and was immediately made staff-surgeon by Mr. Adair, who was then the Inspector-General of Hospitals. In 1761 a powerful armament was sent from this country to lay siege to Belleisle, an island off the western coast of France. With this armament Hunter embarked, and was present at the sanguinary siege which took place, and the following year he proceeded to the Peninsula, and was thus furnished with ample opportunities for practice in the treatment of gun-shot wounds. We have no account of Hunter's private life whilst in the army. Jesse Foot accuses him of exciting jealousies and quarrels amongst his colleagues; but no sort of credit can be given to these statements. It is said that he received 400*l.* from some of Hunter's enemies for writing his life; if so, he deserves only to be remembered in connexion with a homely remark of Hunter's, in answer to a gentleman who was condemning this sort of conduct, "Oh, Sir, we all have vermin that live on us." On the termination of the war Hunter returned to London with his health re-established, and found that the situation he had occupied in his brother's school was filled by the talented and amiable Hewson, who had been taken into partnership soon after Hunter quitted England; it is doubtful whether Hunter would have again entered into partnership with his brother; for it would appear, from Sir Everard Home's statement, that their former connexion had not been productive of entire harmony, as indeed was the case with poor Hewson, who was so unfortunate as to offend the Doctor by marrying; and when, at the expiration of nine months, his wife brought him a son, he was told that the partnership must cease at the expiration of the next winter, refusing even to allow him to make any anatomical preparations for himself. As by the articles of agreement, on entering into partnership, all preparations made by Hewson, were to become the property of Dr. Hunter, this denial was considered most ungenerous, as the stipulation in the articles for a twelvemonth's warning was intended for their mutual benefit, that each party might prepare himself for lecturing separately.

To return to the subject of our sketch, the time had now arrived when Hunter commenced the practice of his profession. With nothing but his half-pay to depend on, various circumstances combined to render his success in practice far less rapid than might have been anticipated. Of these one of the most obvious was that of the field being already occupied by several men of great merit in their profession, as Pott, of St. Bartholomew's Hospital, then in the prime of life, and in the zenith of his fame, Bromfield and Cæsar Hawkins, of St. George's Hospital, and Sharp and Warner, of Guy's. These divided amongst them the greater part of the civil practice, whilst Adair, "the favourite of princes, of women, and of fortune," (as the facetious Wadd termed him,) and Tomkins, from their long connexion with the army, enjoyed the chief share of what accrued from that quarter. As a means of increasing his income, Hunter determined on delivering lectures on anatomy and operative surgery to a private class. These he continued for several years; but, so far were his talents and his enlightened views from exciting the attention they merited, that his hearers never amounted to twenty.

Hunter's leisure hours were never allowed to remain unemployed; he returned to the study of comparative anatomy with increased delight, and to furnish subjects for his researches, he obtained the refusal of all animals which chanced to die in the Tower; all the money he could spare was devoted to procuring curiosities of this sort, and, as soon as he had accumulated fees to the amount of ten guineas, he always purchased some addition to his collection.

In 1767 he was elected a Fellow of the Royal Society, and, in order to promote scientific improvement more effectually than could be done by formal meetings, he was the means of associating some of the most active members in a conversation party at a coffee-house, after the public business of the Society was ended. This at first consisted only of Dr. G. Fordyce, Mr. Cummings, and himself; but they were soon joined by Sir Joseph Banks, Dr. Solander, Dr. Maskelyne, &c. The following year a vacancy occurred at St. George's Hospital by the retirement of Gataker, the translator of the surgical works of Le Dran, for which Hunter became a candidate in opposition to Mr. Bayford, whom he defeated by a majority of 114, and was consequently elected surgeon on the 9th of December, having previously (July 7th) been admitted a Member of the Corporation of Surgeons, as the college was then called, and not *after* his election to the Hospital, as is stated by his biographers. By this election he was insured the means of making his talents as a surgeon more generally known, and was enabled to obtain, as private pupils, young gentlemen coming to town to complete their medical education, with whom he received a fee of 500 guineas. This was further facilitated by his removal to a more commodious house in Jermyn-street, St. James's, which his brother had just vacated. Amongst those gentlemen who successively became inmates of Hunter's house as private pupils, were the illustrious Jenner, Dr. Physic, of Philadelphia, Sir Everard Home, &c., all of whom rose to high positions in their various stations; and it is not unworthy of remark, that of the eminent surgeons of which this country has had to boast, by far the greater number have pursued the most important part of their professional education under the roofs, and as the private pupils, of the most able of their predecessors in the art.

In July, 1771, Hunter was married to Miss Home, daughter of Mr. Home, surgeon to Burgoyne's regiment of light horse, and sister of Sir Everard Home, a lady to whom he had been some years engaged, and who was a source of great consolation and happiness to him during the remainder of his life. The fruits of their union were four children, two of whom died young.

In the autumnal session of the year 1774, Hunter for the first time delivered a course of lectures exclusively on surgery. As a lecturer he appeared to little advantage; his language, though forcible, being inelegant and often coarse. In speaking, for example, of a case of gunshot wounds, he described the ball as "having gone into the man's belly, and hit his guts such a d—d thump, that they mortified;" and in relating his own case, where secondary symptoms had ensued on inoculation with the matter of chancre, he repeated over so often, and in so peculiar a tone, "I knocked down the disease with mercury and I killed it," that the whole class at length burst out into a loud fit of laughter. His delivery was heavy and unengaging, as he rarely raised his eyes from his book; and as, in addition to this, the doctrines he taught were new, and often obscure and theoretical, his hearers were never numerous.

Hunter's increasing professional avocations began now to render it impossible for him to devote as much time as he desired to extending and perfecting his collection. He therefore engaged Mr. Bell, a young artist of considerable merit, who very soon imbibed the ardour of his employer, retaining all the diligence of a tyro with the modesty becoming that character. Hunter was a great economist of time, and was always very punctual in fulfilling his appointments, to insure which he kept a regular entry of his engagements in a book at home, and carried an exact copy of this in his waistcoat pocket, so that by a reference to his book he could always be found at any hour of the day in the event of his being wanted; any unnecessary discomposure of these engagements greatly annoyed him, and caused him to give vent to his feelings in no measured terms; he was equally strict in enforcing punctuality on his household; he dined at four, then the fashionable hour, and gave strict orders that dinner should be ready punctually, whether he was at home or not. He was a very moderate eater, and set little value on the indulgence of the palate; during many of the latter years of his life he drank no wine, and therefore seldom remained long at table after dinner, except when he had company; but, then, though he abstained himself, he was not willing to allow his friends to follow his example.

After dinner he was accustomed to sleep for about an hour, and his evenings were spent either in preparing or delivering lectures, in dictating to an amanuensis the records of particular cases, of which he kept a regular entry, or in a similar manner committing to paper the substance of any work on which he chanced to be engaged. When employed in the latter way, Mr. Bell and he used to retire to the study, the former carrying with him, from the Museum, such preparations as related to the subject on which Hunter was engaged; these were placed on the table before him, and at the other end sat Mr. Bell, writing from Hunter's dictation. The manuscript was then looked over, and the grammatical blunders corrected by Hunter. At twelve the family went to bed, and the butler before retiring to rest, brought in a fresh trimmed argand lamp, by the light of which Hunter continued his labours until two or three in the morning.

(To be concluded in our next.)

* In this situation he most assiduously devoted himself to the study of practical anatomy, not only of the human body, but also of brute animals, for which purpose he procured from the Tower and from the keepers of other menageries subjects for dissections.

REVIEWS.

Elements of Electro-Biology, or the Voltaic Mechanism of Man. By Alfred Smee, F.R.S.

We opened the pages of this book with no ordinary interest. The novelty of the title had much to recommend it. We flattered ourselves that, at length, we were to be enlightened on the phenomena of life. We regret to say, that we have been painfully disappointed. If the treatise had been what it professes to be,—an original inquiry, even the fallacies of its views would have been redeemed to some extent, by that freshness and charm which are invariably associated with new trains of thought. We honour all that put our minds on untrodden paths of research,—that break the monotonous routine of our daily studies.

The work is, in a great degree, intended as an advertisement for Messrs. Horne, Thornwaite, and Wood, the opticians, and publishers of it. The purchaser pays for 164 pages and numerous wood-

cuts, 10s. 6d. It will scarcely be believed, that these wood-cuts are not to illustrate new instruments, or any modifications of instruments, or indeed any novel application of them. They depict the common electric machines, with which every one, at all acquainted with electricity, is familiar. This is too bad. There are other and legitimate modes for advertising articles of this description, and it is disgraceful that the purchaser of the work should be made to pay for what he does not want, and what, in fact, does not throw any light on the views brought under notice. Of course, Messrs. Horne, Thornwaite, and Wood, give, at the end of the thin volume, the prices of the different machines represented. We hope this is the last occasion we shall be called upon to condemn so disreputable a practice.

Mr. Smee is evidently a man of great ambition, of a restless turn of mind, and entertains a very high opinion of his own talents, while his understanding possesses none of the qualities essential to give him a commanding position; for it is deficient in power and logical precision, and his reasoning throughout is shallow and inconsequential.

His language, too, is exceedingly incorrect, and every page furnishes evidence of the truth of this remark. We will give a few illustrations:—"Whilst the dissecting-room reveals to *us* the *structures* necessary for the *organisation*, the laboratory the composition of *the respective parts undergoing change*, universal science demonstrates, that even proud man himself is not endowed with any imponderable ether." (P. 4.)

Structures are organised matter. Structures necessary for the organisation, is an odd expression. For the organisation of what? The writer evidently means to say, that whilst the dissecting-room reveals the structure of organs, the laboratory analyses the elements of which they are composed. "The respective parts undergoing change," is an unnecessary tail. What parts do not undergo change? The following passages are taken at random:—"Some time ago a patient of mine had a most *unruly* tape-worm, which WOULD not be killed by processes amply sufficient to have destroyed abundance of other creatures of a similar class." (P. 129.) One cannot but admire the good sense of the worm. "Although insane, they are capable of as much *enjoyment* as other people, and ought to have every means of *enjoyment* allowed them. Imprisonment in madhouses, without sufficient occasion, is a very serious affair, and, perhaps, nothing but a *specific* examination of all the facts of every insane case periodically, will prevent relatives, or so-called friends, from occasionally making a traffic of the mental afflictions of rich lunatics. Insane *thoughts* alone should be controlled, and prevented from *acting* injuriously; and in all other respects *they* should be allowed to have every comfort, *enjoyment*, and pleasure, which their means and their *inclination* can afford." In these few lines we have *three* enjoyments, and a "specific examination," which, we presume, means something more than an examination. We have "*thoughts* that should be prevented from *acting* injuriously." Individuals act, and thoughts lead or impel to action. Only think of thoughts sitting down to dinner, or knocking a man down—no pleasant idea. They evidently possess these capabilities according to the language of this distinguished Author. He says further, that the insane should have all the "comfort, *enjoyment*, and pleasure which their means and their *inclination* can afford." What would be the amount of these indulgences, if the inclination were to dictate? What would Morrison, Costello, Philp, and Winslow say to this?

The following is a receipt for making an artificial electric fish:—"This artificial electrical fish is made by *taking* an ordinary solution of ferrocyanate of potash contained in a glass vessel. *In this glass vessel* a porous cell, with a similar solution, is introduced. Now, if a series of these cells be *taken*, and connected together by platinum wires, so arranged that the inside of a porous cell of *one* vessel be connected with the interior of the *second* by a platinum wire, no action will be indicated by the galvanometer. If, however, a current of voltaic electricity be now passed through *each* cell from the porous tube to the exterior, one department, or the hydrogen side, will become alkaline, and the salt will retain its chemical character; the *other* cell will become acid, and be converted into the 'red prussiate.'" (P. 55.) Nature may cease her handiwork and leave the business in future to Mr. Smee. We defy any one to understand what the writer means to convey in these ill-assorted words. He mentions only one glass vessel, yet he says that "the porous cell of *one* vessel be connected with the interior of the *second*. Towards the conclusion of the passage he says, "the *other* cell will become acid." He has before alluded to *each* cell, and to a *series* of cells. What the *other* means is known only to the analytical genius of the Writer. Though he can make an electric man, complete in all his parts, he modestly admits, that "no mode has at present occurred to me of forming an artificial glow-worm." (P. 56.) We hope he will ultimately succeed.

"The mechanism we have to consider is, therefore, abundantly complex; because, an impression communicated to any aisthenic filament would, as a general proposition, at certain times, excite any dynamic nerve *in the body* to action. The details are, therefore, exceedingly difficult to comprehend in all their minutiæ; and yet I trust, by passing gradually from the simple to the complex, the leading *features* of this wonderful and intricate *apparatus* will be *developed*; and, though the *exemplification* of a single brain would *occupy many acres*, I can exhibit *examples* of the mode of acting in the several departments, by ordinary voltaic combinations, which I shall hereafter describe." (P. 29.) We have nerves acted upon "*in the body*," as if it were usual to affect them out of it; we have "the *features* of an *apparatus developed*:" we have "a wonderful and intricate *apparatus*," but we are left to guess what it is; and we have a brain, "the exemplification of which would occupy many *acres*." This certainly is original, and we have no doubt equally beautiful in thought,—if we could understand it.

We have, also, a "mode of acting in the several departments," but what these departments are we are left to conjecture. He further says, in continuation—"The requisites *of* action, *blood* and nerve, are found in sufficient abundance in the central battery, or *brain*, as *that* organ is literally nothing but fibres and *blood*-vessels. The nervous fibres are so numerous, that no estimation could be given of the myriads of which the *brain* is *composed*; in fact, the whole white matter of the *brain* is *composed* of nerve-tubes. The *blood*-vessels are distributed to the grey matter in all parts of the *brain*." (P. 30.) Here we have "requisites *of* action," *three* bloods, *two* "composed," and *four* brains, to say nothing of "literally," and other things of a similar character, in seven or eight lines. He states, that the "blood and nerve are found in sufficient abundance," but he does not say for what purpose. "From the above facts, we are in a position to assert, that the ganglia of the sympathetic nerves are rudimentary brains, which might be evolved *in* structure to such an extent as to render us cognizant of minute changes taking place in our *own* bodies, *but which*, for many hundred filaments only send a single impression to the noemic batteries in the skull." (P. 79.) He is here in a position to assert, in respect of the sympathetic ganglia, what others have long ago maintained, but in his hands they "might be evolved *in* structure." Things are not usually evolved *in*; we have likewise "but which," without a verb, and the whole sentence without meaning.

The reader must not imagine that we have selected particular passages, to display the force of our remarks. We would scorn such partial dealing. It would be just neither towards the author nor the public. The one we wish to improve,—the other to inform. It may, perhaps, be said, What have these extraordinary defects to do with the views of the writer? They have an important bearing upon them. We have here a writer, who is F.R.S.,—a title which supposes distinction and excellence, and one who has long been before the public as a scientific inquirer, and who now comes forward to enlighten the world on mental and bodily phenomena, with a treatise on which, he says, he has been engaged ten years; and yet he is so ignorant of his own language, as to be incapable of composing either correctly or intelligibly. Style is the reflection of a man's thoughts, and, whether he be educated or not, will invariably indicate the capacity, the power, and the logical qualities of his understanding. No one who thinks clearly ever expresses himself loosely. He may be deficient in the elegancies and refinements of diction, but not in force or transparency of expression.

[To be Continued.]

Surgical Anatomy. By JOSEPH MACLISE, Surgeon. Fasic. II. London: John Churchill. 1849.

The second part of Mr. Maclise's work contains surgical dissection of the sterno-clavicular region, and the relative position of the main blood-vessels and nerves—of the axillary and trachial regions, displaying the relative order of the contained parts—of the form of the male and female axillæ compared, and the surgical dissection of the head of the elbow and forearm.

We are glad to observe that this second number is in nothing inferior to the first, the drawings being executed with the skill of the most accomplished anatomist, and the colouring of the plates done in such a manner as to reflect high credit on the artist.

Mr. Maclise is entitled to the support of the Profession for the abilities he has displayed as a surgical anatomist, and for the extraordinary cheapness at which his work is published. Nothing short of a large sale can prevent him suffering great pecuniary loss in his effort to benefit surgical science; and it is an era in our professional literature, for four beautifully coloured plates, with the accompanying letter-press, to be published at the small sum of 5s.

On the Management of the Skin as a Means of Promoting and Preserving Health. By ERASMUS WILSON, F.R.S. Third Edition. London, 1849. Small 8vo. Pp. 238.

We believe that all will agree with us in according to Mr. Wilson the honour of being one of the first *dermatologists* in this country. His investigations on the structure, functions, and general economy of the skin; his able writings upon its pathology, &c., and his most admirable "portraits" of its diseases, are sufficient warranty for the awardment of such merit. But to Mr. Wilson not only belongs the praise of being an authority on these points, but also that of being generally an able surgeon and good anatomist. In the work before us, however, we find Mr. Wilson stepping beyond the office of a writer for the *profession*, to assume that of instructor of the *public*, and we regret to feel that some portions of it might lead those not so well informed of our author's high standing and reputation as we are, to bestow upon him a character which we would be the last to desire he should possess. That Mr. Wilson may, if he thinks proper, offer some instruction to the public in these days of improving *hygiene*, and of public baths and washhouses; on the care and attention which the cutaneous surface of the body stands in need of no one can dispute; nor can they feel that there is one amongst our ranks from whom better instruction could proceed than from him. Mr. Wilson, in the present work, offers such instruction, and, in part, it is effectively and properly performed. But we think, also, that he has stepped beyond the legitimate mark, and handed over to the unprofessional person's consideration subjects which should have been left untouched. To the first nine chapters of his book, not only do we offer no objection, speaking generally,—but we say, that they are as highly interesting and instructive as we should expect them to be, considering from whom they come. But upon those which follow, on those pages which treat of "dry pimples," "watery pimples," "mattery pimples," &c., &c., we can bestow no such commendation. They are subjects

—if we understand them aright from their popular titles—with whose details the *public* have nothing to do; and here they are treated in such a method that the *profession* can feel no interest in them. Moreover, we think, that the information that "several efficacious and elegant preparations, vastly superior to the clumsy compound which goes by the name of 'Dupuytren's Pomatum,' and, indeed, to all the nostrums advertised for promoting the growth of the hair," are manufactured by Messrs. ————, after formulæ prescribed by the author, should not have been thus advertised. It would have appeared better, too, if it be necessary that we should be acquainted with the fact of Mr. Wilson having been set "to the task of seeking out the most efficient and least mischievous compositions to be employed as depilatory agents," that we should also be made aware of the results of these inquiries, as relates to the exact nature of the means which have been found most advantageous. We must confess that we think a false step has been made by one who is accustomed generally to tread upon a stable and satisfactory foundation.

Dissertation on Scientific Nomenclature, Medical and General, Exhibiting the Defects, Anomalies, Errors, and Discrepancies of its present condition; with Suggestions for its Improvement. By R. G. MAYNE, M.D., Surgeon to the Leeds Lock Hospital. 8vo. Pp. 82. London, 1849.

Dr. Mayne remarks, that "much of the technical language employed in medicine and its collateral branches of science, possesses, it must be confessed, very slight claims of propriety or correctness;" and who, let us ask, will refuse to agree with him? If this base and spurious condition of the coinage of scientific nomenclature be so apparent then, we would also ask why have not some of our more learned and literary physicians responded to the requests made by Dr. Mayne, a short time ago, in the *Lancet*, and assisted his praiseworthy endeavours to correct past errors, and check the daily increasing ones which are so recklessly made? The learned Oxonian, Dr. Greenhill, alone replied to Dr. Mayne, who, considering the value of our Author's labours, suggested to him that his papers in the *Lancet* "should be revised, enlarged, and published in a separate form, which might bring them before the notice of many persons both in this country and on the Continent, who would not otherwise have an opportunity of seeing them." Dr. Mayne yielded to this suggestion, and the present work is the result,—a work which should be in the hands of all who either read, write, or pronounce scientific words, and of which they are supposed to know the meaning. But if Dr. Mayne's criticisms be not improper in such hands as the above, they are tenfold more necessary for those who help to coin them. We strongly recommend the work of Dr. Mayne to the perusal of all, and to many its most careful and studious consideration. We look forward with much pleasure to the coming of the new edition of the "Expository Lexicon" promised by our Author, who is not only a medical man but also a scholar.

On the Dependence of Animal Motion on the Law of Gravity. By HENRY WIGGLESWORTH, M.B., Scholar in Physiology of the University of London. 8vo. Pp. 210. London and Swansea. 1849.

We shall not consume very much of our readers' time, if we make known Mr. Wigglesworth's intention in the above work, by quoting *entire* its Preface:—

"In the following pages I have collected a body of evidence which has satisfied my own mind that animal motion is due to one great law of gravity. I give it to the public, that they may consider and determine on it likewise."

By the time our Author has arrived at the conclusion of the first division of his work, he believes he has established the following "position," viz.:—

"That physiology is not rightly a separate science, but that the study of the animal kingdom belongs to physics."

"Mathematicians of Cambridge! this is the reply to the *cui bono* taunt of your science." (P. 156.)

At the termination of the second division, we have then enunciated, that the materials introduced into a living organism, "have the power under certain conditions of combination and condensation. That they are brought under such conditions within the animal mechanism, the movements of which are then produced by the attraction of the earth acting through the atmosphere on the organic surface. The object, therefore, served by the food and the oxygen of the air is simply the production of motion within the organism." (P. 206.) Finally, Dr. Wigglesworth assures us, that if we believe this motion "is due to one great law of gravity, and that we are to bring every process to it for an explanation, instead of fettering our minds with ideas of 'vitality' I am content." (P. 208.)

We have thought it right, in these days of intellectual advancement, to place on record these peculiar views in physiology in their promulgator's own words.

APOTHECARIES' HALL *v.* LOBO.

[To the Editor of the Medical Times.]

SIR,—In your Number of the 31st of March (No. 496) there are some remarks, from Mr. H. Pyke, a Barrister of twelve years' standing, which are likely to lead many persons to believe, that the Company of Apothecaries deputed another party to bring an action against Dr. Lobo, and, if I understand him, by his fifth question, he intimates, that an indictment might lie against the Company in that case. And he asks, "of what value is the County Court decision?"

As this is a very interesting matter to the whole of the Profession, will you permit me, through the medium of your next Number, to ask Mr. Pyke if he will enlighten us all on the subject, by answering every one of his own questions for us, that we may read them in the *Medical Times?*

It appears, in the report of the above trial, that Mr. Griffiths, Counsel for the plaintiffs, said, that he availed himself of the valuable jurisdiction of the County Court to recover from the defendant the penalty of 20*l.*, which all persons illegally practising as *Apothecaries* were liable to, under the 55th George III. c. cxciv. The plaint was laid under the 20th clause of that Act.

Mr. Griffiths quoted several cases, and said, "Mr. Justice Creswell defined an apothecary as a person who professed to judge of internal disease by its symptoms, and applied himself to its cure by medicines." So does a physician and a surgeon. "Mr. Justice Williams held, that the practising as an apothecary was *the mixing up and preparing of medicines prescribed by the party who did so.* And Lord Denman said, that "a person *compounding medicines and selling them*, though he did not make out prescriptions like a physician, nor kept a shop, acted nevertheless as an apothecary in the ordinary sense of the word, and that it made no difference if he prescribed as well as prepared his medicines. The opinion was confirmed by the whole Court, and might therefore be taken as settled law."

Now, Mr. Pyke, what has the *ancient law* you allude to, to say in reply?

If the report of the "*trial*" and the quotations are correct, it appears to be a settled point, that ninety and nine of every one hundred chemists and druggists, and all those who compound and sell *patent* pills and medicines, under sanction of the Government stamp, act as illegal apothecaries, and are liable to be prosecuted and persecuted to, by the worshipful trading Company of Apothecaries. Why, then, with such a host of English delinquents attack a poor foreigner without friends or the means to defend himself? Was he singled out, in order to show to all foreigners and graduates of Foreign Universities, whether Scotch, Irish, or Continental, that they are each and all liable to be prosecuted and persecuted by the Company? If so, we shall, perhaps, see fine sport between the lawyers and the apothecaries, whether allopathic, mesmeric, hydropathic, or homœopathic, that is to say, if the Company, lawyers, and judges can torture a "homœopathic physician" into an apothecary, which would, I opine, be a difficult task, since who can *prove*, in the case of infinitessimals, that there is either mixing up, preparing, compounding, prescribing, selling, or administering any *medicine* at all?

It has been said, that Old Nick is the only one who can beat the lawyer. What say we to the homœopathist? *Mais, revenons a nos moutons*, and pray Mr. Pyke to give us an explanation of his eight "*grave*" questions.

The idea of Mr. Griffiths, that, because the patient lived only three days after Dr. Lobo was called in, led to the *inference*, that "not only was there want of *legal* qualification (the Company's *Certificate*), *but also a great want of medical skill*, is so grossly illiberal, and a doctrine so dangerous to the whole body of the Profession, that it should be, and, I doubt not, will be scouted by all.

It seems strange that, in Dr. Lobo's case, no *proof* was asked for by the Judge, nor given by the plaintiffs, that Lobo compounded, mixed, prepared, sold, and prescribed for, or administered to the patient any *medicine*.

Without such *damning proof*, we may echo the sixth query put by Mr. Pyke, "Of what value is a county court decision?"

I am, Sir, your obedient servant,

M.R.C.S.

GOSSIP OF THE WEEK.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, 29th March, 1849:—Frederick Charles Spackman, Bradford, Wilts; George Bullen, Ipswich; Johnson Kaye Baines, Jewry-street, Aldgate; John Sherwood Stocker, Baker-street, Portman-square; John Moore Swain, Long Clawson.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 30th ult.:—Messrs. Freeman Izod, Esher, Surrey; Henri Francaise Fremanges, Mauritius; Thomas Stokes Guppy, Sudbury, Devon; Sturley Payne, Norwich; Thomas Annesley, Portadown, Armagh, Ireland; William Perry, Stonehouse, Devon; and John Humphry, Deal, Kent. At the same meeting of the Court, Mr. John Elliott passed his examination for naval surgeon. This gentleman had previously been admitted a Member of the College, his diploma bearing date July 28, 1845.

WAR-OFFICE, April 30th.—5th Regiment of Foot—Assist.-Surg. Edward John Burton, M.D., from the 25th Foot, to be Surg., vice Sall, appointed to the 93rd Foot; 25th Foot—Assist.-Surg. Frederick Clarke, from the 26th Foot, to be Assist.-Surg., vice Burton, promoted in the 5th Foot; 26th Foot—Frederick Douglas, M.D., to be Assist.-Surg., vice Clarke, appointed to the 25th Foot; 62nd Foot—Surg. William Leslie Langley, M.D., from the 87th Foot, to be Surg., vice Wood, who exchanges; 75th Foot—Staff-Surg. of the second class George Williamson, M.D., to be Surg., vice Gray, who exchanges; 87th Foot—Surg. Robert Wood, from the 62nd Foot, to be Surg., vice Langley, who exchanges; 93rd Foot—Surg. William Sall, M.D., from the 5th Foot, to be Surg., vice John Campbell, M.D., who retires upon half-pay. Hospital Staff—Surg. Edward William Gray, M.D., from the 75th Foot, to be Staff-Surg. of the second class, vice Williamson, who exchanges.

OBITUARY.—On the 15th inst., at Clapham, Surrey, Walter Yonge, M.D., aged 24, only son of Walter Yonge, Esq., surgeon, of St. Ives, Cornwall.—On the 19th inst., at Ilfracombe, Devon, John Sommers Down, Esq., M.D., aged 65.

THE CHOLERA.—The Limerick papers bring most gratifying accounts of the subsidence of the pestilence in that city and neighbourhood. On Saturday there were but 29 new cases, of which, however, 21 proved fatal. A week previous, the deaths averaged nearly 50 per diem.

NEW ROSS.—There is a curious fact respecting the cholera at New Ross, that, in the workhouse, the only five persons attacked were idiots, three of whom died.

MEDICAL ARRANGEMENTS OF THE GLOUCESTER UNION.—The new orders of the Poor-law Commissioners relative to the medical divisions of this Union have now been put in practice. The

chief feature in the altered arrangement is, that one of the Union Surgeons is to be attached solely to the Union-house, having all the patients of that establishment under his charge, but not being required to attend upon any of the out-door poor. Thus, instead of the Gloucester Poor-law Union being divided into two medical districts, the surgeons to which districts attended to such pauper-patients in the workhouse as were sent into the house from the parishes within the respective districts, there are now two out-districts as before, with the addition of a separate medical attendant for the workhouse alone. We understand, that the Board of Guardians, in consideration of the long and valuable services of Mr. C. Clutterbuck, as surgeon to the old district, No. 2, offered him his choice of situations in the new arrangements, and that he has selected to be the Medical Officer of the Union-house, and has entered upon his duties as such. Mr. Niblett succeeds him, as Medical Officer of District No. 2; and Mr. Johnson was, on Tuesday last, appointed by the Board of Guardians to the District No. 1. At the meeting of the Board of Guardians, when these arrangements were effected, the following resolution was proposed and carried unanimously:—"That a vote of thanks be given to Mr. Clutterbuck, for the skill, ability, humanity, and assiduity, with which that gentleman has, for upwards of thirteen years past, discharged his duties as Medical Officer to the Union District No. 2." We believe the poor of the district with which Mr. Clutterbuck has been so long professionally connected, will cordially sympathize with this recognition of his services and merits.

THE COUNTY COURT A CURE FOR QUACKERY.—A poor man, whose face was nearly covered with a thick shawl, and who appeared to be labouring under the most intense suffering, applied to Mr. Norton, at Lambeth Police-office, on Monday, for his advice under the following circumstances:—The applicant stated, that some months since he became afflicted with a cancer in his upper lip, and his attention was attracted to a printed bill, setting forth the alleged "extraordinary cures" performed by Doctor the Baron ——, of the Blackfriars-road, and he made up his mind to place himself under the Baron ——'s care. On calling at the house, he was told that the Baron —— occupied two rooms there, and that a fee of 5s. must be paid before he could be admitted to an interview with the doctor. He accordingly paid the 5s., and the Baron ——, on examining him, said, he should not only cure him in a short time, but effect such a cure as would astonish the medical man who had before seen him, and all his friends, and that his terms for doing so would be 10*l.*, one-half to be paid at once, and the remainder at 5s. a-week. The applicant, after paying 7*l.* 10s., and attending closely to his advice, found that, instead of getting better, he was becoming considerably worse; and the object of his present application was to know how he could proceed to recover back the money, which had been obtained from him by a false promise by the Baron.—In reply to questions of the magistrate as to what the Doctor's mode of treatment had been, the poor fellow said that pills and poultices were the only thing prescribed, and added, that to one poultice the Baron recommended the addition of bark, and this, on its application to the diseased lip, nearly sent him mad.—Mr. Norton here read the printed bill handed to him by the applicant, of the "extraordinary cures" alleged to have been performed by Dr. Baron ——, described as M.D., M.R.C.S., A.M., K.O.M.T., and C.L.D.H, &c., during his brief residence in London. They are of the usual inflated Jewish puff style, as will be seen from one of the cases selected:—"A workman at Messrs. Maudsley's foundry met with such a serious accident in his leg that three medical men failed for eight weeks to relieve him, and he had to use crutches. At length he became a patient to the Baron ——, M.D., &c., who, by his superior skill and immense talent, forthwith saw how he was afflicted, and in half an hour the patient went away perfectly cured, leaving his crutches with the Baron; and, to the astonishment of all who are acquainted with this great cure, the patient next day was able to resume his work."—Mr. Norton remarked, that no respectable practitioner would print and issue such gross puffs as those set forth in the printed bill before him; and in his opinion the whole affair savoured very strongly of quackery. He also thought it a hard case that so large a sum of money should have been taken from the poor man under a pretence of curing him, while he only made him worse; and had no doubt whatever, that, if a summons were taken out against the Baron, the County Court would compel him to refund the 7*l.* 10s.—The applicant declared he should apply to the County Court for a summons against the Baron.

MIRACULOUS BLOOD-SPOTS ON HUMAN FOOD.—Under the influence of certain circumstances, of which it is difficult, if not impossible, now to form any precise idea, there has appeared upon bread, and food of other kinds, spots of a vivid red colour, closely resembling drops of blood. During the siege of Tyre, Alexander was alarmed by the appearance of bloody spots on the soldiers' bread. At a period nearer our own age, in 1510, similar stains were seen upon the consecrated wafers, and thirty-eight unfortunate Jews were accused of having caused, by their sorceries, this phenomenon, and suffered death by burning for their supposed sacrilege. In 1819, similar kinds of red spots appeared amongst the inhabitants of Padua and its environs. At the commencement of the month of August in that year, a farmer of Segnaro, named Pittarello, was frightened by seeing drops of blood sprinkled upon his porridge, made of the maize which grew in the neighbourhood of his village. His alarm was greatly increased, when, for many days following, he saw the same red spots appear on all his food—new bread, rice, veal, fish, and boiled and roast fowls. The *curé* was appealed to, that he might exercise his sacred functions to expel the evil spirit which produced these alarming appearances; but prayers were ineffectual, and the neighbours of the unfortunate Pittarello supposed that he was under a celestial malediction. Incited by curiosity, a large number of persons went to Legnaro, and a Commission was eventually named, to investigate the nature and causes of this phenomenon. M. Sette was appointed to this task. On examining under the microscope these miraculous red spots, he discovered that they were formed by myriads of small bodies, which appeared to be *microscopic fungi*, and to which he gave the name of *zaogalactina imetropha*. He succeeded in propagating these minute organic productions, and in a memoir published at Venice in 1824, he gives a detailed history of them. During the year 1848, the same phenomenon appeared at Berlin, and fixed the attention of M. Ehrenberg. This celebrated micrographer has closely studied these red spots, and he believes them to be, not as M. Sette supposes, microscopic fungi, but animalculæ of inferior degree, a monade to which he has given the name of *monas prodigiosa*, on account of their extreme smallness. These little beings appear as corpuscles, almost round, of one three-thousandth to one eight-thousandth of a line in length; transparent when separately examined, but in a mass of the colour of blood. M. Ehrenberg calculates, that in the space of a cubic inch there are from 46,656,000,000,000 to 884,736,000,000,000 of these monades.

ST. GEORGE'S HOSPITAL.—On Friday, March the 30th, the pupils of St. George's Hospital presented Mr. Prescott G. Hewett, the Assistant-Surgeon and Lecturer on Anatomy to that Institution, with a beautifully chased and massive silver salver, as a testimonial of their respect and gratitude for his unremitting exertions in promoting their professional studies. The plate was presented to Mr. Hewett, in the presence of a large number of visiters and leading members of the Profession, by a senior pupil, with a most complimentary address, which was acknowledged by Mr. Hewett in a very feeling and appropriate speech.

JOCKEY DOCTORS.—King George II., when he went to Newmarket, used to make a large number of Doctors of Physic; these, by way of joke, were called "Jockey Doctors." There is no instance on record, however, of any medical man, created M.D. in this manner, acknowledging the fact.

MORTALITY TABLE.

For the Week ending Saturday, March 31, 1848.

CAUSES OF DEATH.	Total.	Average of Five Winters.
ALL CAUSES	1,241	1,169
SPECIFIED CAUSES	1,237	1,164
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	268	221
SPORADIC DISEASES:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	63	54
Tubercular Diseases	186	203
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.....	147	141
Diseases of the Heart and Blood-vessels.....	41	40
Diseases of the Lungs, and of the other Organs of Respiration	197	243
Diseases of the Stomach, Liver, and other Organs of Digestion	64	67
Diseases of the Kidneys, &c.	11	13
Childbirth, Diseases of the Uterus, &c.....	13	9
Rheumatism, Diseases of the Bones, Joints, &c.....	10	7
Diseases of the Skin, Cellular Tissue, &c.	3	1
Malformations	5	3
Premature Birth.....	26	23
Atrophy.....	28	15
Age.....	43	73
Sudden	50	14
Violence, Privation, Cold, and Intemperance	82	37
Causes not Specified	4	5

TO CORRESPONDENTS.

Our List of Books received will be published next week.

We have to apologise to Dr. Gull, for the non-publication of the Gulstonian Lecture in the present Number; but, in consequence of Good Friday occurring this week, we are compelled to go one day earlier to press.

"B. Y."—We know of no effectual remedy to prevent baldness. An Ointment, however, composed of one part Ung. Hyd. Nitr. and three parts of lard, we have found very beneficial in promoting the growth of the hair.

"Dr. Stiff, Nottingham."—We are much obliged for the communication, and shall be glad to hear again from our Correspondent.

"Mr. H. Hastings, Stokenchurch."—We are compelled to postpone the publication of the paper on Insanity till next week.

"Dr. Collins, Merrion-square, Dublin."—Communication received, which shall obtain an early notice.

"Mr. Daniell, Newport Pagnell."—Communication received.

"Juvenis" asks us, what we consider the *Laconicum* to have been, which Celsus mentions as one of the methods of producing perspiration by dry heat. It was a *recess* or *niche* in the apartment containing the warm-water bath—or, in some instances, a separate chamber—heated by stoves beneath the floor; the degree of warmth being regulated by raising or lowering a *clipeus*, or shield of bronze, suspended beneath an aperture in the vaulted roof. Its name is accounted for by the fact of the Romans having borrowed the use of dry heat in their baths from the Lacedemonians (*Laconesi*, who abjured warm water as effeminate. The '*clibanus*' in its simplest form was undoubtedly a portable oven, and some of the lexicographers, (Scheller and Ainsworth for instance,) have countenanced the idea that the patient sought his "sweating-bath" *within* it, but we are inclined to think that "Celsus" used the word in the sense of a portable *stove*, by means of which, any small apartment might be converted into a *sudatorium*. We cannot take upon ourselves to decide upon the respective merits of the different editions of "Celsus," either generally or with reference to the explanations of this particular passage.

"Mr. H. H. Pyke, Chancery-lane."—Communication received.

"Mr. Jones, Llanfar, Montgomeryshire."—We are much obliged for the suggestion, which shall be attended to. Mr. Wardrop's work cannot, at present, be obtained separately from the "Medical Times." When complete it will form a neat octavo volume. The holders for the binding may be obtained at our Office.

ORIGINAL LECTURES.

HUNTERIAN LECTURES

ON THE

GENERATION AND DEVELOPMENT OF THE INVERTEBRATED ANIMALS.

By RICHARD OWEN, F.R.S.,
Hunterian Professor and Curator of Museum of Royal College of Surgeons, Corresponding Member of the Institute of France, &c.

[Reported expressly for the "Medical Times," and revised by the Lecturer.]

(The Professor having intimated his intention to publish entire the introductory Discourse "On Parthenogenesis," which formed the subject of the first two Lectures, we subjoin only an outline of the course of argument pursued, and refer our readers to the publication itself, which, we understand, will shortly appear.)

LECTURE I.—MARCH 13.

After some preliminary remarks on the tendency of the human mind to penetrate the mystery of the beginning of things, and especially the origin of living beings, and the impossibility for finite powers to comprehend more than certain secondary causes, these, in regard to the generation of animals, were stated to have been traced to the following point: the essential conditions of the act of generation were the combination of the contents of two nucleated cells; the one called the "germinal vesicle," forming the essential part of the ovum; the other called the "sperm-cell," whose product was the "spermatozoon." When this combination had taken place, the ovum was said to be impregnated. The phenomena that thence ensue are the same in all animals up to a certain point, and consist in the appearance in the centre of the "germ-yolk" of the impregnated "germ-cell," producing by a series of spontaneous fissions a numerous offspring, at the expense of the "germ-yolk," which they assimilate. This progeny of the primary "germ-cell" was defined as the "secondary or derivative germ-cells;" and the whole was the "germ-mass."

The material for building up the embryo is thus prepared, with some minor modifications, in all animals; and the cells are converted into the tissues of the embryo. When they cease to exist as germ-cells, either by coalescing with others or by liquefaction, they do not lose their vitality: as individuals, indeed, they may be said to die, but by their death they minister to the life of a being higher than themselves; they combine to construct its tissues or dissolve and impart properties to its fluids; these metamorphoses being mysteriously governed by a plastic nature or mode of force operating unconsciously upon the matter, but according to a law of order and harmony, which directs the processes to a fore-ordained and definite end, resulting in a distinct and specific form of animal adapted by its organization for a particular sphere of existence, and forming a more or less valuable, but not, as once was thought, an essential link in the great chain of organic life.

It is important to know and remember the fact, that not all the progeny of the primary impregnated germ-cell are required for the formation of the body: certain of the secondary germ-cells or their offspring may remain unchanged and become included in that body which has been composed of their metamorphosed and diversely combined or confluent brethren: so included, any such cell may commence and repeat the same processes of growth by imbibition, and of propagation by spontaneous fission, as those to which itself owed its origin; followed by metamorphoses and combinations of the cells so produced, which concur to the development of another individual, which may be, or may not be, like that in which the secondary germ-cell was included.

It has been found, that in proportion as we descend in the scale of animal life, the number of the secondary nucleated cells which retain their individuality and spermatic power is greater, and the number of those that are metamorphosed into tissues and organs less.

Cells predominate in the tissues of the vegetable kingdom, the lower members of which consist exclusively of them, and have been thence called "plantæ cellulares." The lowest of these consist of a single cell.

The *Gregarina* is a parallel animal organism, consisting of a cell-wall, cell-contents, and nucleus.

It differs from the "single-celled plant," by the vital contractility of its tissue, and the solubility of the cell-wall, or integument, in acetic acid.

The infusory monad was also essentially a single-celled animal, with cell-contents and a nucleus. But the cell-wall was ciliated as well as contractile: the contents were "secondary cells," some of which had coalesced to form digestive sacs, others to form pulsatile sacs, and thus definite organs were formed; but numerous secondary cells remained unaltered and had been called "ova."

A large proportion of the nucleated and impregnated cells is retained unchanged in the organization of the *Hydra* and allied polypes, and in the inferior forms of Entozoa: a smaller proportion in the *Actiniæ* and other Anthozoa, and in the *Acalephæ*. Series of the impregnated nucleated cells were retained unchanged at the aggregated filamentary extremities of the fistelliform uterus, and formed the ovaria of the larval *Aphides* and *Psyche*.

In the higher animals they are confined to the ovaria of the female, but the spermatic virtue has been so far exhausted by the successive multiplications of the progeny of the primary impregnated germ-cell prior to their metamorphosis into the tissue of the embryo, that, comparatively unchanged, as the cells are, that lay the foundation of the ovaria, they require fresh stimulus and a re-application of the spermatozoon, in order to renew those processes of growth by assimilation, and of multiplication by spontaneous fission, which are the essential preliminaries to the forming of a new organism.

"Parthenogenesis" was defined to be the act of procreation by a virgin animal, or one that had not been impregnated by the procreant act in its own person. Various modifications of Parthenogenesis were then described. The first, called "spontaneous fission," was exemplified in the Polygastric Infusoria. The second, called "external gemmation," was described as it takes place in the *Cœnurus* or brain-hydatid and the *Hydra*, or fresh water polype. A third modification, called "internal gemmation," was exemplified in the generation of the "Echinococcus," the Cyclops, and the Aphis.

But, in "parthenogenesis," it was by no means a constant circumstance, that the offspring resembled the parent: it was, in many cases, so distinct in its external character, as well as internal structure, as to have led to its being described as a different genus and species from the parent; and more than one generation might succeed, each differing from the other, until the last form appeared, which, developing ova and spermatozoa, completed the cycle, by producing the impregnated ovum.

This "cyclical" generation was illustrated by numerous examples: amongst which we may cite the "*planula*," the "*campanularia*," and the "*tintinnabulum*," which excluded the ova again reproducing the "*planula*." The *leucophrys*-embryo, the rotifier-like larva changing into the *Hydra tuba*, which propagates the Strobilla, which becomes the *Medusa bifida*; and this, ultimately, the *Cyanæa crita*, which is the parent of the ovum, producing again the *leucophrys*-like ciliated embryo.

The ovum of the sea-urchin (*Echinus*) developed a ciliated monadiform embryo, which became successively a beroiform acalephe, or *pluteus*, from which, by a kind of internal gemmation was produced the young *Echinus*, again to develope fertile ova. The Entozoa offered very remarkable instances of Parthenogenesis. A sluggish fluke-worm or trematode worm, would produce from its impregnated ovum, an active ciliated embryo, which would bring forth another kind of worm, described by Bojanus as the 'King's yellow worm." This would develope in its interior numerous "Cercariæ," which, after falling into a pupa-stati, were metamorphosed into the original parent trematode parasite. The Professor observed, that the very various forms of the different links of this genetic circle were not all due to the change or modification of the parts of an earlier into those of the later form; but to a generation by the earlier of the succeeding form: it was not, "therefore," a series of "metamorphoses," but of "metagenesses." Instances were next cited from the Molluscous division of the animal kingdom; and, finally, from the members of the "Articulate" classes, in which the phenomena of *Parthenogenesis* were continued as high as the class Insecta.

"It is now more than a century," said the Professor, "since Bonnet first attracted the attention of physiologists and naturalists to this mode of generation in the *Aphides* or plant-lice. And, because it was the first of a large class of phenomena, till then utterly unknown and unsuspected, it was received with considerable doubt, or met by total incredulity.

"The facts are briefly these:—

"The impregnated ova of the aphis are deposited, at the close of the summer, in the axils of the leaves of the plant infested by the species, and the ova retaining their latent life through the winter, are hatched by the returning warmth of spring: a wingless hexapod larva is the result of the development. This larva, if circumstances, such as warmth and food, be favourable, will produce a brood, and, indeed, a succession of broods, of eight larvæ, like itself, without any connexion with the male. In fact, no winged males at this season have appeared. If the virgin progeny be also kept from any access to the male, each will again produce a brood of the same number of apterous larvæ; and carefully prosecuted experiments have shown that this procreation from a virgin mother will continue to the seventh, the ninth, or the eleventh, generation before the spermatic virtue of the ancestral coitus has been exhausted.

"When it is so exhausted, a greater proportion of cells in the germ-mass of the last procreant larvæ are metamorphosed; individual growth and development proceeds further than in the parent; some members of the last larval brood are developed into winged males; others into oviparous females. The ova are impregnated and oviposited, and thus provision is made for disseminating the individuals, and for continuing the existence of the species over the severe famine-months of winter."

This being the first of the class of the phenomena forming the subject of the present discourse, which happened to be discovered, had been the first which the physiologist had endeavoured to explain.

Reaumur endeavoured to elude the difficulty by affirming the aphides to be androgynous. But Professor Owen explained the structure of the generative organs in the male aphis, the virgin larviparous aphis and the oviparous aphis.

M. Leon Dufour, whose extent of research and comparison of the generative organs of insects led him to a true appreciation of the nature and function of the appendages to the female organs of the oviparous *aphides*, referred the phenomena of the generation of the larviparous *aphides* to "spontaneous or equivocal generation."

But this was little more than another mode of stating the fact. The condition or mode of the fact, the phenomena rendering it possible, are not explained by such terms. M. Leon Dufour, however, meant to record his belief in a hypothetical mode of generation, in which, as he expresses it, the act of impregnation was in no degree concerned.

Professor Morren, a comparatively recent and

very exact observer of the anatomy and generative œconomy of the *aphides*, retaining the hypothesis of spontaneous generation, as it has been applied to the Entozoa, propounded a theory, that the larval aphides were developed in the body of the virgin parent, like Entozoa, "by the individualization of a previously organized tissue." Now, here also was a phrase which, when the meaning of it is analysed, does little more than express the old facts in a new way. When a larval aphis is developed, a new individual exists; in other words, it has been "individualized;" and, as nothing can come out of nothing, it must have been by the individualization of a previously existing something. The question to be solved is, what is that something, and what has happened to that something to make its individualization under the form of a larval aphis possible, and conceivable by us according to the known analogies of other embryonic developments or individualizations?

To Professor Morren's explanation the objection immediately arises, that no one has ever seen a portion of mucous membrane, muscular fibre, or other organised tissue detach and transform itself into an entozoon: such a process is as gratuitously assumed, and as little in accordance with observed phenomena, as 'spontaneous generation' in the abstract.

The Professor concluded by stating, that in a former course he had shown, that "The fissiparous nucleated cells of the ovum, once metamorphosed into a tissue, can produce nothing else save by their decay, which products are excreted; but the germ-cells which retain their primitive state amidst the various tissues which the rest have constituted in building up the body of the new animal may, by virtue of their assimilative and fissiparous forces, lay the foundation for a new organism." He would not then pursue the argument, which is carried out in his published "Lectures on the Invertebrate Animals," but should proceed, in the next Lecture, to compare the phenomena of generation from virgin larvæ, and the successive production of many individuals from a single ovum, which other classes exhibited, and to consider the explanations that had been offered of such phenomena, and how they have been generalized.

THE GULSTONIAN LECTURES.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS.

By W. W. GULL, M.D.,

Fellow of the College, and Fullerian Professor of Physiology at the Royal Institution of Great Britain, &c.

[Reported expressly for the "Medical Times," and revised by the Lecturer.]

Lecture II.

PARAPLEGIA.

[Continued from Page 408.]

The nerves, in their distribution through the tissues, make up a very widely-extended area of nervous substance, whose due nutrition and otherwise healthy condition is necessary to a proper exercise of its functions; and, if we take also into consideration the position of its extreme parts far removed from the centre of circulation, and its susceptibility, we shall be disposed readily to admit, that, from its extent, its position, and its delicacy, that it deserves our closest attention.

Dr. Graves, who has treated on this subject, thus expresses himself: "May not," says he, "the decay and withering of the nervous tree commence occasionally in its extreme branches? and may not a blighting influence affect the latter whilst the main trunk remains sound and unharmed? Pathologists have, with respect to diseases of the nervous system, committed an error precisely similar to that which was so long prevalent with regard to diseases of the vascular system, for it is only lately that, in estimating the forces which influence the circulation in diseased parts, they have begun to appreciate the preponderating influence of the capillary vessels, independently of the heart's action and the vis à tergo. It is only lately that they have recognised the important truth, that diseased vascular action may commence in the circumference. He quotes as one of the most remarkable of such peripheral affections, the *Epidemie de Paris* of the spring of 1828, as follows:—"Chomel has described this epidemic in the 9th Number of the *Journal Hebdomadaire*, and having witnessed it myself in the months of July and August for the same year, I can bear testimony to the accuracy of the description. It began (frequently in persons of good constitution) with sensations of pricking and severe pain in the integuments of the hands and feet, accompanied by so acute a degree of sensibility, that the patients could not bear those parts to be touched by the bedclothes. After some time, a few days, or even a few hours, a *diminution, or even abolition of sensation took place* in the affected members; they became incapable of distinguishing the shape, texture, or temperature of bodies, the power of motion declined, and, finally, they were observed to become altogether paralytic. The injury was not confined to the hands and feet alone, but, advancing with progressive pace, extended over the whole of both extremities. Persons lay in bed powerless and helpless, and continued in this state for weeks and even months. Every remedy which the ingenuity of the French practitioners could suggest was tried and proved ineffectual. In some the stomach and bowels were deranged, and this affection terminated in a bad state of health, and even in death. In another, the vital organs, cerebral, respiratory, and digestive, were in the same state as before their illness, and their appetites were good, but still they remained paralytic. At last, at some period of the disease, *motion* and *sensation* gradually returned, and a recovery generally took place, although, in some instances, the paralysis was very capricious, vanishing and again re-appearing. *The French pathologists searched anxiously in the nervous centres for the cause of this strange disorder, but could find none.* There was no evident lesion (functional or organic) discoverable in the brain, cerebellum, or spinal marrow.

The learned author, from whom the above quotations are made, uses these facts, with others, to prove that paraplegia may arise from diseased conditions of the nerves in their peripheral distribution; and, whilst they are here introduced for a similar purpose, yet the chief object is to show that, in such cases, the nerves of sensation are often affected to a greater degree than those of motion, contrary to what occurs in diseases of the cord. The following are illustrations of peripheral paraplegia from cold, with prevailing loss of sensation:—

David Fife, aged 50, was admitted into Guy's, under Dr. Bright, in March, 1838. By trade an engineer and wheelwright; muscular. His present illness began seventeen years ago, with an aggravation five months since. His first symptom was *numbness in the lower extremities*, extending as high as the hip joints. He had been, at this period, much exposed to wet and cold; *the power of motion was not in the least affected*, and he continued to do his work without intermission. He could walk a distance of six miles without inconvenience. Five months since the numbness extended, and he attributes it to his having, about this period, been engaged in working in a damp well; after this, with the extension of the numbness, the power of motion in the legs became impaired, and the arms in some degree participated. After being in the Hospital for a short time he had twitchings in the lower limbs, and the power over the sphincters was diminished. His symptoms increased to entire helplessness; his legs became œdematous; the urine highly ammoniacal, and he died worn out. There was no section of the body.

Although this case is incomplete, yet I think we may trace the peripheral affection of the nerves of common sensation from cold and damp lasting without muscular weakness for seventeen years, and under fresh exposure the nervous centres beginning to suffer, followed by paralysis and all the evils attendant upon ramollissement of the cord. I need not here insist upon the fact, that the nerves do suffer from cold, and that at parts far removed from its direct application, as in sciatica from standing on cold stones.

The following case is given by Dr. Graves:—James Moore was admitted into the Hospital labouring under paraplegia, which he attributed to cold and wet. About a month before admission, he first perceived a stiffness of the great toe of the right foot, afterwards *numbness* and coldness of the sole, and then of the leg as far as the knee, and dragging of the limb in walking. During the progression of the disease up along the thigh, it commenced in the left foot, and, after a few days, he experienced *almost complete paralysis of sensation* in the right lower extremity, and a lesser degree in the left, accompanied by so much diminution of the power of motion as to render him unable to walk without support. About three weeks after the appearance of paralysis in the lower extremities, the little finger of the right hand was attacked with *numbness*, which passed successively to the rest, attended by some loss of the sense of touch and power of grasping objects. He has also had retention of urine, and the bowels were obstinately constipated. There was no tenderness of any part of the spine; he had no pain in the head; his pupils were natural; mind unaffected; pulse, sleep, and appetite, also, natural. "This case," says Dr. Graves, "I am convinced, had its origin in the extremities."

Having thus shown that cases of paraplegia, with prevailing numbness, may arise from causes acting on the nerves themselves, I shall next call attention to a third class of paraplegic diseases, resulting from anxiety, mental depression, irregular practices, and all attended with general diminution of the nervous force.

The relation of the parts of the encephalon to the segments of the cord, is one of great difficulty to determine. I have observed that emotions of a depressing kind generally affect the lumbar portion of the cord very greatly. I have now a friend who has suffered from extreme susceptibility of the whole nervous system, resulting from great intellectual exertion; and he describes to me, that, under the least emotion, the shock felt in the loins is most appalling, seeming to take all the strength out of him. The trembling of the knees in fear is of the same kind. In the year 1820, Dr. Baillie published, in the Transactions of the College of Physicians, "Some Observations on Paraplegia of Adults," in which he states, that where the spine has not suffered from outward violence, paraplegia most commonly depends upon a disease of the brain itself. Now, although I think our present state of nerve physiology, and the facts I have just read, will not warrant us in arriving at so general a conclusion, yet certainly a fair number of cases of paraplegia have an encephalic origin.

Mr. Earle, in his excellent paper on paraplegia, made some most practical remarks on this form of the disease, and is the only writer, so far as I know, who has pointed out the condition of the sensation, as distinguishing it from paraplegia arising from primary affection of the cord. In the thirteenth volume of the Med. Chir. Trans., he says: "Paraplegia dependent upon disease in the brain, generally occurs about the middle or a more advanced period of life, than is usual in diseases of the bodies of the vertebræ, or the intervening fibro cartilages; its progress is more rapid than the slow, insidious approach of symptoms from the latter diseases; the affection is more general, occasioning more or less paralysis of the upper and lower extremities; and this will often take place in a very few days from the occurrence of the complaint. This disease happens much more frequently in men than women; the gait of persons suffering from cerebral affection is peculiar, and very different from that attendant on affections of the spine; it very nearly resembles the vacillating steps of a drunkard. Such paralytic persons are incapable of walking in a direct line; the limbs are loose, and thrown forward with an exertion of the whole body; there is a great consciousness of feebleness in walking, and the greatest difficulty in turning round. The appearance of the eyes often much resembles those of a drunkard, particularly when the patient is at all excited or anxious. The above similitude to the staggering steps of intoxication is readily understood, if we

consider, that it is the temporary disturbance of the brain, from the congestion of its blood-vessels, that deprives the drunkard of the power of directing his steps, and, for the time, induces a state bearing the closest resemblance to paraplegia."

"*Sensation is more impaired* than in spinal affections, when it will often remain perfect after a total loss of the locomotive powers. This impaired sensation is often peculiar, imparting an idea of some foreign body, as a leather glove or stocking, being interposed. The patient appears to feel, if I may use the expression, through a false medium. The limbs are more wasted and flabby, without any spasmodic rigidity of the muscles, which so often occurs in affections of the spine. Although often accompanied with a torpid state of the bowels, aggravated, no doubt, by the impaired muscular power of the abdominal parietis, there has not, in any instance that I have witnessed, been any train of gastric symptoms similar to those which so constantly attend affections of the spine, especially of the dorsal region."

We are not at present in a condition to determine what is the precise state of the nervous system, arising from exhaustion of its energies. It is one which leaves no obvious changes behind it, although its results are often permanent. Losses in trade, reverses of fortune, depressing emotions, too much anxiety, too much study, and many similar causes, may so lessen the whole tone of the system, as to produce anæsthesia with paraplegic weakness, and leave no change behind; or we find, as concomitants, subarachnoid and ventricular effusions, with wasting or other general alterations of the nervous substance.

Although it cannot be denied, that a preponderating weakness of the lower extremities may arise from mere local affections in the encephalon, especially when affecting the parts in the neighbourhood of the spine, yet, as such cases follow the law of local central lesion, in which motion suffers more than sensation, already considered, I need not allude to them here, my object being to point out those cases which militate against this law, and to prove that they have an especial morbid anatomy, consisting, when any appearances are evident, of general and passive changes, of fullness of the larger venous trunks, watery effusions, with chronic and various general states of wasting, hardening or softening, of the nervous substance; changes which, though so seemingly opposite, may yet have the same result on the functions of the parts.

There is good reason to believe, that many of these changes are *results rather than causes* of the loss or diminution of function. We know that we cannot interfere with the function of an organ without affecting its structure. If a duct be tied or obstructed, we get wasting or degeneration of the gland from which it comes, and I would venture to suggest, whether something similar may not occur in the nervous tissue. These cases of paraplegia having an encephalic origin, and characterized during life by prevailing anæsthesia, present to us *general* as opposed to *local* and *isolated* changes of structure, that is, provided there be any obvious appearances at all, which sometimes there are not.

The two following cases are from the abstract of an interesting paper on Paraplegia by Mr. Atholl Johnson, as I find it given in the *Medico-Chirurgical Review*, 1842, and which are classed by him under "Paraplegia, cause not discovered by dissection":—

Thomas Bailey, aged 39, admitted into St. George's with paralysis of the lower extremities; motion is not entirely lost, but greatly impaired. *Sensation entirely lost at the soles of the feet*, becoming less affected as you passed up the legs. Urine and fæces passed involuntarily. States that the attack commenced three weeks ago with numbness of the feet and dullness of vision in the right eye. At present, vision is perfect, and the pupils act naturally. Sloughs on the back. Soon after admission, a cough, with muco-purulent expectoration, mixed with blood, came on. In six weeks, he died.

Post-mortem.—The body was much emaciated; large and extensive sloughs over both hips and sacrum. There was a small quantity of fluid in the upper part of the theca, which had apparently dropped down from between the membranes of the brain. Spinal cord apparently healthy; a slight alteration of colour and consistence was thought to be observed about opposite the first lumbar vertebra. The change, if any existed, was very slight. The sinuses of the brain contained a considerable quantity of dark blood; some fluid in the ventricles. Structure of the cerebrum and cerebellum apparently healthy.

Anne Cook, aged 21, admitted, with palsy of the lower extremities; *sensation impaired, but not altogether lost*; double vision occasionally; incontinence of urine, but not of fæces; sloughing of back rapidly came on, but which, by the greatest care, was prevented from extending. Under the remedies employed she improved gradually for some time, becoming able to retain her urine and fæces, and to move the leg slightly when in a recumbent posture. The double vision still continued, though in a less degree; suddenly, however, the back and hips began again to slough, the legs were drawn up convulsively close to the abdomen, vision became affected to a much greater degree, and there was violent pain in the head. She died, at last, worn out by the profuse discharge from the back. On examination after death, the substance of the cerebrum was firm and natural; it was, perhaps, rather wet when cut into. But little fluid in the ventricles. Substance of the anterior part of the middle lobe of the left hemisphere slightly softer than other parts. The cineritious substance was here of a pale colour; the cerebellum pons crura cerebri and optic nerves apparently healthy. A small quantity of fluid was effused external to the dura mater in the spinal canal, and a very small quantity within the theca; cord quite healthy.

Sometime since I had the opportunity of seeing the following case of paraplegia, which arose, apparently, from mental emotion, and in which no lesion was discoverable after death. I cannot state what was the condition of the sensation.

Mary Hawgood, aged 21, of delicate frame but healthy, was in her usual health until one day a medical man, to whom she had applied on account of a bursal enlargement at the back of the wrist, offered to disperse it. To this, though very fearful, she consented. He struck the wrist several times with a book, and gave her so much pain and mental disquiet that she fainted. The same day she took to her bed, complaining of weakness in her legs; she soon became completely paraplegic, and her back sloughed. After lingering for some months she died, and, on a most careful *post-mortem* examination, no disease could be discovered in the brain nor spinal cord, nor any visceral derangement to account for the paraplegia.

It is in the experience of most to have seen cases of paraplegia in young women, in whom *post-mortem* examination has not shown any local or general disease of the cord. In some of these, congestive derangements of the kidneys have been found, with or without calculus in their pelves, and some have regarded these latter conditions, when present, as the exciting causes of the paraplegia, through impressions on the sympathetic nerves. It is not the object of this communication to enter upon such an inquiry, but I may express my belief, that many of these renal affections in paraplegia are the result of the spinal affection. I do not here refer to those cases of kidney disease and stricture complicated with paraplegia, described by Mr. Stanley, (Med. Chir. Trans., 1833,) in which he believes, that the diseased kidneys communicate an impression to the spinal cord and nerves issuing from it.

The following examples seem to belong to the class which might be termed *encephalic paraplegia*, which I am here considering, and illustrate the general symptoms presented by these cases, especially in reference to sensation.

Henry Chambers, aged fifty-three, was admitted into Guy's with the following history and symptoms:—He is tall and of a spare frame, large well-formed head; attributes his present condition to losses in business, and to irregularities, although of late he has been less dissipated. He has great weakness of memory. There is so much affection of the nerves of common sensation, that in walking he does not seems to touch the ground, and the legs are so weak and faltering, that it is with the greatest difficulty that he can support himself a few steps with a stick. He says he feels without weight, and finds it difficult to keep himself on the ground, for he seems to have a greater tendency to fly than to walk, though, indeed, he can effect the latter but a few steps only.

The hands and forearms are also affected with numbness, especially the former, and there is weakness and awkwardness of movement, but less than of the legs. He can retain or pass at will the urine and fæces, but there is some diminution of power; urine pale, large in quantity. The vision is impaired.

Heat and cold are oppressive. Twilight is more agreeable than full daylight, which is too exciting, and leaves him with less command over his movements. If he attempts to read, the letters soon become confused.

His memory is defective, his few weeks' residence in the hospital seeming to him a lifetime.

Various tonics, as zinc, iron, shower-bath, electricity, were employed without any good result, and he remains much in the same condition.

Sarah Staples, aged 30. In the autumn of 1845, whilst residing in Italy, where she had been for five years, began to complain of languor and indisposition to exertion, which she attributes to sedentary habits.

The attack began by a feeling of numbness in the left leg and right arm; also the vision of the left eye was impaired; in a short time, the other extremities became similarly affected. At this time she could walk and grasp firmly, but could only imperfectly feel the floor, or tell when she held anything in her hand. After her return to England, which was in the spring following the autumn in which she was attacked, she became much worse, and was confined to her bed for five months. Galvanism in the course of the lower limbs restored her. She was then obliged to gain her livelihood by close application to her needle, and her present state is very unfavourable. I have watched her for a year. About two months since (two years from beginning of attack) her speech became faltering, and her eyesight very dim; the right arm and the left leg are the worst, the left arm being not greatly affected; still there is some numbness in the fingers, especially in the tips of the middle and ring-finger.

In attempting to walk, which she can do with slowness and caution, she has no sensation of touching the ground, but seems to tread on nothing. There is considerable impairment of sensation up to the knee, as if some soft and thick substance was covering the surface; above the knees the sensation is good.

The middle and ring fingers of each hand are more numb than the others, and the palm more than the back of the hand; the numbness extends to the elbows. She has power over the bladder and rectum. The various remedies employed have not had any very decided effect. They have consisted of tonics and rest, with counter-irritants.

The peculiar state of the sensation in this form of paraplegia was remarked, as I have said above, by Mr. Earle. There is numbness and an affection of the nerves of common sensation, as if some substance interposed itself between the object and the skin, and the integuments feel as if bandaged. The paraplegic affection is in part owing to the affection of the sensation, so that the patient cannot direct the muscles, rather than to an actual weakness in their contraction. One patient told me he could not walk without looking at his feet, because he felt as if the legs were cut off below the knees, and another because he had no apparent weight. With the numbness there is yet the perception of pricking or pinching of the integuments, and the numbness generally terminates in an undefined manner about the elbows, and just above or at the knees. Power over the bladder and rectum is not lost, except in extreme cases.

There is often pain over the head, some affection of vision, as dimness or muscæ volitantes, noises in the ear; and one peculiarity is that the

most moderate pressure on the nerves, as from lying on the arm in bed, or sitting on the edge of a chair, will very speedily render the nerve completely anæsthetic. In walking, the patients complain of difficulty of keeping on the ground, which seems due to the want of sensation, which is necessary for directing the movement, as well as to the sudden contraction of the muscles. The morbid changes I have spoken of above, are *general* rather than *local*; and, so far as I can find, afford no explanation of the peculiarity of the state of the sensation, although it seems probable such may depend upon disorder in or about the mesencephalon.

ORIGINAL CONTRIBUTIONS.

CASE OF PLACENTA PRÆVIA.

By CHARLES WALLER, M.D., Obstetric Physician to St. Thomas's Hospital.

During the last few days, another case of complete placental presentation has occurred in my practice, which, although terminating fatally, tends to confirm the opinion, that perfect detachment of the placenta will have the effect of arresting instead of increasing hæmorrhage; at any rate it adds one more to the many cases already recorded by various obstetricians, which prove most satisfactorily, that the entire removal of this organ (the after-birth) does not, as was formerly supposed, *necessarily* involve as its consequence an increase of the bleeding. In the present state of our knowledge this is a very material point, which, I think, may now be considered as established. The existence of a contrary opinion has doubtless hitherto prevented many Practitioners from testing the safety of Dr. Simpson's plan, inasmuch as they have been afraid of increasing the severity of the symptoms by any manipulation, except the entire emptying of the uterus.

Case 36.—On the morning of the 10th of the present month, I was requested to see a patient in consultation with Mr. Brydges, of Guildford-street, who gave me the following history of the case:—Mrs. H., a lady about 38 years of age, was the mother of nine children, and had been in a very enfeebled state of health for the last few years. She had borne children very rapidly, and in previous labours had suffered severely from hæmorrhage, the effect of which was long felt, her strength slowly and imperfectly returning. During the intervals of pregnancy, her constitutional powers never completely rallied, she was unequal to even moderate exertion, and was the subject of frequent attacks of syncope; her power of digestion was weak, and her bodily frame emaciated. During the present period of utero-gestation, these symptoms had increased; there was œdematous effusion in the lower limbs, which augmented the difficulty of moving about. About a month since, the patient was alarmed by a sudden gush of blood from the uterus, the quantity in Mr. Brydges's opinion, amounted to about a pint. This loss, though small in comparison with many other cases, affected her greatly. A vaginal examination elicited no certain information as to the cause of the hæmorrhage, as there was no dilatation of the os uteri. The recumbent posture, perfect quietness, and other appropriate remedies were prescribed by Mr. Brydges, and the patient was diligently watched. A slight drain continued until the 10th of April, when another gush took place about 6 o'clock in the morning, not much more profuse than the preceding, but succeeded by most alarming faintness. At 10 a.m., I saw the patient with Mr. Brydges, who further informed me, that the discharge had been sudden, and that since the gush there had been little, if any, blood lost: that the os uteri was beginning to open, and that it was a complete placental presentation. Mrs. H. was lying in a fearful condition, her countenance ghastly, extremities of a marble coldness, and no distinguishable pulsation in the radial arteries. On inquiry, I was told the pulse was always very feeble, the countenance very pale, and that faintness was not unusual, even in her ordinary state of health. I mention this particularly as a necessary point of inquiry in these cases, from recollecting a case which occurred many years since to which I was called: On entering the room, I was struck with the death-like paleness of the female's countenance, but was informed by her friends, that she seldom exhibited any other appearance in her usual condition of health. In the present case, I entertained great hopes that our patient would rally, for although, as I have already stated, the extremities were cold, the trunk of the body was warm, there was no jactitation, the breathing not very laborious, and the pulse, as indicated by the carotid artery, very little accelerated in frequency. Nourishment, in combination with stimuli, was therefore ordered; the yolk of an egg beaten up with brandy was taken, and retained on the stomach, in consequence of which the female was sensibly refreshed, the pulse at the wrist could now be felt and distinctly numbered (100 in the minute), the icy coldness of the hands was giving way to something like returning warmth, and a feeling of improvement was expressed. After waiting about an hour, and finding no return of the alarming symptoms, I determined on making a careful examination to ascertain the actual condition of the parts. The vagina was filled with coagula; on passing these, the os uteri was found considerably dilated, and so dilatable as to allow the hand to be carried into the uterine cavity without difficulty. The placenta was attached all round the lower portion of the uterus, forming the "complete presentation." The bleeding was slightly renewed by this manipulation, but not in any material degree. The head was the presenting part, and version might have been effected with the utmost ease, and the delivery speedily accomplished. I was fearful, however, least, in the exhausted condition of the patient, the sudden removal of the child might produce fatal syncope, and, therefore, determined to separate the placenta entirely from its uterine connexion, believing the present case to be peculiarly suitable for such an operation. (See Vol. xvii., p. 292, column 2.) As the hand was within the uterus this was readily done. The clots from the vagina were also removed, that we might be able to ascertain whether there was any oozing of blood. The excitement produced by this manipulation disturbed the circulation, and, for a short time, the faintness increased. Tranquillity being again restored, and there being no symptoms of hæmorrhage, I left the house, having recommended suitable nourishment to be from time to time administered, under the immediate superintendence of Mr. Brydges. At the expiration of three hours, I again saw the patient, and was gratified to find everything going on as favourably as we could reasonably expect. No bleeding, no return of the alarming syncope; the pulse distinguishable, though feeble; the nourishment had been retained; slight labour pains had supervened, and the head evidently descending. As the liquor amnii had not been discharged, the finger was introduced, and the membranes ruptured. In consultation, it was determined to pursue the same plan, the existing symptoms warranting us in expecting a favourable termination of the case, and I left the house with the hope that all would be well. The result, I regret to say, did not confirm the opinion. About eight in the evening my attendance was again requested, when Mr. Brydges informed me that the patient had vomited since my last visit, and now retained nothing on her stomach—that for the last hour the pains had ceased, or nearly so—and that no perceptible advance in the labour had been noticed for two or three hours. On examination, the head was felt to be low down, nearly resting on the perinæum, and the parts thoroughly dilated. We, therefore, decided upon delivery; and, as the child must have died soon after the separation of the placenta, (supposing it to have been living previously, of which, however, we had considerable doubt,) I thought it best to perform the operation of craniotomy, that the patient might be saved the pain and pressure, which would have otherwise been unavoidable.

No difficulty was experienced in the delivery, and no hæmorrhage occurred. The uterus contracted tolerably well; but the patient became colder and fainter, and in about three quarters of an hour after the birth of the child, breathed her last. It is worthy of remark, that, although this unfortunate woman was, during the entire day, in a state of faintness, yet actual deliquium did not once occur.

Had the system not been so completely prostrate, I have no doubt the termination would have been favourable, as 14 hours had elapsed between the cessation of the bleeding (for there was scarcely any after the morning gush,) and the death of the patient.

Finsbury-square, April 7th, 1849.

RESEARCHES ON INVOLUNTARY SEMINAL DISCHARGES, AND THE DISORDERS ATTENDING THEM.

By H. J. M'DOUGALL, Surgeon, Fellow of the Royal Medical and Chirurgical Society; formerly House-Surgeon to University College Hospital.

(Continued from page 414.)

DEFINITION OF SPERMATORRHŒA.—SYMPTOMS OF SPERMATORRHŒA.

Before proceeding to describe the symptoms of spermatorrhœa, I wish to say a word or two on the term itself. By the term spermatorrhœa, I understand any and every form of seminal discharge which occurs involuntarily, or, in other words, which is not induced, either naturally, as in coition, or unnaturally, as in the practice of masturbation, or of other vices, to which I need not allude more particularly here. Involuntary discharges may occur in continent people rarely during sleep, accompanied by dreams, vigorous erection, and great sexual plethora,—the slightest form of the affection,—a form which may be consistent with a healthy state of the system,—or they may occur during sleep, frequently, without lascivious dreams, or with dreams of a different character, unconnected, or only imperfectly connected, with ideas of the other sex, without complete erection, and without venereal orgasm,—the commencement of the serious nature of the disease. So much for *nocturnal pollutions*, or the first form of spermatorrhœa. The second form of spermatorrhœa, to which the name of *diurnal pollutions* has been applied, is generally a much more serious state of things than that I have just described. Diurnal pollutions differ from nocturnal ones, inasmuch as they occur in a state of complete consciousness, although, at the same time, the discharge is perfectly involuntary in its character. Diurnal pollutions admit of being classified under three heads,—1st. Pollutions occurring involuntarily, or without any external interference with the organs, and excited by lascivious thoughts, or by the sight of persons of the other sex, even without dwelling on lascivious ideas; 2nd. Pollutions occurring at stool, a discharge of semen taking place at the time of, or immediately after, evacuating the fæces; and 3rd. Pollutions that occur when making water,—the spermatic fluid flowing away with, or immediately following, the last drops of urine. This last form of spermatorrhœa has generally been considered, by all who have written on the subject, including M. Lallemand, as by far the most serious,—and so, perhaps, it may be in its effects on the economy; but, according to my experience, it is nearly approached, even in this respect, by the pollutions that occur at stool, and is generally much easier of cure than that form of discharge, when of an aggravated character. All these forms of pollution may occur together in the same individual,—indeed, I have repeatedly seen this the case,—and then the state of affairs is serious. It is more frequent, however, that two of the forms should occur simultaneously,—nocturnal pollutions and discharges at stool being, I believe, the most frequent concomitants in the early and middle stages of the disease, and discharges at stool and after making water occurring together in the latter stages. Having prefaced thus much, in order to make my future remarks intelligible to such as are entirely ignorant of the subject, (and I have reason to believe such are not few,) I shall leave the further consideration

of the different forms of pollution, and of the numerous minor varieties occurring in each, until I come to treat of the local symptoms of the disease, and its effects on the organs actually implicated. I now propose to enter on the consideration of the symptoms of the disorder, and, as I proceed, I shall pass in review the varieties of deranged action to which the different organs of the body may be subjected by the losses I have described. I shall consider these derangements in the order in which, according to my experience, the animal functions are most frequently acted on.

SYMPTOMS OF SPERMATORRHŒA.

The symptoms of spermatorrhœa may be arranged under two heads or classes—those affecting the system, or the *general symptoms*, and those specially affecting the organs of generation, or the *local symptoms*. I shall first take into consideration the symptoms affecting the system generally.

There is not a single function in the animal economy, which may not be disordered by long-continued involuntary seminal discharges; such disorders generally appearing to be connected with a diminution of the energy and power of the organ implicated, together with an increased nervous susceptibility. The functions thus become more susceptible to disorder, whilst at the same time the organs present less tonic power to resist slight causes of derangement. In advanced stages of the complaint there seems to exist a decrease of nervous energy in the system generally, probably produced by the debilitated condition of the nervous centres; and in this state of things none of the functions are performed with their due vigour. In earlier stages, the depressing losses are, in the majority of cases, quickly repaired; the functions of nutrition being increased in activity, so that the depressing effects of the disease are by no means so keenly felt at first. When permanently and long established, however, the continual drain on the system is not so easily made up; partly from its extent, and perhaps, from the highly-elaborated nature of the matter lost, and partly, perhaps chiefly, from the depressed and disordered state of the reducing functions of the stomach. In by far the majority of these cases the patients are unaware of the presence of such a cause of derangement. The medical attendant, if he thinks it necessary to ask at all on the subject of the sexual functions, is generally satisfied with the assurance that no excesses, or abuses, are being carried on; and, in many cases, is still further thrown off his guard by the patient's stating that, although at the commencement of the derangement of his health he suffered from nocturnal discharges to a considerable extent, these have now either entirely left him, or occur very rarely. No suspicion exists of these discharges having been replaced by others of a much more serious nature, and at the same time very difficult of ascertainment. The patient's disorders are thus necessarily allowed to progress, the cause being unchecked, and, indeed, often, I believe, being aggravated by the remedies used to restore to a healthy state distant organs, whose only derangement arises from the depressing influences of the drain on the system, and the case goes on from bad to worse until both patient and surgeon become disgusted with want of success, and the former falls a prey to homœopathists, hydropathists, and advertising nostrum-mongers of all classes. The patient, if he escape from these charlatans with life, sinks down a miserable wreck, unfit to perform any of the duties devolving on man, and making all about him unhappy by his constant sufferings and bewailments. Those of my readers who are in extensive practice will, I am sure, readily admit that they have met with a class of cases such as I have described, which have baffled all their skill, and have almost shaken their confidence in the remedies of the Materia Medica. By far the majority of these cases, occurring in the male sex, in which they are much the most frequent, will be found, on a little careful inquiry, to depend on involuntary seminal discharges. The subject is a delicate one, and difficult of approach by the medical man, especially as all allusion to the state of the genital functions has hitherto been almost entirely omitted during the intercourse of the patient with his professional adviser; it is one of first-rate importance, however, in many cases involving the question of years of happiness or misery; and I cannot agree with those practitioners who look upon *all* these disorders as "the results of a degrading vice," (which they are not,) and *therefore* consider them unworthy medical attention. These cases are invariably hypochondriacal, and *bore* us; hence, perhaps, arises some of the virtuous indignation which has been expressed against them.

The head and the stomach are generally the organs, the functions of which are first deranged, by spermatorrhœa; the head suffering first in the majority of cases.

The symptoms of spermatorrhœa, arising from a deranged condition of the cerebral functions, may be divided into two classes—*physical* disorders and *mental* disorders. Of the physical disorders, headache, in the widest sense of the term, is one of the most constant. This may vary in degree, from a sense of uneasiness and heaviness, sometimes described by patients as a sensation of emptiness within the cranium, to the most violent and excruciating pain. The former is a constant sensation, aggravated after each discharge, and attending advanced stages of the disorder. The latter attends the earlier stages, frequently recurring at regular intervals before the physical powers are materially weakened, and frequently is produced by unrestrained masturbation, as the following case will show.

I was consulted in the spring of the year 1845, by the friends of a youth, aged 16, in consequence of his having, during two years, suffered from intense headache, of a periodical character. Various remedies had been tried—tonics especially, including the mineral acids, the various preparations of bark, steel wine, generous diet, with stimulants, &c., with only occasional and temporary benefit. The complaint was at one time supposed to arise from debility, the result of rapid growth; at another time from ague; and, at another time, from liver or stomach disorder. The patient described the access of these headaches, as commencing with general dimness of sight and dizziness, very slight at first, and giving the sensation of looking through a slight fog. This then increased. Sometimes the whole of the vision of one eye would become obscured, as though a thoroughly black and opaque object had been drawn before it. Sometimes only half the pupil seemed to be obscured—frequently the outer half; but affecting all parts. This generally commenced in the left eye, and was attended by a dull sense of aching. The right eye would then become similarly affected, and, on a few occasions when I saw him during the paroxysm, he complained of being perfectly blind in both eyes from the same cause—this blindness going off as though a veil were being gradually removed, either sideways, or drawn downwards. He never had flashes of light; muscæ volitantes tormented him occasionally for a few minutes before the attack. The giddiness generally increased up to this point, so that the patient could not cross a room without staggering; and on one or two occasions, when the attacks came on in the street, he was obliged to hold by railings until the dizziness went off. This state of things generally lasted from half an hour to two hours, the pain in the eyeballs and frontal region becoming more and more intense. The period of the duration of the attack, however, depended much on the patients being left quiet and obtaining sleep. It invariably ended in a deep and sound sleep of two or three hours' duration, after which he awoke perfectly free from all his symptoms, much refreshed, and with a voracious appetite. These headaches occurred generally every second day, sometimes every day, and sometimes with an interval of three days. Occasionally a month passed without an attack, after which the complaint returned generally with increased violence. At first, when I saw this case, I did not suspect its origin, and I commenced pretty much the same routine of treatment which had been previously used, adding salt water shower baths, the sea-side, and such other means as seemed most appropriate. The patient's father one day mentioned to me that his son's linen was always much soiled. This immediately led me to suspect masturbation. A strict inquiry, after explaining the injurious effects of the habit, produced a full confession of fearful abuses, masturbation being practised sometimes as often as three times daily. The patient had learned the habit at the age of thirteen from an older boy, and practised it during eight or nine months, as well as he could recollect, before any emission occurred. At first he was unaware of the bad effects of the habit, but he admitted that he had latterly strongly suspected it to be the cause of his headaches, and that he had several times desired, but had not the courage, to confess the whole, either to his father or to myself. He remarked, with an air of reproach, that had I questioned him, or even hinted at the subject, he should have confessed all. As it was, he doubted his power of leaving the habit off entirely, and begged that some steps might be taken to prevent his recurring to it. This was effectually done, by placing him immediately under the care of an elder brother, to whom he was much attached, and who scarcely left him night or day for many months. The result was perfectly successful. The headaches never once returned after the habit was broken off. The patient improved in health and grew stout, and is now a fine healthy young man, equal to any exertion, either mental or bodily.

This gentleman has since repeatedly assured me, that he is now convinced of what he previously more than half suspected; namely, that the severity and frequency of the headaches invariably increased in the same ratio as the masturbation; and he says, he also believes that the slight remissions in his malady were not due to the remedies used, but to his having abstained from abuse for a few days occasionally.

This young man had the advantage of a sound constitution and healthy parents. He was well made, although slight, and the genital organs were properly formed. He *was taught* the practice of masturbation. Thanks to the natural strength of his constitution, and the power of his genital system, he did not suffer from involuntary discharges after the practice of masturbation was abandoned. During the intervals of the headaches he was able to apply his mind with considerable facility, and made good progress in his studies.

The following case contrasts with the above in some points, whilst it agrees with it in others, especially in the form in which the effects of the seminal losses first showed themselves. R. T., aged 19, at the recommendation of the patient in the former case, sought my advice for a somewhat similar affection in August, 1846. He had spontaneously learned the habit of masturbation at the age of 12, and practised it two years, as far as he remembers, without emission occurring. Ejaculation taking place one day, however, he fainted, and believes he remained faint for some time. This frightened him, and he determined never to have recourse to the practice again. A few months after this, emissions began to occur during sleep with dreams. These, at first, happened about once a fortnight, but gradually increased in frequency, until, at the age of 17, they frequently occurred two or three nights following. They were attended with little pleasure, and with imperfect erection and ejaculation, the discharge seeming to run from him. About this time, he first began to suffer from headache in the frontal region, coming on much in the same way as I have detailed in the previous case. It was always relieved by sleep. The patient was naturally of a weakly constitution. As an infant, he had been brought up by hand, and, as a boy, he had never been strong enough to join in the sports of boys of his age. In addition to the paroxysmal headaches, he had a constant sense of uneasiness and vacuity in the frontal region, with often a dull aching behind the eyeballs. His memory was much impaired, and he was unable to apply himself to any kind of reading. He was pale and emaciated and peculiarly hollow-eyed. From the age of eighteen he has not been

much troubled with nocturnal emissions. He never has had sexual intercourse, and scarcely ever now experiences any erectile power. Remembers to have had one nocturnal emission about a month ago, but does not think he has had any since, although he suggests that sometimes he thinks the discharge takes place unconsciously during the night. Knows nothing about any other form of discharge. Feels very restless, but at the same time very languid, and "as if his legs did not belong to him." Bowels at one time costive, at another relaxed. Remarks that "he always feels worse after going to stool." The headaches now occur every second day, generally beginning in the morning about eleven, and continuing for about three hours, unless he sleeps. They are *always relieved by sleep*, and he always awakes hungry. His appetite is good generally. Assures me that he has never practised masturbation since the occasion on which he fainted. Does not believe he ever practised it oftener than three times in a week, and that was before emission took place.

On examining the genital organs in this patient, I found the erectile tissues scanty, but the prepuce long and curled up in front of the penis. On drawing it back the corona of the glans was found to be covered with sebaceous matter to a great extent, and the whole surface of the glans, after this had been removed, was found to be highly sensitive and irritable. The testicles were small and soft, and the scrotum slightly relaxed. He had a variocele on the left side, of which no notice had hitherto been taken.

I decided on taking no steps in the treatment of this case until I had satisfied myself whether diurnal pollutions were or were not present. To ascertain this, therefore, I gave the patient instructions to watch carefully for the passage of any matter from the penis while at stool, having made water previously, and to preserve anything that passed between two pieces of glass, according to my directions. This was easily effected, as by reason of the length of the prepuce the discharge from the urethra caused by the passage of a stool did not escape as usual. The patient was also requested to preserve separately the urine passed on each occasion during three days.

On his next visit, August 26, he stated, that every time he went to stool something of a milky nature passed from the penis. Portions of this fluid he had saved, on two occasions, between glasses, as directed. On placing these glasses under the microscope, they were found to contain multitudes of spermatozoa in the dried matter between them. This was the case with both specimens. The patient also brought nine bottles of urine for examination. Three of these had been passed at night and three in the morning. The others had been passed previous to going to stool. These specimens varied much in their specific gravity, from 1020 to to 1035, those passed in the morning being the highest. They were all of an acid re-action, and all contained more or less of a whitish flaky deposit, which proved to consist of large octohedral crystals of oxalate of lime and epithelium. In two of the morning specimens, spermatozoa were abundant; in the others, none were detected. Several of the specimens contained a considerable excess of urea.

The treatment of this case was ultimately successful. It was very tedious, however, and, as I may possibly refer to it again, when describing the treatment of spermatorrhœa, I shall only mention the heads of it here. The first thing done was to remove the whole of the curled up and hypertrophied prepuce. This was effected by passing a grooved open-ended director under the prepuce, and running a straight sharp pointed bistoury along the groove, bringing the point out through the skin, as far back as possible, and then cutting forwards, so as to divide the foreskin far back on its upper surface. The two angular flaps were then removed by two rapid sweeps of the knife, and the cut edges of skin and mucous membrane brought together by three fine sutures. This was done on the 27th of August. The extent of cut surfaces arising from the hypertrophied condition of the removed prepuce confined the patient to his bed for several days. Care was taken to remove the sebaceous matter, and within ten days there was a considerable change in the patient's condition. The headaches, although still present, were by no means so severe, and at the end of the second week, four days passed without a paroxysm.

On the 15th of September, the parts were all but healed; the bowels being confined, however, considerable straining took place at stool; a large quantity of semen was passed, and in the afternoon the headache returned with all its violence. The same thing happened two days afterwards. On the 18th of September, having introduced an exploring bougie with considerable difficulty, giving the patient much pain, I decided on cauterising the urethra. A nocturnal emission of healthier character took place the second night after the bougie. The patient also expressed himself as having experienced a sense of comfort after its passage,—a feeling as though some uneasiness had been removed from the urethra by the bougie. A slight relapse of pain in the head followed the nocturnal emission. On the 22nd of September, I practised cauterisation of the urethra with considerable difficulty, on account of the irritable state of the parts. A good deal of pain followed, with a few drops of blood. This continued after each act of micturition for several days. A considerable bloody and muco-purulent discharge was set up from the urethra, which continued nearly a week. A nocturnal emission ensued on the night of the 27th, with an erotic dream and more sensation, although a good deal of pain was occasioned by the erection; no headache followed. On the 30th of September there had been no return of headache and the effects of the caustic had nearly left the organs. The patient was decidedly better. The oxalate of lime, which had continued in the urine up to the date of the cauterisation, and for two or three days afterwards, had entirely ceased. Repeated examinations of the urine failed to detect any crystals of this deposit. The epithelium also had notably diminished. The patient then left town to spend a few weeks at the sea-side. He returned on the 4th of November in much better general health. The headaches had not returned, but the dull sense of weight and vacancy was still present. There was no trace of oxalate of lime in the urine. Nocturnal pollutions had returned, however, and that rather frequently,—twice in the last week. For this, the introduction of a full-sized wax bougie was practised, the instrument being retained in the urethra a few minutes, or until spasm was excited. The urethra was still slightly irritable, and great benefit was derived from the use of the bougie, repeated twice a week for several weeks. The patient gradually improved in health, and in March, 1847, was able to return to his employment. At this time emissions occurred at night about once in every third week, and were attended with vigorous erection, erotic dreams, and vivid sensations. The erectile tissues had considerably increased in size, and the testicles had become larger and firmer. The varicocele of course still existed; this is now, however, of little trouble, as the patient wears one of the excellent varicocele rings invented by Mr. Wormald, which keeps up the distended veins with great comfort, and without increasing the heat of the parts, as is done by the common suspensory bandage.

Difference of constitution was probably the cause of the different effects of masturbation in these two cases. The first patient suffered no permanent injury to the genital organs from the most unbridled abuse; the second brought on spermatorrhœa, with all its evils, by masturbation practised at most three times a week, and left off as soon as emission commenced. Both patients commenced the practice before puberty. The one was taught it, the other learned it spontaneously. The organs of the one were vigorous, those of the other weakly, with an elongated prepuce and a varicocele. Both were somewhat similarly affected at first; the headaches in one clearly arising from masturbation, and ceasing with the habit; those of the other being brought on by unsuspected in voluntary discharges, and ceasing only when means had been taken to cut these short. In the latter case, also, there was the serious complication of a deposit of oxalate of lime, which ceased in a mysterious manner after the application of the nitrate of silver. Several similar cases have since come under my notice. I have selected these two cases from among many others, of which I have records, to show that violent and acute headache may be caused by excessive seminal evacuations. This, I believe, usually occurs in young people, and the pain generally puts on an intermittent character. In all the cases I have seen it has invariably been relieved by sleep, and has generally commenced with the giddiness and partial temporary amaurosis, which I have described in the first case. Once or twice also patients have complained of numbness in one hand and leg, lasting a few minutes only, and giving a sensation of the limb being asleep. All these symptoms pass off as soon as the paroxysm is fully established.

I may add, that there was nothing resembling ague in these cases, excepting the periodicity of the headache,—that there were several circumstances distinguishing it from neuralgia, which, however, may be produced by spermatorrhœa, as I shall show hereafter.

In my next paper I shall describe some of the physical symptoms of spermatorrhœa, which affect the head in persons more advanced in life.

CASE OF CHRONIC LARYNGITIS.

By HENRY SMITH, formerly House Surgeon to King's College Hospital.

I was requested by my friend Mr. Fullford, Dec. 6th, 1848, to visit with him at Brixton a gentleman, aged 40, who was supposed to be labouring under some laryngeal disease, and who had suffered for many months. I found the patient, with the symptoms of some very severe disease of the air passages. He was unable to articulate except in a whisper, there was a constant irritative cough of a tracheal character, and a copious and frequent expectoration of mucus. He was very thin, the face pale, but not anxious, spirits excellent. There was hardly any difficulty of breathing, and the appetite was pretty good. He complained of no pain when I made pressure over the larynx and trachea; pulse very small, about 90 in the minute. His history is the following:—More than six months ago his voice began to fail, and he had occasionally pain over the region of the larynx. Still his health continued pretty good, although the symptoms of laryngeal disease had increased. He completely lost his voice some weeks ago. He had consulted some of the most eminent physicians, some of whom considered the disease to be in the larynx alone, whilst others thought that his lungs were tuberculous. He had tried most remedies without benefit, counter-irritation by the most powerful means being employed to a great extent. As his symptoms became worse, and he could get no relief from any measures, and he was evidently getting weaker and thinner everyday, Mr. Fullford proposed that an opening should be made in the trachea, and that a solution of nitrate of silver, should be applied to the larynx, through the wound, as recommended and practiced by some French authorities; and it was for the purpose of performing the operation, if I should think it advisable, that I was called upon by that gentleman. The patient was willing to undergo anything which would give him a chance of cure.

The appearance of the patient induced me to examine the chest with care, and, on applying to my note-book, I find the following:—He can expand both sides of the chest pretty freely. On applying the ear, the air is heard to enter the left lung pretty clearly and healthily, there is, perhaps, a slight crepitus audible at the end of the inspiration in front, a few inches below the clavicle. This side sounds well on percussion before and behind. The right side in front sounds pretty clearly on percussion, but not so well as the other, and behind about the lower angle of the scapula, there is evidently a diminution in the resonance. On applying the stethoscope in front, the air is heard to enter but feebly, and behind a crepitus is audible,

just about the lower angle of the scapula. There is no enlargement of the tonsils, nor any ulceration of the throat visible.

The effect of this examination was sufficient to induce me to suspect that there was tuberculous deposit in the lung; at the same time the amount of disease in the larynx or trachea could not be ascertained, in consequence of the absence of all pain over those parts, and also from the presumed existence of tubercle in the lung. There was no urgent distress, at least none to call for immediate interference; and I therefore declined to resort to the operation in question; but he was ordered to inhale the vapour of iodine and hemlock, and to take a small dose of hyd. cum cretâ, with quinine and henbane twice or thrice a day, and to have good nourishment. He continued under Mr. Fullford's care.

In about a month I saw this patient again. He remained much in the same condition as when I first saw him, but the tracheal irritation was lessened by the inhalation, although it was severe at times; he did not appear to lose flesh to any great extent; he did not perspire; there had been some diarrhœa which was attributable to the pills. I again carefully stethoscoped him; and I found, in addition to the signs I had before noticed, a loud and prolonged expiratory murmur inside the right scapula, accompanied with slight crepitus. I was now pretty well convinced that the patient was suffering from a slow and hidden pthisis, but it was evident that the tubercles were by no means in an advanced stage; and it was thought, that gently affecting the system with mercury, given in conjunction with quinine, might have some influence over the disease in the lung, as well as, at the same time, check the ulceration of the larynx. He was, therefore, ordered to continue a small dose with quinine.

I saw this patient from time to time; but the symptoms did not give way, and it was too evident that he was getting gradually weaker; yet the symptoms of pthisis were by no means marked—all of them being referred to the larynx—an increased dullness, however, between the scapula, convinced me of the existence of tubercle. He took cod liver oil without the least benefit; he got weaker and weaker, and gradually wasted away, and sunk quietly, like the candle in its socket, on March 11th; a few weeks before death, the tracheal irritation had much subsided, and instead of this, he was troubled with considerable difficulty in swallowing. We were most fortunately enabled to make a *post mortem* examination. On opening the chest we found that the lungs were much diseased. Tubercles were scattered over the upper and posterior portions of both lungs; in the middle and posterior lobe of the right lung they were numerous. On the left side there was hepatization of the upper and back portion from pneumonia, which had probably come on a few days before death. He had complained of some pain in that side latterly; at the lower part, and in front, the lungs were very healthy. On taking away the larynx and slitting it up, we found one of the most beautiful specimens of disease of that organ ever presented to our notice. The inner surface of the greater portion of the epiglottis, and of the whole of the cavity of the larynx presented marks of chronic and extensive ulceration, and thickening of the mucous membrane. But the most striking appearance observed was a great thickening of the membrane just above the ventricle on the right side; so that when we looked into the entrance of the tube, this was seen as a protrusion, half blocking up the opening of the glottis. The trachea, with the exception of a very limited space at the top, was perfectly healthy. This case presents features of interest both to Pathologist and practical Surgeon. In the first place, it shows how insidously disease within the chest may go on to a fatal termination, when accompanied with a morbid affection of the air-passages, without forcibly exciting any suspicions of such existing, and without producing those symptoms which are ordinarily the concomitants of this fatal disorder. It will be seen, too, what a vast amount of disease there was in the larynx, and how comparatively few symptoms there were (considering the amount of structural change) to mark it;—the whole of the surface ulcerated, and the entrance of the glottis nearly blocked up—yet hardly the slightest dispnœa during the whole term of illness. From the time I saw the patient until his death there was no pain over the larynx—certainly there was complete loss of voice, which was well accounted for by the morbid appearance of the vocal chord.

To the Surgeon I hope it will prove of equal interest, for it shows how careful he should be in resorting to any operative process, in these cases of chronic ulceration of the larynx, without carefully examining the condition of the lungs. It is very evident that any operative proceeding in this instance, to say the least, could only have produced temporary benefit, and would have ultimately been unsuccessful. Had the lungs been healthy, the proposition of my friend, Mr. Fullford, might have been carried into effect with success, as the the local application of a solution of nitrate of silver would, perhaps, have caused the cicatrization of the ulceration, and, by a false opening in the trachea being present, the larynx would be at rest, and the parts would have an opportunity to heal up. And it is a question of interest, as to how far this plan of treatment might be followed, and what success might accrue from it, in certain intractable forms of ulcerated larynx. There can be no doubt that the mere opening in the trachea may be of service, as the diseased parts are kept at rest, and thus the Practitioner, aiding Nature, is enabled to do more by his remedies. We see the same thing in certain affections of the urethra. A false opening being made by the surgeon, which allows the urine to come away, the unhealthy portion of the tube is kept at rest, as it were; at all events, is not irritated by the presence of the fluid, and then the surgeon can do in two weeks what he otherwise would not be able to perform in two years.

As regards the applicability of the second part of the operation, the introduction of the solution of nitrate of silver through the wound to the surface of the larynx, there is room for doubt. I have had no experience of it myself, nor have I ever seen the practice put in force, although I am aware it has been done in France (recommended, at least, I think, by Bretonneau). I should consider it, at least, a very troublesome, if not hazardous, proceeding for the patient. Perhaps some of my readers, who have had any experience of this remedy, will oblige me by making it known.

13, Caroline-street, Bedford-square.

ON THE TREATMENT OF TOOTH-ACHE, WITH PRACTICAL REMARKS ON THE REMEDIES TO BE EMPLOYED FOR ITS CURE.

By C. STOKES, M.R.C.S.

For the successful treatment of this painful malady, it is essential to consider the pathological condition of the affected tooth; without this guide our treatment is uncertain, or, if successful in relieving pain the relief obtained is, at best, but the result of chance; on the other hand, if we bear in mind the indications which I have described as being almost constant in their occurrence in the three several stages of toothache, we can decide with tolerable certainty when a painful tooth can be retained with a prospect of future usefulness, and where it must be sacrificed to obtain relief.

In the early stage of dental caries, before severe pain is experienced in the tooth, or symptoms have appeared by which we are led to infer that the pulp cavity is exposed, the remedial measure consists in removing, by appropriate cutting instruments, the dead and decomposing dentine, until we have obtained a healthy surface; or, in other words, reached vital and unimpaired dentine. In the accomplishment of this operation a cavity is necessarily formed in the body of the tooth, which requires to be protected by a metallic plug, permanently adapted to its configuration. The metals in general use for this purpose are gold, tin, silver, and lead. Of these, the first is incomparably most suitable for the formation of a solid compact plug adapted at once for assistance in mastication, as well as for the exclusion of the oral fluids. This method of treatment is specially applicable to the early stages of dental caries, it is found to be practically effective, and teeth similarly treated have been restored to the integrity of their functions for an indefinite number of years.

But, when toothache has declared itself, a plug of a permanent nature can only be adopted, after the pain is completely subdued; if we attempt to accomplish it on any other terms, we shall be defeated by the sufferings of the patient; on the other hand, care is requisite to avoid the inference, that from the absence of pain, during the excision of the dead dentine, the tooth is capable of being immediately filled. If the secretion to which I have alluded as occurring in the second stage of odontalgia, is discharging from the pulp cavity, the check thus given by the plug to its free exit will produce, in a few days, very severe suffering, although no pain of any moment may have been experienced during the operation.

In my former paper I divided toothache into three well-marked stages or periods.

1st. In which it is caused by simple exposure of the pulp cavity, with diagnostic signs of that condition.

2nd. In which, super-added to this condition, we have also a discharge from the pulp cavity.

3rd. In which considerable pain occurs when either vertical or lateral pressure is applied to the tooth, accompanied by a slight elevation of it from its socket, after several hours of repose.

Of these three stages of odontalgia, both the first and second are within the reach of remedial measures. In the third stage permanent relief is only to be obtained by the loss of the tooth; extraction is indispensable to prevent the recurrence of pain. The inflamed pulp, or "nerve," as it is ordinarily termed, being the principal, if not the only cause of pain in the first stage of odontalgia, the indication is obviously to reduce its extreme sensitiveness—speedily, effectually, and with the least possible amount of pain; hitherto the agents employed for the accomplishment of this object have been, generally, so unsuitable, that they have fallen deservedly into disuse. Thus the employment of red-hot wire, the application of either the concentrated nitric or sulphuric acid, the potassa fusa, &c., is now happily obsolete,—the injury frequently received by the soft parts from their use compelled their abandonment. For the removal of pain, as well as for the destruction of the exposed pulp, the combination of a very minute portion of arsenic, not exceeding the twentieth part of a grain in combination with muriate of morphia, and creasote is invaluable; by its use we can check with certainty the torture of toothache when existing in the first stage; and I do not hesitate to affirm, from an experience extending over a multitude of cases, that this remedy may be regarded in the light of a specific. I apply it on a very minute portion of cotton wool to the sensitive portion of the tooth, and its retention *in situ* is maintained by softened wax.

In twenty-four hours after its application, the dead dentine can be cleared away without pain. I recommend the pulp cavity to be completely laid open, the pulp to be broken down, and, if not too painful at the time, to remove it; but should any pain be complained of during this operation, it is advisable to desist, and renew the arsenical combination. The tenderness will have subsided by the following day, when the operation may be completed, and the tooth be plugged with gold, or any other suitable substance, in the usual way.

The second stage is most efficiently treated by primarily subduing the pain and tenderness by the use of the arsenic, morphia, and creasote. I then recommend the excision of the carious dentine, which being accomplished, that morbid condition of the pulp cavity, which gives rise to the secretion perceptible in this stage, is to be changed to one of health. To effect this change, I inject daily into the pulp cavity a weak solution of the nitrate of silver in distilled water, or an aqueous solution of alum

of a moderate strength. The restoration of a healthy action depends much upon the amount of organic derangement; but, under ordinary circumstances, the daily injection of either of these solutions, for about a week or ten days, is sufficient for the attainment of this object.

In the third stage the general principles of antiphlogistic treatment are to be followed; thus the application of leeches to the gums, the use of sialagogues, and counter-irritants, with the exhibition of saline purgatives, combined with attention to the general health, are the remedies which occasionally afford relief. In this stage, however, experience gives but little encouragement to hope that permanent benefit can be derived from any remedy other than the loss of the affected tooth by extraction. This is the plan of treatment which, from very extensive experience, I can confidently recommend for adoption. A line of distinction is now drawn between teeth which can be saved and teeth which are not capable of being saved,—a distinction which derives importance from the check which it gives to the unnecessary sacrifice of these invaluable organs in the human economy, whether we regard them in relation to their influence in expression, their utility in maintaining health, or their indispensable necessity to the orator.

65, Lower Brook-street.

HOSPITAL REPORTS.

ST. BARTHOLOMEW'S HOSPITAL.

CASES UNDER THE CARE OF E. A. LLOYD, ESQ.

Reported by T. M. GIRDLESTONE, Esq., M.R.C.S. Surgeon to the Blenheim-street Dispensary. Formerly House-Surgeon to St. Bartholomew's Hospital.

DISLOCATION OF THE RADIUS AND ULNA BACKWARDS. REDUCED THIRTY-ONE DAYS AFTER THE ACCIDENT.

Mary T., aged 20, a robust and muscular person, residing in the country, injured her right elbow by a fall from a pony. The accident was followed by pain, considerable swelling, and loss of motion in the joint. A surgeon in the neighbourhood, believing it to be only a sprain, treated it accordingly with lotion and leeches.

When she came to the Hospital, on August 4, 1847, the joint was swelled, and the arm was semiflexed, but she had gained a power of flexing and extending it to a slight degree. On a careful manipulation the nature of the injury was discovered.

Reduction.—She was placed on a chair, ether was administered, her scapula was fixed, and extension from the wrist was made by pullies, so that the arm was straightened. When the extension had been kept up for eighteen minutes, the bones returned to their natural situation; the arm was then flexed and bandaged to a bent splint.

Slight pain and increase of swelling followed the reduction. This was treated with leeches and cold lotion. Passive motion of the joint was commenced in a week.

She left the Hospital on Aug. 24. I saw her in Oct. 1847, the use of her arm had gradually improved, and she had considerable motion in the joint.

FRACTURE OF THE RIGHT SIDE OF THE SKULL, AND PARALYSIS OF THE LEFT SIDE OF THE BODY. EXTENSIVE LACERATION OF THE RIGHT HEMISPHERE OF THE BRAIN, CAUSING DEATH.

Francis Green, aged 3½, was brought to the Hospital on May 26th, 1848; he had been struck on the side of the head by a flower-pot, which fell from the top of a house.

The right side of his head was very much swelled; the skin was tense and bruised, so that no fracture could be discovered, although a careful examination was made. The child frequently moved its right arm and leg, but not the left; though a pinch on the left side was evidently felt, and followed by a slight movement. Its mouth was drawn to the right side, both the pupils were active, the face was pale, the pulse quick, the breathing regular and quiet.

He was ordered to have his head shaved, and to have a purgative administered.

A few hours after his admission he vomited several times; the vomit was stained with blood. The bowels acted; the pulse was 112; the temperature of the body natural.

May 27th.—He remains in the same state as yesterday, and has taken no food. It was now thought that a slightly-projecting edge of bone could be felt about two inches above the right ear. An incision was made through the scalp; in this situation an extensive fracture of the skull was exposed, and a quantity of coagulated blood, and several fragments of brain escaped. The child remained insensible, and died during the night.

Post Mortem.—The fracture was confined to the right parietal bone. The greater part of the right hemisphere of the brain was completely broken up, and a portion of it had escaped; at this situation there was a quantity of effused blood, which had most likely pressed on the brain before the incision in the scalp was made, which allowed some of it to escape. The left side and the base of the brain remained uninjured.

Remarks.—In this case, severe injury to the brain was followed by symptoms of a comparatively mild nature, and not sufficiently characteristic to point out the injury. The hemiplegia naturally led to the supposition that the brain was suffering unnatural pressure; yet it was remarkable that this should be accompanied by vomiting and sensibility of the iris in both eyes. The treatment of course was, to remove, if possible, the injurious pressure from the brain: with this view, the incision was made at the point where the fracture had been discovered; but the injury was found to be too extensive to admit of any treatment.

PROGRESS OF MEDICAL SCIENCE.

GERMANY.

[Berlin Correspondence.]

PRUSSIAN MEDICAL REFORM.

Our readers have already been informed, that the medical men of Berlin last year failed in an attempt to prevail upon the Government to convoke a Medical "*Constituent Assembly*," the members of which were to be elected by the Profession at large, for the purpose of agreeing upon a re-organization of their body. The Government, however, consented to invite a certain number of "experts" of their own selection to meet at Berlin, with whom they promised to advise. The "Society of Physicians and Surgeons" naturally feared, that such a proceeding would not lead to a thorough reform; and have, therefore, appointed a Committee to draw up a new code of laws for the regulation of all matters connected with the Medical Profession, and they are at this moment engaged in a revision of the draft, which, when completed, they purpose, with the support and consent of the provincial Medical Associations to recommend to the Government for adoption.

The projected code is based upon the following fundamental principle.

That it is incumbent upon legislation to secure, to the full extent of the capabilities of the state and the present condition of science, the means by which the health of the citizen is protected.

The draft adopts four main heads:—1. Public hygiene. 2. The members of the Medical Profession. 3. The examinations and the course of instruction. 4. The Academy of Medicine.

We will briefly touch upon the essential points of this plan of reform. Every practitioner is to be instructed and examined in all the branches of the healing art; accordingly there are to be no surgeons in future, who are not, at the same time, physicians. Cuppers and midwives will be allowed to practice, under the supervision and direction of medical men. Apothecaries—that is, chemists—must qualify by examination, and are only allowed a license to dispense according to a certain rate of the population. Medical men are to be allowed to dispense themselves only when living at a great distance from a chemist. The prices of drugs are fixed by Government, and are to be revised from time to time. The charges of medical men are only to be so far regulated as to serve as a guide in cases of disputed fees, which are submitted to legal jurisdiction. The medical men of several districts are to unite in free associations, in order to guard their scientific interests, and the interests of their order; they are to hold annual general meetings, and elect a Committee, which, in addition to other functions, discharges those of a court of honour. The representatives of the parishes (the vestry) are to choose and to pay the medical officer, who is to attend gratuitously both the paupers and those parishioners who possess no means of support beyond their manual labour. Every district, comprising 50,000 inhabitants, is to have a Board of Health, consisting of medical men and unprofessional persons, whose duties are to consist in superintending medical statistics, in watching over the markets, dwellings, and schools of the district, and in attending to the administration and establishment of its hospitals. The Board is also to see that the district is suitably provided with medical men and chemists, and to protect the public from quackery. The district physician (Kreisarts) is to be Chairman of the Board, and at the same time attend to the medico-legal matters affecting the district. At the head of several district Boards there is a Berirks-Arts (a county physician) who is selected by the representatives of the county from a list proposed by Government, and who is to be supported by a council, consisting of the Committee of the Medical Associations. The chief Medical Board is to be appointed by Government, and attached to the office of the Minister for Medical Affairs. No one is to be allowed to follow the study of medicine, without having previously received a sound preliminary education. No period of professional studies is prescribed. Poor students are to be allowed to attend lectures gratuitously. Every University is to have at least eight medical professors, viz., for Anatomy, Physiology, Therapeutics, Forensic Medicine, and for Clinical Instruction, and to provide a physiological and pharmaceutical laboratory. The rules that regard the attendance at the Hospital, the examinations, the appointment of professors and the hospital staffs are adopted in the main from the French. Appended to this document is a demand for the institution of an Academy of Medicine in Berlin, which is to form the Court of Appeal in questions of science.

COMPLICATED HEART DISEASE.

There are at present two female patients in the clinique of Professor Rombery, in whom disease of the heart presents itself in complications, which seem unknown in Germany, although described by Marsh, Graves, and Stokes. The complication consists in tumefaction of the thyroid and prominence of the bulbs of the eyes. In both cases the tumefaction of the gland has proved to be a so-called struma aneurysmatica. Whenever the heart affection exacerbates, one of the patients (a woman of twenty-five years of age) observes an increase in the size of the thyroid gland; and in the other (a girl of seventeen) in addition to this symptom, a still further prominence of the eyes is remarked. We may also mention that, a short time ago, a Hamburg woman applied for relief, who presented similar symptoms, with this difference only, that the most violent palpitation caused little or no inconvenience, and that the tumefaction of the thyroid offered no aneurysmatic phenomena.

In Upper Silesia, which was last year decimated by famine and typhus, the latter scourge has again appeared in an alarming degree.

FRANCE.

ON THE DIAGNOSIS AND TREATMENT OF CROUP.

M. Gaillard, of Poitiers, in an official paper reported in the *Revue Medico-Chirurgicale*, has detailed the results of his great experience in croup—a question, although discussed a thousand and one times, seems, on account of its dangers and dif-

culties, to be always as new as it is important. We need not, therefore, offer an apology to our readers for the space we devote to M. Gaillard's observations. The epidemics which devastated M. Gaillard's province, afforded him many opportunities of observing various forms of plastic angina, and to establish the intimate relations of that disease and the true croup. His conclusions appear drawn from numerous cases; he founded his practice at last upon them, and congratulates himself that Bretonneau and Trousseau had arrived at the same opinion.

The commencement of angina is very insidious; so much so that when we are called to an infant with febrile sypmtoms, without any obvious cause, it is always necessary to examine the pharynx. To this precautionary measure M. Gaillard attributes very happy consequences, and says, that he has often been surprised, on inspecting the throat of a child who made no complaint of uneasiness in the part, to find very extended plastic laminæ, which demanded the most energetic treatment. He considers further, that every case of true croup is preceded by this species of angina, and, on this view, he founds the following practical inferences.

1. In treating plastic angina, in its early stage, the object is to check the progress of the false membrane, and to prevent its extension to the larynx, and thus true croup, which is the result of the formation of false membrane in the larynx, becomes far more rare.

2ndly. In treating true croup by the means used to suppress the first form of this fatal disease, more successful results are obtained than when treated in the ordinary method.

Monsieur Gaillard does not give the name of croup to laryngismus stridulus, or spasmodic croup, which is distinguished by its rapid invasion, hoarse, tearing, whistling cough, and suffocating paroxysms. These spurious croups, which come on suddenly, create terror in families, and rouse the doctor from his bed, present little danger, and easily yield to emetics. They are, however, liable to recur, and Monsieur Gaillard tells us, he has known children treated for eight or ten attacks of that form of the disease. But, lucky is the patient who has been once cured of real croup, which has no resemblance to the spasmodic affection, but which has an obscure origin and insensible progress, frighten neither parents nor patient, and requires to be closely examined to be recognised. Nevertheless, between these two affections, the only positive diagnosis that can be pronounced is that obtained by examination of the affected part. Whatever patient has not the false membrane in the membrane in the pharynx, whatever the other symptoms present, has, according to our author, no croup. If this criterion is acted upon in considering the numerous observations which are constantly published in praise of the efficacy of emetics, purgatives, and other medicines in the cure of croup, we should bring many useless materials to their proper level; for, in all these cases, the treatment was applied to laryngismus stridulus, and not to croup. In making this diagnosis, we determine, at the same time, our prognosis; for whatever the symptoms, we need be under no apprehension, so long as there are no membranous formations in the pharynx; and Monsieur Gaillard's experience has fully satisfied him that these are never discovered except on inflamed mucous surfaces. And thus an attentive examination, made within forty-eight hours after the invasion of the disease, enables us, whatever may be the symptoms, at once to determine its true character. For want of this examination both friends and physician have been often kept in anxiety for eight or ten days during an attack of acute laryngitis in a child, and unable to decide the question, "Will it have croup?" Moreover, if the membrane, says Monsieur Gaillard, does not form within two days after the invasion of the attack, the child will have no croup; and that capillary bronchitis of a plastic character—a very rare disease—differs from croup in this, that it is attended neither with aphonia nor dull muffled cough; and that it is rather a prolonged state of asphyxia than a succession of paroxysms of difficult breathing. We need scarcely observe, that the examination of the child must be made with great care, and especial attention paid the whole region of the pharynx. On this subject, the *modus faciendi*, Monsieur Gaillard remarks, that there are few infants who will voluntarily permit the throat to be examined; and he recommends, that without losing time in a vain attempt to reason, which only causes more excitement, the medical man is to secure a firm seat for himself, having on his right the clear and uninterrupted light from a window or a table with several candles or lamps upon it. He is then to take the little patient *volentem et nolentem*, well wrapped up in a shawl, and place him on the left knee, with the legs well secured between those of the operator, while the hands are firmly held by an assistant, while another, standing behind the child, is to fix his head by applying his hands steadily over either ear. Everything being thus adjusted, the operator is to place his left hand under the occiput so as to bring the mouth toward the light; then with the right he is to introduce a spoon between the jaws, depress the tongue, and carefully examine the pharynx. But this is not always as easy to do as to describe, for the infant often makes great resistance, and there is difficulty in opening the mouth. In this case the assistants must be steady, and, by gently insinuating the spoon towards the base of the tongue, a degree of nausea is induced, and the patient opens his mouth, elevates the epiglottis, and freely exposes the pharynx. The process is to be repeated until the practitioner is fully satisfied.

We add merely a few words on our author's treatment. Rejecting bloodletting, leeches, blisters, mercurial inunction, he principally advocates the application of a solution of one part of nitrate of silver in three or four of water. This is to be followed by emetics to effect the expulsion of the false membrane, now moveable and detached. He recommends also a nourishing diet when the fever subsides.

THE NEW VOLUME.

In compliance with the wishes of several of our Subscribers, it has been determined to postpone the commencement of our next Volume till the 7th of July next, and to conclude it at the end of the year. Thus, in future, the new Volumes will commence—July and January.

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THE MEDICAL TIMES.

SATURDAY, APRIL 14, 1849.

EVERY one knows how many questions of vital importance to the progress of Medicine are necessarily passed over by the Practitioner who is immersed in the cares of our most engrossing Profession, and whose well occupied time does not permit him to attempt the perusal of the ponderous tomes in which these questions are discussed. The inability of the man in practice to keep himself *au niveau* of the ever-advancing literature of Medicine, is a common subject of regret; and we propose, therefore, to place before our readers, from time to time, in a succinct and easy form, the prominent topics of discussion which now agitate the Medical world, and the shifting phases through which Medical opinion appears now to be passing.

To those who are removed by distance or engagements from the fountain-heads of Science, the *Medical Times*, under its present management, aspires to be a trustworthy guide, ever ready to indicate the point towards which the course of real Science is setting, as well as to supply prompt and accurate information of all practical improvements in Medicine.

One of those points which have been often discussed, often forgotten, and again revived, is the nature of the foundations on which Medicine is based. The controversy between the Rationalists, who searched after occult causes, and the Empiricists, who built their faith on observation solely, is older than Celsus. In our own time the debate has been as fresh as ever. But, at last, it seems drawing to a close, and a common ground is being rapidly formed, on which both parties may meet, amalgamate, and become indistinguishable. A few lines will introduce this subject to our readers; and we know not a more interesting or a more important subject for consideration than the present unprecedented growth and advancement of Physiology, Chemistry, and the other sciences, collateral to medicine. Wonder itself is overpowered at the rapidity with which facts emerge from the original chaos, order replaces confusion, and light gleams out of thickest darkness. A century ago and these sciences scarcely existed: some great facts there were, but they were disconnected and unfruitful; some fundamental truths were known, but they were only partially and distortedly seen, like the face of nature in the early morning, when light and darkness are contending. Chemistry was as visionary as the spirits which the alchemists expelled by fire from their metals; Physiology was as unstable as the bubbles blown by a school-boy, which mount towards heaven and reflect its hues, then burst into thin air, and leave no trace behind.

Yet, in those days, and before them, when Chemistry and Physiology were phantastic or unformed,—when the sciences of life taught nothing, or taught only to mislead, the art of Medicine was something more than a shadow, and the men who practised it were anything but half-mad charlatans. There were great Physicians in those days. There were men who profoundly studied the mysteries of disease, and who have left descriptions to which we still bow down, as to incomparable models. There were men who, as Physiologists, talked nonsense about animal spirits, or spasm of vessels, yet who, as Physicians, treated small-pox or ague as skilfully as their successors in the nineteenth century.

For this state of things it is easy to account. The art of healing must have been coeval with the first wants and vicissitudes of the human

race. It was founded to combat with terrible foes, human weakness and decay. For long centuries, it derived no assistance from any extrinsic source; it was even impeded by the jargons of philosophy which successively encompassed it. Unassisted by collateral sciences, unaided by physiological suggestions, its founders adopted the only course left to them. They built their art upon EXPERIENCE. They recorded, and they analyzed; and more or less rudely, and with greater or less method, according to the age, they noted the aberrations from health, and the remedies which removed them. There is no doubt that the endeavour was successful, and that, in all ages, the Medical art has indeed borne healing on its wings, and has been, under Providence, an inestimable blessing to mankind.

By *experience*, then, medicine became an art,—that is, an useful application of empirical knowledge. Experience alone can never make it more than this. Experience alone can never accurately classify its phenomena, perfectly unfold the chain of causation, and collect its scattered truths under comprehensive laws. To do this requires the aid of other sciences; of a knowledge of the laws of matter, of mind, and of those forces which, under the term "Vital," appertain both to mind and to matter. With the aid of such sciences phenomena are bound together by more intimate chains than those of mere coincidence or succession. Medicine, then, ceases to be empirical and becomes rational—it is no longer merely an art,—it has advanced to the majesty of a science.

The highest degree of knowledge, if such should ever be attained, would make Medicine entirely rational; anything short of this would leave Medicine commensurately empirical. As knowledge gradually advances from its first rude outline, to its full development, Medicine as gradually passes from the domain of fallible experience to that of positive and certain truth. This transformation can evidently be accomplished only through the agency of those sciences which lie at the foundation of the *science* of Medicine, although the *art* is independent and irrespective of them. Every discovery in Physics or in vital Physiology which tends to enlarge the science, and thereby to circumscribe the art, is a positive gain. It is a step towards ultimate perfection; it is another stone placed on the building, whose complete proportions are to be those of perfect harmony.

At the present day, the old controversy between Rationalists and Empiricists, resolves itself into one of words. The Rationalist cannot maintain that his knowledge is so perfect as to comprehend the art in the science. The Empiricist cannot deny that the transition has commenced, and that the real and undoubted progress of Physiology and Chemistry must influence his observations and direct his inquiries. Still, as Baglivi wrote, "*Ars medica est tota in observationibus;*" but with us the observation bears fruits, which simple Empiricism could never have extorted.

This influence of the collateral sciences upon Medicine; this unfolding of general laws among the multitudinous details of observation; this growth, in fact, of Medical Science, is a spectacle which every man who loves his Profession would do well attentively to regard. If he do not comprehend its nature and its extent, he misses the spirit of his times; he is either before or behind the facts; he is either a speculative Rationalist, and vainly attempts to anticipate truth, or he is a bigoted Empiricist, and blindly denies it.

The English School of Medicine is not free from the taint of both errors, and, on another occasion, we may probably bring before our readers a few prominent examples. As impartial Journalists, we seek to delineate the aspects of opinions, as well as to record the progress of events; and we may add, in conclusion, that the discussion of this controversy has a more important bearing on actual practice than might at first sight appear.

THE PETITION FROM THE NATIONAL INSTITUTE.

THE Petition to Parliament from the Council of the National Institute, which we publish in another column, is an important document at this crisis of Medical affairs. The difficulties in the way of a settlement of the Medical question are no doubt immense, obtruding at every step that may be taken, to reconcile conflicting interests, and to arrange a scheme which shall meet with general acceptance. Sir James Graham, one of the most persevering and able of the recent Home Secretaries, and endowed with great constructive talents, declared that, in all his experience, he had never known so complicated and difficult a subject for legislative address as that of Medical Law, and abandoned his various measures in despair.

If, therefore, the plan propounded by the Council of the National Institute is not one calculated to redress every grievance, to represent every opinion, and to give satisfaction to every class of the Profession, it is simply because such a result is beyond attainment; for hostile interests naturally engender antagonistic opinions; and, whatever hopes may be fixed upon any measure, it cannot, at any rate, be expected to embrace contradictions. It is the fate of moderate men to dissatisfy all parties. Each grumbles that its own views are not adopted in their entirety, and is willing to reject everything for the *one* thing left undone; for it is curious enough, that men cling with more tenacity to those extreme opinions, in which the weakness of their cause invariably lies, than to those wise and useful principles which imbody the moral truth, and constitute the practical strength, of all party policy.

Every arrangement of opposing interests must necessarily have its weak points, which the factious, the over-sanguine, and the unthinking will assail and condemn. That the arrangement proposed by the Institute is imperfect, no one would be foolish or presumptuous enough to deny; but imperfection is the very nature of a compromise, and the real question is, whether the Profession, at this epoch, is prepared to accept an arrangement,—the best, under circumstances, that can be devised; or whether it is resolved to prolong the agitation until the existing institutions can be destroyed, and subsequently re-modelled upon an entirely new basis? Does the Profession, in short, demand a single Faculty of Physic? The question must be answered, for we consider it to be mere idling with a solemn responsibility, to continue a wild agitation against a general arrangement, unless a wider policy and a bolder intention be avowed.

For our own parts, we believe that the scheme agreed to at the Conference is susceptible of improvement in various points, and we hope that steps will be taken, at the proper time, to amend certain oppressive clauses that do not harmonize with the political enlightenment and equity of the age; but, at the same time, we believe that the measure is qualified to strengthen the interests of the General Practitioners, and will constitute a bond of union for all the variously-qualified members of this branch of the Profession, and thus will be a means for a more effective and fundamental reform of the Profession at a future, and, perhaps, not very distant period. It would, therefore, appear to be a measure peculiarly adapted to the necessities of the present moment. It is practical, and this is great praise.

It is clearly the intention of the National Institute to press forward the arrangement that has been concluded with the Colleges, and, if possible, to obtain its enactment as a part of the law of the land during the present Session of Parliament. We hope that any amendments that may be suggested may be urged in a friendly spirit, and will receive that attention which the representations of men so deeply and vitally interested in the settlement of this question imperatively deserve. If the Profession out of doors confine themselves to one or two points—the restrictive clauses for example—they will doubtless succeed; but, otherwise, they will beat the air like maniacs, making wise objections ridiculous by the violence of their opposition, and, in reality, fighting the battle of the Corporations against their own interests.

THE SWINEY LECTURESHIP AND PRIZE.

OBSERVATION teaches us that it is the common lot of bequests for the furtherance of charitable or of scientific purposes, to have their objects defeated or perverted, and this generally arises from faulty provisions for their carrying out—provisions either loosely defined or limited in operation.

A glaring example of the perversion of a testator's intentions has recently come before the public, in the case of the Lectureship and Prize instituted by the late Dr. Swiney. The defeat of the objects intended in this instance, is a consequence of the imperfect and eccentric nature of the terms of the bequest; and thus the designs of the founder have been frustrated.

We must now, however, content ourselves with remarking the more prominent circumstances connected with the Lectureship only, reserving what further observations we have to make respecting the institution of the Prize and its award to a future opportunity.

In the first place, then, and to get a complete notion of the features of the case, we must look to the wording of the will, imbodying the foundation of the Lectureship.

The original will, dated May, 1831, reads to this effect—"I leave 5000*l.* stock, in the 3 per Cent. Consolidated Annuities, to the Trustees of the British Museum, and their successors duly elected and appointed, for ever in trust, for the purpose of establishing a Lectureship on Natural History. Should this plan not meet with the approbation of His Majesty's Ministers, then . . .;"—but to this first document was afterwards appended a codicil, dated September, 1836, in which the eccentricity of the testator is much more evident, and by which the clause quoted was revoked, and the following one substituted in its room, viz.:—"And whereas there is also a trust to the Trustees of the British Museum for a Lectureship on Natural History, I do also revoke that bequest, and I leave 5000*l.* in the 3 per Cent. Consolidated Fund, in trust to the Trustees of the British Museum, for establishing a Lectureship on Geology, the Lecturer to be an M.D. of Edinburgh."

The only distinct directions given are, therefore, to institute the Lectureship, to endow it with the interest of the 5000*l.*, and to appoint to it none but an M.D. of Edinburgh. Indeed, concerning the last, we may express our opinion, that it would have been better omitted; that although, in many cases, and *cæteris paribus*, preference may be rightly given to those of one's own College or University, yet, when the public benefit is involved, it is better to throw open an office to general competition, and to secure the best man, whatever be his caste.

But, dismissing this question, it will be admitted, on perusing the testamentary provisions, and especially in connexion with the general tenor of the chief bequests,—as a rational and fair presumption, that the testator's design was to institute, at the British Museum, a Lectureship of a national character, and one, like the galleries of the Museum itself, open and free to every one who chose to avail himself of the means of knowledge thus provided. Such we believe and affirm to have been the noble and praiseworthy object of Dr. Swiney, in his liberal bequest; an object, one would have thought, which must have recommended itself to the Trustees, and which they would cherish and still further develope. It was one which afforded that body an opportunity to render their names honourable and honoured in this and succeeding generations, if they had adopted it as a foundation on which to rear a superstructure for the free and general diffusion of natural science; as a means, too, whereby they might advantageously have unfolded the treasures of their cabinets, by rendering them available for the illustration of the Lectures. In plainer language, the Trustees of the British Museum might have made this the first of a series of Professorships connected with that noble national Institution; Professorships similar to those founded at the Museum, or at the Jardin des Plantes, in Paris. The creation of such Chairs would, indeed, encourage the study of the natural sciences in this country, and, in a great measure, furnish the impetus which is wanting to render us equal with our French and German neighbours, in the persevering, extended, and successful prosecution of those sciences.

That the Trustees have neglected this golden opportunity will appear to every reader of the following Resolutions, issued in the name of the Trustees of the British Museum, but in the framing of which, we can believe but a self-elected few to have been concerned.

"I. That the gentleman who may be chosen to be the Swiney Lecturer, do find for the delivery of his lectures, a place to be approved by the Trustees of the British Museum; and that he bear all expenses attending the preparation and delivery of such lectures, and also of the publication thereof, if he should deem it expedient to publish the same.

"II. That the following classes of persons be admitted to the Swiney Lectures free of charge—namely, 1. The Trustees and Resident Officers of the British Museum, and also the assistants in the Department of Natural History. 2. All Graduates of the University of Edinburgh. 3. All Members of the College of Physicians.

"III. That ten tickets for each lecture be further placed at the disposal of the Trustees.

"IV. That the charges to be made to other persons be approved by the Trustees.

"V. That the first year's salary of the Swiney Lecturer become due on the 10th day of July, 1848; that the office become vacant on the 8th May, 1852; and that the last year's salary be payable on the 10th July, 1852."

To note the character and consequences of these Resolutions, let us refer to their more prominent provisions. The first is, that the Lecturer "do find for the delivery of his Lectures a place to be approved by the Trustees," *i. e.*, at his own cost: a liberal measure surely. The size of the apartment may thus vary indefinitely; the trifling matter of rent is of no moment to the trustees, that is to come out of the Lecturer's stipend. Not only, however, is the gentleman chosen as Lecturer to find accommodation for the Trustees, their friends, the functionaries of the British Museum, and the other individuals to whom the Trustees have been graciously pleased to extend their patronage; but he is also to defray all expenses incurred in the preparation and delivery of his Lectures, *i. e.*, he is to find all the illustrative specimens, drawings, &c. at his own charge, which, on the subject of Geology, is no trifling matter, and one, indeed, beyond the compass of individual resources.

To fulfil these requirements as far as single effort can effect,—and the utmost it can effect, will but cramp the utility of the Lectures,—will, we fear, so far entrench upon the annual stipend as to leave little to the credit-account of the Lecturer. Better had he, if desirous of a Lecturer's fame with a due share of profit, peregrinate the country, and hold forth at Mechanics' and Scientific Institutions.

Will any one say that this is in accordance with the design of the donor?—but such is the will of the Trustees, who must surely have shut their eyes upon the responsibility of their position as Conservators of the British Museum, and have completely lost sight of the great end of that noble Institution,—the application of its treasured contents to the promotion of science, and to the intellectual improvement of the nation. The Trustees will have the Swiney Lecturer get his own geological specimens, while they will quietly repose with the keys of their cabinets. The valuable specimens of the Museum now serve little other purpose than to excite the wonder of the vulgar, instead of being brought to bear in the advancement of Geological knowledge, especially of Palæontography; to which end they are so well adapted. It is only when Professors shall be appointed to give instruction *within* the walls of the Museum, to elucidate the contained specimens, and to evolve their true signification, that the chief object of a museum will be subserved, or the value of its collections be properly appreciated by the public.

To the succeeding resolutions we must very briefly advert. As observed before, Dr. Swiney intended the lectures to be for the public good, and of a national character. But, by their second resolution, the Trustees have restricted the privilege of attending them gratuitously to certain descriptions of persons; all others are to pay a fee, we believe, of a guinea for each course of twelve lectures. It is to be noted, however, that the Members of the Royal Institution are now allowed to attend freely, and that this is owing to an arrangement between the present Lecturer, Dr. Carpenter, and the Managers of that Institution, in the theatre of which the lectures are delivered.

Among those admitted by the Trustees are the members of the College of Physicians; why, we would ask, these, and not the Members of the College of Surgeons? Indeed, the latter should have preference, if any be given; for there are certainly many more cultivators of the Natural Sciences among them than among the Physicians.

The fifth and last resolution suggests several curious questions. Up to July, 1848, when the first salary was to become due, four and a half years had elapsed since the death of Dr. Swiney; and, consequently, interest to the amount of 675*l.* had accumulated on the 5000*l.* invested for the endowment. Out of this interest, but one year's salary is to be deducted, viz., 120*l.*, leaving a surplus of 555*l.* To whom it went, and for what purpose it was applied, is an unsolved, and, from present data, unsolvable mystery.

Another matter, very hard to be understood, and still more hard in the case of the Lecturer, is the reduction of the income provided by Dr. Swiney's bequest of 5000*l.* consols, from 150*l.* to 120*l.* per annum; in other words, one-fifth is deducted. The Income-tax will not account for this; and it is only on the supposition of some private tax, levied in consideration of the trouble devolving upon the Trustees, whereby it seems it can be accounted for. As we find, so we must leave the monetary management of the Swiney endowment—a mystery; but one, let us hope, which some of the honourable Board of Trustees, in or out of Parliament, will furnish means for clearing up.

A national endowment has been made a piece of private jobbery; Rules have been made plainly opposed to the will of the founder; the pecuniary management of it appears exceptionable, and, altogether, the Swiney bequests, for Lectureship and Prize, have been carried out very hoggishly. Z.

A Democratic Surgeon.—*Le Peuple* asserts, that an assistant-surgeon of the 42nd has been ordered to join a regiment in Algeria, and to quit Bourges in twenty-four hours, solely because he was seen to communicate with several Democrats present at Bourges.

REVIEWS.

Elements of Electro-Biology, or the Voltaic Mechanism of Man. By ALFRED SMEE, F.R.S.

(Concluded from page 464.)

We shall now proceed to show that the views of Mr. Smee are as weak and untenable as his style is defective in grammatical accuracy and clearness. He lays it down, that "man is solely constituted of matter." "Man, however, is immortal. Man at all times, and in all regions, has *believed* in his immortality. It is probable that this conviction has its origin in his *very* organization. Life and mind cease at death." (P. 4.) According to his doctrine, immortality has no other foundation than the prevalence of the *belief*. He remarks, that this is *probably* to be traced to his organization. To what else can it be referred, if he gives man nothing but matter? Why talk of probabilities, when one conclusion only flows from his reasoning? He admits, that "mind, thought, and reason" are altogether material. Belief is the result of the exercise of these material properties, and, therefore, what light can it throw upon that which is immaterial and immortal?

The following passages will show how vastly he transcends, in his intellectual acuteness, all philosophers of past and present times. With what ease, force, and beauty, he solves the greatest of mysteries, and from taking, as his basis, the materiality of man! How gloriously magnificent is the mental capacity of the writer! No subject is too great for his grasp—no phenomena too abstruse for his comprehension. He sheds a flood of light on all he touches. He says:—"Other combinations, doubtless, give us other ideas: thus, personality and infinity give us the idea of the soul; pleasure and infinity, of good; pain and infinity, of bad; cause and infinity, of God; time and infinity, of eternity; infinity, pleasure, and time, of heaven; infinity, pain, and time, of hell. Personality and all the units of sensation give us the idea of the body; personality, infinity, and time, of immortality. Personality and other totalities of senses give us the idea of the mind; thought and infinity, of spirit. Lastly, action, infinity, and pleasure conjoined, give us the idea of virtue; action, infinity, and pain, of vice."

"Thus, we perceive that we know, from the very organization of our bodies, that we are immortal; that God exists; that there is virtue and vice—a heaven and hell." (P. 46.) He says:—"It is not in our power to define these ideas, and, if we attempt, very different *specific* ideas are attached to the same *point*."

Who will doubt the marvellous profundity of his capacity,—his philosophical acumen? He starts with pure organized matter; but, in his hands, such is the inexplicable wand which genius wields, at pleasure, that heaven, hell, infinity, soul, spirit, and immortality—subjects of vast moment, and the study of which has interested and perplexed the master-minds of all times—rise, at his bidding, as clear and as well defined facts, as the cause of the motions of the planetary systems. He says, the "*development* of this *work* has afforded me unmixed delight." (P. 157.) Can there be any wonder? The power of solving such mysteries would have turned the head of Newton; and some passages would certainly lead us to fear, that it had exercised a prejudicial effect upon his own. We hope in this we are mistaken. The reader, however, shall judge for himself.

"Electro-noemics indicate, that man, at the beginning, is perfectly free to act in any manner from *external* impressions; but after he has once *received* impressions, these also regulate his future proceedings. He is then necessitated to act well, if he has received good impressions; badly, if he has received evil impressions." (P. 46.) Here is a charming piece of logic, and elegantly expressed. Man, at first, that is, the moment he is ushered into the world, is "free to act in any manner from *external* impressions;" the English of which is, that *before* he has received any impressions at all—he is free to act; which implies the existence and operation of the mental faculties in their full maturity. Is not this exquisite reasoning? But mark what follows:—"When he has once *received* impressions, these regulate his future proceedings." In one line he admits that the external impressions have no influence on the mind; in another—and all in the same sentence, we are told, that the *same* impressions affect it, and not in a transient manner, but as indelibly as the machine stamps the head of Her Majesty on that beautiful coin—the sovereign. So lasting, indeed, are the impressions, that if these, at first, have not been good, it is in vain to struggle to be virtuous; it is a folly and an absurdity to attempt it. It is a gross delusion for man to dream of the possibility of improvement, how meritorious soever may be his efforts. His doctrine is clear on this head, and leaves nothing to be desired,—save its fallacy.

The reader must bear with us a little longer. We have another passage to adduce, which will show that the Author alone can do justice to himself:—

"Electro-noemics also show, that to produce a *strong effect in future* actions, a strong impression must be left on the brain. From this cause, punishment should be inflicted upon a man in a *healthy, vigorous* condition, and neither ill-fed nor debased in energy; otherwise, the impression would be *transient or evanescent*, and would not deter the party from the commission of future crimes." (Pp. 46, 47.) Reader, this passage is not ours. "To produce a strong effect *in future* actions," surely establishes the paternity of the doctrine. What a crowd of prejudices and fallacious opinions it will tend to correct. We, and the world at large, in our simplicity, had always imagined, that to whip a man when he had little flesh on his bones, broken down in spirit and vital energy, would necessarily be attended with great pain and suffering; and hence that a *strong* impression would be made upon his mind; or, in other words, that he would feel acutely; but Mr. Smee says, nonsense, "if you intend him to feel and remember the punishment, first *feed* him and make him *vigorous*, then every lash of the cord will leave an everlasting impression." This is certainly original, and worthy the consideration of Government. It shows why criminals are not generally cured by one punishment. They are not first fed and filled with the good things of this world, so as to be brought to that point where an exuberance of vital energies begins to riot in excess. They are confined, whipped, or ill-treated, without this preliminary preparation, which is as essential to the corrective system, as that a man should have a head, in order to be beheaded.

Such are the philosophical views of the Author on the Electro-Biology of man. We must say a few words on his experiments. It is possible that he may reason and write badly, and yet may be wonderfully clever as an experimentalist. He may lack the ability of making a good use of the rich results at which he has arrived. We will not do him injustice. According to his notions, the body has an immense number of electric batteries; and that every mental and corporeal action is to be traced to their operation. See how beautifully he "exhibits the effects of memory" on his principles:—"If we take two iron wires, and place them in a solution of argento-cyanide of potassium, and direct a voltaic current through them, silver would be reduced at that wire constituting the negative pole. The two wires would be ever afterwards in different electric relations to each other; one would be positive, the other negative; *and thus the effects of memory would be shown, and future actions regulated.*"

See how beautifully he explains consciousness:—"The mind, however, derives certain powers from combinations of two or three of these batteries conjointly. We obtain the *ideas* of a thought and of a *reality* in this manner. An *idea* is a thought when the bodily action does not concur with the combination which *appears to the mind*. An idea is a *reality* if these two combinations *do* concur. There are times, when indulging in the *spontaneous* thoughts *of the mind*, that a question arises to *ourselves*, whether everything around us is not a dream,—a fanciful creation of *the mind*; and in such a state we are led to doubt whether it be possible to prove our very existence; but the moment we ascertain whether *actions* of thought *concur* with *actions* in the body the difficulty ceases, and we are enabled to distinguish immediately between a *reality* and a *fanciful* creation of *the brain*. THIS POWER IS TERMED CONSCIOUSNESS." (P. 45.)

If any one will prove that he understands this passage, or any of the preceding extracts, we will present him with Mr. Smee's work, bound up in calf, gilt, and lettered. Only think of the "*ideas* of a thought." An idea is not a *reality*, that is, it has no existence, except in combination with "the bodily action." According to philosophers, all thoughts are spontaneous. We may call them like spirits from the vasty deep; but they will not come. But why spontaneous thoughts *of the mind*,—do thoughts belong to the liver, the spleen, or the great toe? As soon as we "ascertain whether *actions* of thought concur with actions in the body the difficulty ceases." Now, reader, what do you think of *actions* of thought concurring with actions in the body?

If a man may carry a brick as a specimen of his house, surely we may be permitted to offer the foregoing passages as illustrative of the whole book. We would willingly, at an earlier stage, have closed its pages, from various considerations, but especially from the feeling that still haunts us, that its publication is only a jocose experiment on the credulity of the age; and in this light it is happily conceived, though badly executed. There is only one circumstance which dissipates this impression, and that is, the character of his previous productions. Had these been wanting, nothing would have induced us to believe that the Treatise we have reviewed, in a bland and liberal spirit, had any other object in view than to test the gullibility of the Nineteenth Century. It is deficient in all the qualities of a sound philosophical or physiological inquiry. It has neither well-established facts, just reasoning, depth of thought, nor common grammatical accuracy,—to say nothing of the essential requisites of style,—to recommend it. Taken as a whole, it is the most unfortunate specimen of a literary and scientific Treatise that ever fell under our observation.

We have not penned these remarks in any bitterness of spirit. If they exhibit any severity, it is the severity of truth, and this alone carries a keen edge. If the author would confine his attention to subjects within his capacity, he might possibly prove an entertaining writer. His wings are unequal to lofty scientific flights. Nature did not intend him to soar. She has withheld the strong or vigorous pinion, but has given him, in common with thousands, mental faculties adequate to the study of numerous interesting objects, which lie on or near the surface of the earth. Let him devote his energies to their examination.

Pathology of the Human Eye. By JOHN DALRYMPLE, F.R.C.S. Fas. I. Folio. London: John Churchill. 1849.

There is no class of human diseases more important than those affecting the eye, and none which require more correct diagnosis and treatment, in order that permanent and serious injury may not affect this organ. The opportunities of studying ophthalmic diseases are comparatively few to surgeons not attached to hospitals; and hence Mr. Dalrymple's work will prove a great boon to a large number of our Professional brethren. The Author, from his large experience, is well qualified for the office of teacher in this department of Surgical Science, having been for a long period attached to the Royal Ophthalmic Hospital in Moorfields.

In this first Fasciculus we have four plates, containing each six coloured illustrations,—Chronic Ophthalmia, Lippitudo, Tinea, Pterygium, Symblepharon, Anchyloblepharon, Hordeolum, and Tumor Tarsi. These engravings are exquisite specimens of art, and faithful delineations of the diseases they pourtray. The beautifully-printed text gives a brief history of the disease each plate illustrates, with the mode of treatment, and, if the Work is completed in the same style it is begun, it will be one of the

most beautiful and valuable books ever published on Ophthalmic Surgery.

Elements of Chemistry, Theoretical and Practical: including the most recent Discoveries and Applications of the Science to Medicine and Pharmacy, to Agriculture and Manufactures. Illustrated by 230 Wood-cuts. Second Edition. By Sir Robert Kane, M.D., &c. Pp. 1069. Dublin: Hodges and Smith. 1849.

The first edition of this work was well received by the scientific public, both in great Britain and Ireland, and deservedly so. In the present edition, the Author appears to have laboured diligently to make the volume one to which the student of chemistry can with confidence refer. The great progress which has been made in the department of chemical science, within the last few years, rendered it necessary for the Author to make alterations almost in every Chapter. These he appears to have accomplished with great care and discretion. We can, therefore, with confidence, recommend the volume as one of the best "Elements of Chemistry" published.

ANASARCA IN OLD PEOPLE.

[To the Editor of the Medical Times.]

Sir,—I have recently registered the death of Phœbe Nathan, residing at 15, Mint-street, Borough, at the advanced age of 92, from anasarca. She was a Jewess, and had lived twelve years in that not very healthy locality. She was a patient of mine at the Surrey Dispensary, and had previously been under my care twice, at the ages of 90 and 91, for the same complaint, from which she had each time recovered. I do not forward this case to you with the wish of puffing a cure on these two occasions,—for the treatment consisted merely of such means as any medical man might suggest, viz., alteratives, diuretics, potass. bitart., and friction,—but to record the fact of a patient's recovery twice from anasarca, at 90 and 91 years of age. The urine did not contain any albumen. Having seen several cases of recovery from anasarca in elderly females, it has made me extremely cautious as to the prognosis in such cases. I attended another anasarcous patient of the Surrey Dispensary, a few years ago, residing on Walworth-common. She was between seventy and eighty years of age and recovered. Chronic bronchitis occasioned the dropsical effusion. I will only trouble you with another case of a private patient, Mrs. L——, aged seventy-two, who came under my care last spring twelvemonth, for anasarca of the lower extremities, produced by chronic bronchitis. Nature was materially assisted in this case by an ulcer which formed in one leg with a copious discharge from the other, and, although the ulcer proved to be a tedious one, she recovered from it as well as the anasarca. No albumen could be detected in the urine of either of the two last cases, and the treatment was nearly the same as that adopted in the first case, excepting the addition of tincture of cantharides. Mrs. L—— experienced no return of the complaint until January, 1849, and she died February 27th, 1849.

I am, Sir, your obedient Servant,
C. J. B. Aldis, M.D.

1, Chester-terrace, Chester-square,
April 11, 1849.

ON THE TREATMENT OF STILL-BORN CHILDREN.

[To the Editor of the Medical Times.]

Sir,—Allow me, through the medium of your valuable Journal, to add my testimony to that of Dr. Thues in favour of the plan of treating children apparently born dead, by the alternate use of warm and cold water, as recorded in your last week's Number.

I have been in the habit for some years of treating all such cases in a very similar way, and with great success. I first immerse the child in warm water, and, upon withdrawing it, cover the chest with a cloth or sponge well soaked in cold water (the colder the better); again immerse it in warm water, and again apply cold, so on alternately using the hot and cold water, until there is evidence of respiratory movements. The first application of cold will generally produce a slight sob, and repeated applications will establish respiration. I conceive the good arises from the sudden impression caused by the cold on the cutaneous nerves, (which are the principal) "*excitor nerves*" in the reflex action of respiration. This is followed by response along the "*motor nerves*" of this function, as the phrenic, intercostal, &c.; hence the sob on the first application, and the establishing of respiration by being repeated. I have, for an equally long period, been in the habit of ligaturing the cord, before the complete birth of the child in breech and feet presentations, sometimes even before the pulsations were obliterated, believing, as I do, that the child in these cases dies from hæmorrhage into the placenta, arising from the umbilical vein being much exposed to pressure, by virtue of its superficial and unprotected position in the cord, which, together with the tenuity of its tunics, render it very liable to have its current obliterated, whereas the tunics of the umbilical arteries are firmer, and they themselves less exposed; thus they are in a measure protected from the consequence of slight pressure. Therefore, the flow of arterial blood through the vein may become obliterated, whilst the venous blood continues to flow along the arteries, from the child, into the placenta, without there being any counterbalancing stream; hence the great mortality in these cases by the usual treatment, and hence the utility of ligaturing the cord early, thereby removing one fatal consequence; and, as it is well known that a child can breathe in the vagina, its chances of life are not to say the least diminished, but, I think, much increased; for, out of thirty-seven cases that I have treated in this way, *two children only have died*, which is saying very much more than I can say for the usual treatment. In this class of cases especially, I think the good effects of alternate application of cold and warm water will be seen, if tried.

I am, yours &c.,
J. Ogden Fletcher, M.R.C.S. Eng., &c. &c.
Manchester.

P.S. I do not claim originality for this plan of treating breech and feet presentations, but, as it merits greater publicity than it at present enjoys, I have ventured to forward it to you for your consideration; not being able to find its author, ignorance has prevented me from doing him justice.—J. O. F.

THE RIGHT OF M.B.'S TO THE TITLE OF DOCTOR.

[To the Editor of the Medical Times.]

Sir,—Your Southton Correspondent having asked a question which required an answer bearing personally on myself, as I believe that I am the only M.B. in this immediate vicinity, and, I presume, for the purpose of damaging, if possible, my position, since the answer has been copied, the words "not a right" dashed, and circulated by post,—I must beg that you will do me the justice of answering other queries, which may possibly counteract the influence intended to be produced on the non-medical reader, uninformed on such subjects, and, consequently, easily misled.

1. Should we not value degrees only in proportion as the examinations by which they are acquired are stringent and comprehensive?

2. Are not the examinations for the M.B. degree of the London University more stringent and extended than those for the M.D. degree of most other Universities?—and is it not generally admitted that the medical standard of examination of the London is higher than that of any other British University?

3. Can M.B.'s, holding the office of Physician to public Institutions, of whom there are many, be rightly addressed by any other title than that of Doctor?

4. Is it right to address by the title of Doctor such as hold boughten degrees, or have assumed the doctorate without ever having graduated at any University?

5. Has a person the right to style himself Surgeon who has never passed a surgical examination, or received a license from any corporate body to practise surgery?

I am, Sir, yours obediently,
Edwin Hearne.

Southampton, April 4, 1849.

Testimonial to Dr. Witt.—It appears that Dr. Witt has respectfully declined the proposition of the Governors of the Bedford Infirmary, to place his portrait in that Institution, which he served so long and so well; and that it is now proposed to purchase the Museum formed by Dr. Witt, with great labour and skill, in the hope that it may prove, under his name, a nucleus round which may be gathered the fossils and antiquities that are continually being turned up in the county.

CONVENTION OF POOR-LAW MEDICAL OFFICERS.

THE PETITION OF MEDICAL OFFICERS OF UNIONS IN ENGLAND AND WALES.

PRESENTED TO THE HOUSE OF COMMONS BY LORD ASHLEY.

The humble Petition of the Chairman and Committee of the Medical Officers of Unions in England and Wales, and other Members of the Medical Profession,

Sheweth,

That your Petitioners have been duly authorised, by resolution passed at a meeting of delegates and others representing the Medical Officers of Unions in England and Wales, held at the Hanover-square Rooms, on the 19th of February, 1849, to lay before your honourable House a statement of the grievances complained of by the said Medical Officers, and to solicit the interposition of your honourable House for their redress and removal.

That your Petitioners have already, by Memorial to the Right Honourable the Secretary of State for the Home Department, and to the President of the Poor-law Board, respectfully set forth the numerous evils and defects of the present system of administering medical relief to the sick poor, more especially as they affect the position and interest of the medical officer; but your Petitioners lament, that hitherto no decisive steps have been taken towards their amendment, either by the Government or the Legislature; they therefore entreat the attention of your honourable House to the manifold injuries which they sustain under the existing laws.

Your Petitioners desire to impress upon your honourable House their conviction, that very much of the difficulty and dissatisfaction attending the operation of the Poor-laws originates in the present mode of affording medical aid; for it will appear, on examination of the facts, that almost every case of complaint that has strongly agitated public opinion has been contingent on the imperfect arrangements in this important branch of Poor-law administration. Among the defects of this system bearing more directly on the well-being of the destitute poor, the following are the most obvious and important:—

1st. The difficulty of obtaining an order for medical relief from the relieving officer in cases of sudden illness, of accident, or of midwifery.

2nd. The frequent refusal and general uncertainties of remuneration to the Medical Officer for his attendance on a poor patient under such circumstances, and the consequent hardship either to the patient, the Medical Officer, or both.

3rd. The undue restriction on the Medical Officer in reference to his power of ordering the necessary aliment for the cure of his patient, and the frequent neglect of such orders when given.

4th. The want of the requisite inspection over the working of the system by intelligent and duly qualified medical men.

That there can be no doubt that in consequence of the present complicated and inefficient system much avoidable suffering and distress afflict the labouring classes; and that, by invaliding the father of a family and throwing him, his wife, and children upon the funds of the union for support during a protracted disease, and by the increased expenditure arising from premature widowhood and orphanage, the burdens on the ratepayers are greatly augmented; whilst, also, the same causes tend to increase that rapidly-spreading mass of hereditary pauperism which is confessed to be a national calamity, which has brought the Poor-laws themselves into very general disrepute and distrust.

That, whilst your Petitioners deplore these evils, they feel it their duty to state that the medical officers are worked heavily and at great disadvantages, and although, as it has been generally avowed, they perform their onerous and trying duties with zeal and humanity, they have, nevertheless universally complained of the grievous pressure of the system under which they act, and of the want of encouragement to exertions hitherto so faithfully rendered which they experience in the disgracefully low and parsimonious remuneration at present awarded.

That your Petitioners have ascertained, after an examination of returns from 805 districts in various parts of the country, that the average payment per case for medical attendance on the poor is only 2s. 7d. for the country districts, and 1s. 6¼d. for the metropolitan districts, the highest of which sums is scarcely sufficient to defray the reasonable cost of drugs at the rate of expenditure that obtains in hospital and dispensary practice, and affords not the

slightest recompense for the surgeon's skill, time, and labour, which, in an extensive and populous district, are so fully engaged, that he is greatly impeded in his efforts as a private practitioner, and he sustains, in this respect, a heavy loss, of which he becomes sensible only when it is too late to redeem it. That it is also proved that, in consequence of the salaries being fixed upon no definite plan, the payment for medical service varies very widely in different districts, being so high in the Bishop Wilton district of the Pocklington Union as 14s. 4d. per case, and so low in a district of the Newton Abbott Union as 3d. per case; that also the remuneration is frequently in an inverse ratio to the amount of work done, and instances are known to your Petitioners where one medical officer, doing ten times more work than another, receives only one-fourth of the remuneration per case. Similar inequalities prevail even in different districts of the same Union, in consequence whereof great injury has been done to many hard-worked and meritorious officers, and the liveliest dissatisfaction has been expressed throughout the country. Your Petitioners would also beg the attention of your honourable House to the fact, viz., that the civil surgeon attending a detachment of the army receives 6s. 6d. per head, sick or well,—a sum that would afford remuneration of several pounds for each sick case; also that 13s. 7d. is paid for a sick felon who is attended in a gaol, whereby the time of the surgeon is not wasted, nor his strength impaired, by making extensive and laborious journeys; and that 7s. per head is paid for the police. And your Petitioners trust that the contrast of these payments with the paltry average of about 2s. awarded for medical attendance on the sick poor of this country will present a striking illustration of the wrong and hardship to which the Union Medical Officer is subjected, and will convince your honourable House of the instant necessity of reforming so unjust and degrading a system.

Your Petitioners further desire to state, that the invidious position in which Union Surgeons are placed between the rival powers of the honourable the Poor-law Board and the Boards of Guardians operates most disadvantageously to their interests and to the satisfactory performance of their official duties; for, inasmuch as any complaint or misunderstanding that may arise, or any appeal that may be made, involves the liability of coming under the jurisdiction of two conflicting Boards, the expectation which the Medical Officer ought to feel of a just award from a calm and unbiassed consideration of his case is annihilated by the conditions under which the adjudication is made.

That, moreover, in consequence of this antagonism between the Central and Local Boards, the Union Surgeons are unjustly deprived of the benefit of those instructions issued in their favour by the Poor-law Board in accordance with the recommendation of a Committee of your honourable House; and your Petitioners beg to adduce the following illustrative facts confirmatory of this statement. That, in the year 1842, the honourable the Poor-law Commissioners issued a code of regulations to the Boards of Guardians, ordering a scale of payments therein specified to be made to Poor-law Medical Officers, as extra payments for various surgical operations, and expressly commanded that such extra payments should not be included in the salary of any district Medical Officer, or contract made by any Board of Guardians with a district Medical Officer; yet, despite this express injunction of the honourable Commissioners, your Petitioners are authorised to state, that these instructions have been very generally evaded or disobeyed by the Boards of Guardians; that several of them reduced the salaries of their Medical Officers, in order that, after the addition of the extra payments, the salaries might not exceed the original amount; others, by undue constraint, induced the Medical Officer to compound for all extras by a small fixed addition to the annual salary; whilst others have systematically and rigorously evaded the order, by sending all cases of accident to some hospital to which the Board subscribes, and thus the Medical Officer is deprived of any boon intended by the instructions of the Commissioners, the patient's sufferings are considerably augmented, and even his life often risked, by the removal in carts over bad roads for many miles, during perhaps an inclement period of the year.

Notwithstanding the numerous complaints that have been already made, your Petitioners regret to state, that the representations of the Medical Officers of Unions have been overlooked, and that, by recent Acts passed by your Honourable House, in utter disregard of all their claims, they have experienced additional hardship and injustice.

That the Health of Towns Act, and the Act for the Prevention of Epidemic Diseases and the Removal of Nuisances, passed by your honourable House during the last Session of Parliament, confer certain powers on the Boards of Guardians, and the new General Board of Health, in relation to sanitary purposes, in virtue of which the Medical Officers of Unions have been called upon to perform the duties of officers of health, without any provision being made for payment for such duties. As these duties form no part of the contracted engagements of the Medical Officers with the Boards of Guardians, and are not referred to in the instructions of the Commissioners of Poor-laws under which the Union Surgeons took office, your Petitioners consider that the orders issued by the Boards of Guardians in compliance with the instructions of the General Board of Health are a direct violation of the rights of Union Surgeons as private citizens of the State.

That your Petitioners have already protested to the General Board of Health, and to the Poor-law Board, against this new imposition of unrequited labour, and do hereby most respectfully repeat their protest to your honourable House, and earnestly trust that your honourable House will see fit, not only to amend laws so directly subversive of the rights of the subject, but will also undertake the revision of all other laws which affect the position of the Medical Officers of Unions, so that a system more conformable with justice and the true interests of the public may be established. Your Petitioners are convinced, that, under an improved system, equally regardful of the interests of the poor and of the Medical Officer, prompt and efficient attendance might be obtained in all cases for the former, whilst the just interests of the latter might be guaranteed, and that thereby the requirements of a true economy in the apportionment of the public funds might be secured, and the duties of an enlightened humanity worthily fulfilled.

That, as the principles of a new and improved system, your Petitioners are humbly of opinion,—

1st. That the payment for medical relief to the poor should be made from the Consolidated Fund.

2nd. That the remuneration should be fixed according to a settled plan or scale, and that the average payment in town and country districts should be at least 6s. per case.

3rd. That the appointment of Medical Officer to a district should be permanent, and subject only to be rescinded by the President of the Poor-law Board, or by the Director of a Board specially appointed, upon proved charge of neglect of duty, gross malpractice, legal sentence inferring dishonour or crime, or other valid cause.

4th. That a General Board should be established for the superintendence of the duties of the Medical Officers of Unions, under a chief Medical Director, and a sufficient number of competent medical inspectors, to protect both the interests of the public and the Profession.

That your Petitioners, seeing the perverse opposition by which the Local Boards have too often succeeded in rendering the instructions of the Central Board nugatory and void, are fearful that the Poor-law Board has not sufficient power to remove the existing evils, and they, therefore, most emphatically press upon your honourable House the urgent necessity of considering their manifold wrongs and grievances; and your Petitioners, remembering that nearly 3,000,000 of Her Majesty's subjects are entrusted to their care and skill in every form of accident and disease, that they are often called upon singly, and at a moment's notice, to succour life under the most appalling and hazardous occurrences, and the high qualifications that are necessary from them for a due performance of their varied duties; and considering also the constant liability to pestilence, with all its fearful consequences, not only to themselves but also to their families; the numberless annoyances and harrassing anxieties incidental to their arduous and responsible duties; the continual exposure to the vicissitudes of climate and season, and the daily sacrifice of time, money, and strength, which their avocations necessarily incur, believe that they have paramount claims on the attention of your honourable House, and they earnestly hope that your honourable House will speedily take into your consideration their present position and claims, and amend a system so defective, unsatisfactory, and fruitful of injustice to all parties concerned in its operation, whereby your honourable House will fulfil the noblest functions of a philanthropic and parental Legislature, will enlist the sympathies of the suffering poor, command the respect and confidence of the public, and win the gratitude of a numerous but oppressed body of public officers.

And your Petitioners, in conclusion, further pray your honourable House that you will take into your consideration, as speedily as can be, and adopt measures to amend, not only the system of Poor-law Medical Relief, but also to put on a more enlightened and satisfactory footing the laws and regulations relating to the education and control of the Medical Profession generally throughout England and Wales.

And your Petitioners will ever pray,

THOMAS HODGKIN, M.D., Chairman of the Committee.
ADOLPHUS BURNETT.
WILLIAM LOBB.
&c. &c. &c.

MEDICAL REFORM.

The following Petition from the Council of the NATIONAL INSTITUTE of MEDICINE, SURGERY, and MIDWIFERY has been forwarded to JAMES WYLD, Esq., M.P., for presentation to the House of Commons:—

To the Honourable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament assembled.

The Petition of the undersigned Members of the Council of the National Institute of Medicine, Surgery, and Midwifery, humbly showeth,—

That evils have afflicted the Medical Profession in the United Kingdom, and have occasioned an agitation for Medical Reform of many years' duration, which are not only unabated, but are daily increasing; and that the Profession is suffering at the present time, more than at any former period, from the imperfect, inconsistent, indefinite, and anomalous state of the laws by which it is governed.

That a reform in the laws has been advocated by the National Association of General Practitioners, and also by the National Institute, and the principles and more important details of such reform are in perfect accordance with the principles and plan of certain measures of Medical Reform proposed and agreed to by the representatives of Physicians, Surgeons, Apothecaries, and General Practitioners, in the Conference recently held in London, at the Royal College of Physicians, and to which the Medical Institutions of England, Ireland, and Scotland, have given a general assent; and that the proposed measures are eminently calculated to ameliorate all the more pressing grievances of which the Profession so loudly and so justly complains.

That the principles above alluded to have been fully detailed in the "Outline of a Bill" for regulating the Profession of Physic and Surgery, drawn by the Conference, and which "Outline" is contained in the evidence taken, during the last Session of Parliament, before the Special Committee of your honourable House, on "Medical Registration and Medical Law Amendment."

That the general agreement of so many influential bodies, not only in the principles, but in most of the more important details of a Bill for Medical Reform, and the pledges given by the Government to those bodies, have obviated difficulties in medical legislation otherwise insuperable, and afford, at the present moment, a fairer prospect than at any former period, of carrying such a Bill through the Legislature.

That in the existing state of the Profession, no measure, however great its merits, can possibly meet with the full concurrence of every section or denomination of its members, and any plan than can be devised may be expected to meet with some opposition. That it is most inexpedient, however, on that account, to delay a measure calculated to benefit the great mass of the Profession, and to effect a great public good.

That your Petitioners therefore respectfully, but earnestly, represent to your honourable House the urgent necessity that exists for immediate legislation on the affairs of the Medical Profession, and they pray that a Bill for regulating the Profession of Physic and Surgery may, on public as well as on professional considerations, be enacted by the Legislature, with as little delay as possible.

And your Petitioners will ever pray, &c.,

Peter Hood, 15, Lower Seymour-street, Portman-square.
James Stedman, Guildford.
George Stillwell, Epsom.
George J. Squibb, Orchard-street, Portman-square.
Henry P. Fuller, 112, Piccadilly.

John Propert, 6, New Cavendish-street, Portland-place.
James Clayton, Percey-street, Bedford-square.
James Bird, Orchard-street, Portman-square.
Edward Headland, Guildford-street, Russell-square.
Robert Tanner, Manchester-street, Manchester-square.
Richard Wallace, John's-terrace, Hackney-road.
Thomas Martin, Reigate.
Emanuel Baker, Bulstrade-street, Manchester-square.
John Bowling, Hammersmith.
Hamilton J. Jennings, West Drayton.
John Nussey, Cleveland-row, St. James's.
John Sutton, Greenwich.
Septimus Read, Jewin-street, Cripplegate.
William Anson Cartwright, Teignmouth.
George Webster, M.D., Dulwich,
Wm. B. Vickers, Baker-street, Portman-square.
Thomas Parker, Woburn.
Robert Dunn, Norfolk-street, Strand.
John Liddle, Alie-place, Goodman's-fields.
Farnham Flower, Chilcompton.
Richard Southee, Cambridge.
William H. Garrington, Portsea.
George Gibson, Ulverstone.
Thos. Herbert Barker, Bedford.
George Webster, Connaught-terrace.
Nathaniel Clifton, Islington.
Edward Doubleday, Blackfriars-road.
Charles M. Thompson, Westerham.
Jas. S. Daniel, Ramsgate.
Charles M. Burnett, Alton.
John Prankerd, Langport.
Wm. Chaldecott, Dorking.
Geo. Drummond, Brighton.
Henry Ancell, Norfolk-crescent, Hyde-park.
John Spence, Manchester.
Wm. Collyns, Kenton, Exeter.
John R. Keele, Southampton.
Horatio G. Day, Isleworth.
Geo. Robins, Bedford-street, Covent-garden.
Thos. Paget, Leicester.
Thos. Porter, Bishopsgate-street.
Wm. E. Snow, Tredegar-square, Mile-end.
Thos. Nicolson, Davies-street, Berkeley-square.
Isaac Hurst, Bedford.
Edward Westall, Croydon.
Edward Tegart, Dover-street, Piccadilly.
John B. Eyles, St. Andrew's-court, Holborn.

ROYAL COLLEGE OF SURGEONS.

QUESTIONS ON ANATOMY AND PHYSIOLOGY PROPOSED TO THE CANDIDATES FOR THE FELLOWSHIP.

The examination for the "Fellowship" of this Institution took place on the 2nd and 4th instant, on which occasion seven gentlemen presented themselves. The following are correct copies of the questions put to the senior candidates on anatomy and physiology :—

1. Describe the course of the aorta from its origin to its termination.
2. State what are the vessels from which blood flows into the right auricle; describe the course of the blood through the cavities of the heart, with the valvular structures regulating its progress.
3. What are the arteries distributed to the brain? State the course they take to the interior of the cranium.
4. State whence the nerves are derived which are distributed to the upper and to the lower limbs.
5. State what are the chief muscles employed in inspiration, and in what directions they enlarge the cavity of the chest.
6. State where the large intestine begins; describe the course of it from its commencement to its termination.

The following are copies of the questions put to the Junior Candidates on the same subjects :—

1. Enumerate, in the order of their situation, the parts met with in the perinæum of the male, proceeding from the integuments to the prostate gland and bladder.
2. Describe the portio dura of the seventh cerebral nerve,—its origin, course, distribution, and communications with the adjacent nerves.
3. Describe the structure and properties of the iris.
4. Describe the arrangement of the glands in the several divisions of the intestinal canal; also the structure of those glands, and the views entertained of their functions.
5. Describe the structure and properties of the tissues forming the coats of an artery.
6. What are the present views entertained of the physiology of the kidney?

The above questions were submitted to the Candidates on the 2nd inst.; on the 4th they met to answer the following on surgery and pathology :—

SENIOR CANDIDATES.

1. State what are the ordinary consequences of enlargement of the prostate gland, and what is the treatment required for their relief.
2. State what are the different forms of inflammation in the fauces and pharynx, and what is the treatment suited to their removal.
3. State the character, consequences, and treatment of hæmorrhoidal swellings.
4. State what is the treatment suited to bursal tumours in their different stages or conditions.
5. State what are the inflammatory conditions of the mammary gland consequent on parturition, and their treatment.
6. State what are the characters and treatment of the inflammatory affection of the eyes occurring in infants.

THE JUNIOR CANDIDATES WERE REQUIRED TO

1. State what are the consequences of concussion of the brain, and what is the treatment required in the several stages.
2. Describe the characters of carcinoma in the mammary glands, and state what are the diseases occurring in the gland, which might be mistaken for carcinoma?
3. Give an account of umbilical hernia in respect to the ordinary conditions of the sac, its coverings and contents; also, the treatment, when strangulated, and its ordinary result.
4. In any case where puncture of the urinary bladder (male) is deemed expedient, state the grounds of preference to the operation above the pubis, or from the rectum.
5. State what are the changes of structure in the eye which ensue from iritis.
6. Describe the changes of structure which ensue in the several tissues of a joint from inflammation commencing in the synovial membrane.

All the candidates, having passed the necessary examinations, were admitted by the Council on Wednesday last "*Fellows*" of the Royal College of Surgeons of England. Their names will be found in another column.

LIST OF BOOKS RECEIVED DURING THE MONTH.

Two Notices of the Obstetric Air-Tractor. By J. Y. Simpson, M.D. Edinburgh: Sutherland and Knox. Pamphlet.
De l'Uretrotomie ou de quelques procédés peu usités de Traiter les Retrecissements de l'Urètre. Par le Dr. Civiale. Paris: Baillière. 1849. 8vo. Pp. 122.
Mémoirs sur les Faits relatifs a la Revocation de M. Bouillaud des Fonctions de Doyen de la Faculté de Médecine de Paris, &c. Par M. J. Bouillaud. Paris: Baillière. 1849. 8vo. Pp. 144.
The Elements of Chemistry, Theoretical and Practical. Second Edition. By Sir Robert Kane, M.D., M.R.I.A., &c. Dublin: Hodges and Smith. 1849. 8vo. Pp. 1069. Bound in cloth and illustrated by cuts.
Elements of Electro-Biology, or the Voltaic Mechanism of Man; of Electro-Pathology, and of Electro-Therapeutics. By Alfred Smee, F.R.S. London: Longmans and Co.; Horne, Thornthwaite, and Wood.
The Hunterian Oration for February 14, 1849. By Cæsar H. Hawkins, Esq. London: J. Churchill. 8vo. Pp. 35.
Medical Reform. A Public Question; or, How to Save Twenty Thousand Lives per annum without putting the Country to a Farthing's Expense. By a Physician. London: Hatchard and Son. 1849. Pamphlet. Pp. 35.
The Medical Remembrancer, or Book of Emergencies, concisely pointing out the immediate remedies to be adopted in the first moments of danger, &c. By Edward B. L. Shaw, M.R.C.S., &c. Third Edition. London: J. Churchill. 1849. 16mo. Pp. 108.
On Healthy and Diseased Structure, and the True Principles of Treatment for the Cure of Disease, especially Consumption and Scrofula; founded on Microscopical Analysis. By William Addison, M.D., F.R.S. London: J. Churchill. 1849. 8vo. Pp. 320.
Pathological and Practical Observations on Strictures, and some other Diseases of the Urinary Organs. By Francis Rynd, Esq., A.M., M.R.I.A., &c. London: Longmans and Co. 1849. 8vo. Pp. 195.
Practical Remarks on the Use of the Speculum in the Treatment of Diseases of Females. By T. R. Mitchell, M.D. Dublin: Fannin and Co. London: Longmans and Co. Edinburgh: Maclachlan and Co. 8vo. Pp. 83.
Report on the Epidemic Cholera as it has appeared in the Territories subject to the Presidency of Fort St. George (Madras). Drawn up by order of Government; under the superintendence of the Medical Board. By William Scot, Surgeon and Secretary to the Board. Edinburgh: Blackwood and Sons. London: Murray. 1849. 8vo. Pp. 212.
A Short Sketch of the Life and Writings of the late Joseph Clarke, Esq., M.D., Vice-President of the Royal Irish Academy, &c.; containing minute results of his private practice, extending over a series of forty-four years, including 3,878 births. By Robert Collins, M.D., &c. London: Longman and Co. 1849.
Hints on Obstetric Practice; with Illustrations. By John Bremner, Surgeon. Part I. Edinburgh: Maclachlan and Stewart. 1849.
Practical Observations on the Prevention, Causes, and Treatment of Curvatures of the Spine; with Engravings and Woodcuts illustrative of the Cases. By Samuel Hare, Surgeon. Third edition, revised and enlarged. 1849.
Practical Remarks on the Use of the Speculum in the Treatment of Diseases of Females. By Thomas R. Mitchell, M.D., &c. Illustrated with Cases and Coloured Plates. Dublin: Fannin and Co. 1849.
Proceedings of the Westminster Medical Society. Session 1848-9.
An Exposition of the Case of the Assistant Surgeons of the Royal Navy. By a Naval Medical Officer. London: John Churchill. 1849.
Questions and Observations in Hygiene: recommended to the consideration of Naval Medical Men; suggested to the mind of the Author by the approach of the Asiatic Cholera. By J. J. Brown, M.D., Assistant-Surgeon, R.N. London: John Churchill. Malta: J. Quintana. 1849.
The London University Calendar, 1849. Second Edition. London: R. and J. E. Taylor. Small 8vo. Pp. 319,
The American Journal and Library of Dental Science, for October, 1848. Baltimore: Armstrong and Berry; Philadelphia: Lindsay and Blackiston.
The Medical Examiner and Record of Medical Science. Edited by R. M. Huston, M.D. Nos. from September to December, 1848. New Series. Edited by F. G. Smith, M.D., and David H. Tucker, M.D. No. for January, 1849. Philadelphia: Lindsay and Blackiston.
The Veterinary Record, and Transactions of the Veterinary Medical Association. For April, 1849.
The Pharmaceutical Journal.
The British Record of Obstetric Medicine and Surgery.
The London Journal of Medicine.
The Edinburgh Monthly Journal.
The Calendar of Queen's College, Birmingham. 1849. Edited by the Dean of the Faculty.

GOSSIP OF THE WEEK.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, April 5th, 1849 :—George King, Calne, Wilts; John Rorie, Plymouth; John Wilcocks Wakem, Truro, Cornwall; Edward John Vivian; Joseph Powell Swanwick, Prestbury, Cheshire; John Buncombe, Taunton, Somerset; John Dix, Smallburgh, Norfolk; Theobald Ringer, Langharne, Carmarthenshire; Charles Anthony Floyer, Floore, Northamptonshire; Richard Edmonds Price, Marlborough, Wilts; Edward Leopard Neville, Esher, Surrey; Edward Buckell, Chichester; John Weekes, Tavistock, Devonshire; Franklen George Evans, Cardiff, Glamorganshire; William Kitchen Parker, Peterborough; Samuel Atkinson Brough, Marlborough, Wilts; George Smith, Axbridge, Somerset; Richard Pope Jeston, Henley-on-Thames, Oxon.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, all members of the College having undergone the necessary examinations, were admitted "Fellows" at the meeting of the Council on the 11th instant, viz., Messrs. Edgar Barker, Edgware-road, Diploma dated March 5, 1824; Henry Butler, Hobart Town, Van Diemen's Land, July 28, 1843; William Henry Colborne, Chippenham, July 17, 1846; John Cooper Forster, Wellington-street, Southwark, November 15, 1844; John Havers, Bedford-place, Russell-square, December 15, 1837; Thomas Brooks Larkins, Hon. East India Company's Bombay Service, December 23, 1836; and Arthur Sargeant, Meriden, Warwickshire, November 19, 1841.

OBITUARY.—At Skellylon, near Hamilton, 30th ult., Dr. Whitehead.—March 26, at Wotton-Underedge, aged 70, Mr. George Hopkins, surgeon, of many years' practice, highly respected, and deeply regretted by a large circle of friends.—On Friday, the 30th ult., in Edge hill, in his 58th year, William Henry Lynass, Esq., surgeon.—At New Ross, on the 7th instant, of cholera, after a few hours' illness, Dr. Mullin, an eminent practitioner of that town for thirty-five years. During that time he was ever ready to attend to the wants of the poor, and it is deeply to be regretted that he finally fell a victim to his unwearied exertions in endeavouring to relieve their sufferings. By the public and the Profession to whom he was endeared, his loss will be long felt, and as a husband, father, and

friend he could not be excelled.—On the 5th inst., after a protracted illness, William Smith, late of Dowgate-hill and Stockwell-common, surgeon.

CHOLERA.—In New Ross workhouse only five persons were attacked with cholera. They were idiots, and three of them died.

ROXBURGSHIRE.—Cholera has made its appearance in Cessford, a village about five miles distant from Jedburgh. On Friday night last, a young man was attacked and died the following morning. Since then two other cases have occurred, one of which has also proved fatal. The villagers account for its introduction among them in the following manner, which, if true, speaks volumes as to the contagious nature of the disease:—The young man above alluded to had gone to Kelso on Thursday last, to assist in cultivating the garden of some relatives there, and at night had slept in a bed the last occupant of which had fallen a victim to the pestilence, and which bed since that time had never been purified.

PAISLEY.—Cholera has again broken out at Nitshill, near Paisley, and three deaths from the disease took place on Friday.

THE CHOLERA IN PARIS.—The number of cholera cases admitted into the hospitals in Paris during the last two days has diminished. It was 34, while in the three preceding days it was 62. The number of cases in the different civil and military hospitals, from its first invasion, has been, according to the *Union Médicale*, 1,009, of whom 563 have died. The mortality differs remarkably in the military hospitals from that in the other similar establishments. Hitherto in the first it has been but a little more than one-third, while in the others it has been 59 in 100. This difference is explained by the dissimilarity between the two classes, and more particularly by the frightful mortality at the Salpetrière. In this asylum for old age the disease continues its ravages upon a par with those of 1832. Within the last two days there have been 89 new cases, which make the total amount to 419, among whom there have been 279 deaths. It is not only the infirm and incurable that are attacked; the ward for lunatics, which is filled with women of all ages, furnishes an equal number of victims. The persons employed in the infirmary and other parts of the hospital have been attacked in great numbers, and two out-door students in medicine have very nearly fallen victims to their zeal. The directors of the hospitals, who have been seconded by all the medical men of the Salpetrière with the most admirable zeal and courage, have come to the only resolution which can have efficacy, and that is to reduce the accumulation of 6,000 persons, the amount of its population, by disseminating them. All the women who are able to leave the establishment will be desired to return to their families; and as long as they remain out they will receive a daily relief of 75 centimes. Notwithstanding the reports of the slight intensity and prevalence of the cholera, much alarm prevails respecting it in Paris, several persons of note having already died of it. This fact alone is sufficient to explain the public uneasiness. Fifteen members of the Assembly are said to have been attacked, five of whom are already reported dead. Several cases of death by the epidemic among the upper classes have also been reported. Among the representatives attacked by cholera is stated to day the name of M. Payer, formerly Secretary to M. de Lamartine.

THE NEED OF SANITARY REFORM IN PARIS.—It appears that there are at present fifty-eight members of the French National Assembly confined to their apartments by serious indisposition. The cause is assigned to the unhealthy exhalations which prevail in the Chamber, and from the difficulty of ventilating the building.

The cholera has declared itself at Angers and at Chalons-sur-Saone. The cases have been almost all fatal.

MEDICAL REFORM IN THE ROMAN STATES.—The Provisional Government of Rome has, at the request of the great majority of Medical Practitioners, and of the Medico-Chirurgical Committees of the Roman States, decided upon the formation of a Commission, composed of Professors Matteis, Maggiorari, Baroni, Drs. Farrini, Pantaleoni, Monti, Fabri, Fusconi, Antonelli, Feliciani, Amadio, and Apollini. This Commission is charged to consult the Faculties, the Academies, and the Medico-Chirurgical Colleges, upon the improvements which may be adopted for medical education, for regulating the practice of medicine, and for elevating the *status* of the Profession. The Commission is commanded to make its Report within three months.

ABOLITION OF BURIALS IN TOWNS.—On Wednesday week, a public meeting was held at the Whittington Club-house, in the Strand, to advocate the immediate suppression of burials in cities and large towns. Lord Dudley Stuart presided. The chairman, Mr. Mackinnon, Mr. G. A. Walker, and Mr. George Thompson, were the principal speakers. The first resolution, moved by Mr. Mackinnon, and seconded by Mr. G. A. Walker, was a protest against the practice of burial in vaults under any circumstances, and stated that the attention of Parliament ought to be immediately directed to the way in which 600,000 bodies, the annual mortality of the United Kingdom, were disposed of.

ARTIFICIAL FECUNDATION OF OYSTERS.—It is generally admitted that the sexes are united in the oyster. From observations which M. Quatrefages has made for some years past, he has been led to adopt a different opinion. Most of the oyster-banks of the Manche, the working of which affords a livelihood to the inhabitants in the neighbouring village, were for a time abandoned in consequence of their unproductiveness; but by means of artificial fecundation the oysters have rapidly increased. For this purpose, it is necessary to place the spawn upon the bottom of the oyster-ground, in order to avoid the losses that are occasionally inevitable from the currents and waves. The fecundation must be carried on in vessels containing a large quantity of water, conveyed afterwards by means of pipes plunged deeply into all the parts of the bed that have in former times been most productive.

MORTALITY TABLE.

For the Week ending Saturday, April 7, 1848.

CAUSES OF DEATH.	Total.	Average of Five Springs.
ALL CAUSES	994	963
SPECIFIED CAUSES	991	959
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	221	198
SPORADIC DISEASES:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	38	48
Tubercular Diseases	196	200
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.....	111	123
Diseases of the Heart and Blood-vessels.....	39	34
Diseases of the Lungs, and of the other Organs of Respiration	202	131
Diseases of the Stomach, Liver, and other Organs of Digestion	59	62
Diseases of the Kidneys, &c.	10	11
Childbirth, Diseases of the Uterus, &c.....	7	8
Rheumatism, Diseases of the Bones, Joints, &c.....	6	6
Diseases of the Skin, Cellular Tissue, &c.	3	1
Malformations	5	3
Premature Birth.....	24	21
Atrophy	22	17
Age.....	33	50
Sudden	4	11
Violence, Privation, Cold, and Intemperance	11	33
Causes not Specified	3	4

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN IN LONDON AND ITS VICINITY.—Our readers will see, by the advertisement in this day's Journal, that the annual dinner of this Society is to take place on Saturday, the 21st inst.

TO CORRESPONDENTS.

ERRATA.—In Mr. Stokes's paper, on the Treatment of Toothache, at page 453 of our last Number, at col. 1, 29 lines from the bottom, instead of "successfully," read "*successively*."—Page 456, Col. 2, 12th and 13th lines from the bottom, for "*Aqua*" read "*Aquæ*;" page 455, Col. 1, 32nd line from the bottom, for "*Aquæ*" read "*Aqua*"

"Alexander."—The suggestions are important, and shall be attended to.

"Dr. Kidd, Limerick."—Communication received.

"Mr. J. Parkin, London," "On the Saline Treatment of Asiatic Cholera," received.

"Mr. H. Hastings"'s Paper "On Puerperal Mania followed by Insanity," has been unavoidably omitted in the present Number.

"Mr. H. H. Pyke, Chancery-lane."—Communication received.

"Mr. F. S. Garlick, Halifax," "On the Medical Relief to the Poor in the Halifax Union," received.

"Mr. Bernard Conway, Rothley, Leicestershire," shall receive a private communication.

"Mr. Edward Daniel, Newport Pagnell," writes us in reference to the report of his speech, delivered at the National Convention of Poor-law Medical Officers, which was published in the "Medical Times":—"I never used the word 'taskmaster,' nor did I speak of giving up my Union practice 'in disgust.' It was not my intention to attack any individual Board of Guardians, but to contest with general principles, giving only examples from the range of my own experience. I should not certainly have considered it necessary to trouble you with my correction, had the report been confined to your own journal; but as it has been adopted by the Committee of the Convention, and therefore my speech necessarily appears as an authentic document, I feel called upon, expressly in my own justification, to repudiate terms which, not being mine, I cannot allow to remain uncontradicted.

"Dr. Stiff, Nottingham."—We shall be happy to hear again from our correspondent.

"H. A., Bury," asks the following questions:—1. Can a person practising as a surgeon, but without any qualification, and not in practice prior to 1815, legally sign the certificate for the admittance of a lunatic into an asylum; and will the officers of the asylum be justified in admitting the patient, knowing that the certificate is from an unqualified person? No.—2. Can an unqualified practitioner be appointed Certifying Surgeon to the Cotton Factories; and if he has been so appointed, under the supposition that he has a diploma, can the inspector legally confirm him in the appointment, after he has been told that the person so appointed is without any qualification? By unqualified, I mean, a person without any diploma, and not in practice prior to 1815. No.

"N. W. H." requests information as to the composition of the "Bengal Spleen Powder;" and also to know, if any specific for enlarged spleen (not connected with ague) be known.

"A Practitioner prior to 1815" writes:—"I am a decided enemy to quackery of every kind, regular or irregular; but when we see and know that the whole of our British Medical Institutions are based upon the old adage 'Number one first, and God for us all,' need any one wonder that quacks exist in shoals; and that the Legislature does not nor will become a consenting party to harsh laws in the shape of monopoly? As regards quackery in general, I will venture to say, that if we were to cure our patients, quackery would at once cease to exist amongst us; as, in nine cases out of ten, the medical man is first consulted in chronic diseases."

"Dr. Moses, St. Asaph."—The Paper "On some Structures of the Mole," is in type.

"Mr. Bernard Holt's" "Observations on Stricture of the Urethra and its appropriate Treatment," will be published next week.

"Dr. Turley, Worcester."—Communication received, and a private note shall be forwarded.

"Mr Tuson's" paper "On Diseases of the Bones" shall receive an early insertion.

"Mr. H. Hastings, Stoken Church."—Communication received.

"X. Y. Z" will see that his suggestion has been attended to.

"Mr. W. Brigham, Foxley-house, Lymm, Cheshire."—We beg to thank our Correspondent for his offer, which is accepted.

"A Hater of Malice."—Our Correspondent is certainly labouring under an erroneous impression.

"S. H. A., a Constant Subscriber."—He is eligible to both appointments.

"Dr. Tripe, Commercial-road."—Communication received.

"Vindex, London," was received too late for insertion in the present Number.

"Sigma, Brighton."—The delay has occurred in consequence of a great press of matter, which required immediate publication. Our Correspondent will see that his wish is attended to in the present Number, and we hope to complete the subject in two or three months.

"Dr. J. Wm. Boyd, New Ross, Ireland," received.

We are sorry that we are unable, in the present Number, to present our readers with a continuation of the spirited and interesting sketch of John Hunter's life. Next week, however, the article will be completed.

ORIGINAL LECTURES.

HUNTERIAN LECTURES

ON THE

GENERATION AND DEVELOPMENT OF THE INVERTEBRATED ANIMALS.

By RICHARD OWEN, F.R.S.,

Hunterian Professor and Curator of the Museum of Royal College of Surgeons, Corresponding Member of the Institute of France, &c.

[Reported expressly for the "Medical Times," and revised by the Lecturer.]

LECTURE II.

THE SUBJECT OF PARTHENOGENESIS.

[Continued and concluded.]

The Professor commenced by stating, that, in the preceding Lecture, he had adduced some of the instances in the animal kingdom in which a species is propagated in different ways, and is represented by procreative individuals of different forms; the groupe of such individuals representing, nevertheless, one and the same species, and returning into itself. He had, also, cited the explanations which naturalists and physiologists of deservedly high repute had propounded for one of the earlier known instances of this cyclical generation, and showed how they failed in their end; and he now proceeded to consider the explanations that had been offered by those who had recognized and pondered over a wider range of these phenomena, and had endeavoured to generalize them.

With a view to illustrate one of these generalizations, the Polygastric Monad was instanced, which, according to Ehrenberg, was developed from an ovum or germ-cell, and propagated others by spontaneous fission, just as the Hydra Polype is developed from an impregnated ovum, and propagates by gemmation an individual which, in its turn, develops fertile ova. Not that the processes always do alternate with this regularity, but they may do so.

It was obvious that by calling them "alternate generation," their nature would not be explained any more than if it was said, that the polype from the bud, or the monad from the fission, was "spontaneously or equivocally generated independently of any impregnation," or that they resulted "from the individualization of a previously organised tissue." All these would be but so many different modes of expressing the fact, with the addition of demonstrable misconception of its nature, by the advocates of the equivocal-generation hypothesis.

If, again, the hydra from the bud were supposed to assume a different form from the egg-born hydra out of which it proceeded, and to be oviparous, but the ova to produce only the lower form of hydra, which is gemmiparous, a lower and higher form alternately appearing, the one from an egg, the other from a bud: these phenomena might likewise be defined to be "an alternating generation."

The Medusæ actually manifested the phenomena that had been ascribed to the Hydra for the sake of illustration; that is to say, they resembled the polype at one stage of their development or under one form of individualisation, and the medusiform individuals were developed from segments separated from the larval polype. Analogous phenomena were presented by some of the compound Hydriform polypes, by certain Entozoa, by compound Ascidians and Salpæ amongst the Medusæ, and, with various modifications, in other Invertebrata up to the species of *Insecta*, where, in the Aphis, the "Lucina sine concubitu" has excited the wonder if not the incredulity of those who for the first time had been made acquainted with the facts.

Again, the simple hydra, which by gemmation produced the hypothetical higher form of oviparous hydra, might be designated a "*larva*," as containing potentially, and concealing, as it were by a mask, such higher form of animal. Or, by another figure of speech, the simple gemmiparous *hydra* might be called a "wet nurse," in the character of carrying or contributing sustenance to a young individual of a higher grade than itself. But neither of these metaphors would convey a full or true idea of the organic conditions essential to the development by the larval or nursing hydra of a bud producing another individual: they would prove, to every thinking mind, very unsatisfactory substitutes for such knowledge.

The terms *Generationswechsel*, "alternate generation," and *Amme*, "wet nurse," had been, however, proposed by Dr. Steenstrup, a learned and ingenious Danish Professor of Botany, in explanation of the "natural phenomena of an animal producing an offspring, which at no time resembles its parent, but which itself brings forth a progeny that returns in its form and nature to the parent;" and these phenomena, he writes, were "till now entirely inexplicable," meaning until the publication of his work "On the Alternation of Generations, or the Propagation and Development of Animals through Alternate Generations, a peculiar form of fostering the young in the lower classes of animals." 8vo. 1845. The Professor stated that he had studied this work in the hope of obtaining some further insight into the mystery of Parthenogenesis, or procreation by an animal without sexual concourse; but had sought in vain for any observation which really explained them, or anything purporting to be explanatory of them, save the phraseology and figurative expressions above cited: no organic condition was pointed out by Steenstrup as being essential to the "Lucina sine concubitu."

With regard also to figurative language in science, unless the metaphor was exact, it misled rather than explained. As to the term *Amme*.

The development of the secondary germ-cell in the body of a larva is at the expense of the surrounding cells and fluids of that larva, which, therefore, contributes food to the embryo; but this is rather as the mother of the viviparous vertebrate animal contributes nutriment to its embryo, than as the wet-nurse does to her foster child: the relation of the offspring of the parturient larva to its procreator is also very different from that of the infant to the nurse, and more closely resembles that of the fœtus *in utero*.

It was by no means easy, however, to find a name for the relation in which the fissiparous monad stands to the two monads between which it has been equally divided. A parent retains its individuality distinct from its progeny; but the monad has become a part, and, indeed, the chief part of the two that have resulted from its spontaneous fission. Both separated moieties are, in an equal degree, the same individual as the whole from which they proceeded; and in an infinitesimal though conceivable degree the actual monad is the same individual as the first created one from which it may have proceeded by an uninterrupted succession of spontaneous fissions; and in that degree it may be viewed as one of the oldest individuals in creation, the individual having never wholly become deceased.

The value of the "alternate-generation" theory was well tested by its alleged relation as affording the explanation of the very remarkable mode of parthenogenesis manifested in the Aphides. The virgin-procreation of the Aphides is described by Professor Streenstrup in his work, agreeably with the account which was given in the former lecture, and which is generally received. He calls the virgin larviparous Aphides, *Ammen*, or "wet-nurses;" says, the species is propagated by "alternate generation;" and affirms, that "no true ovary has been discovered in the larval and larviparous Aphides, but that the germs, as soon as they are perceptible, are situated in organs which must be regarded as oviducts and uteri.

The Professor gave the details of his own anatomical observations on the generative organs of the Aphides, which went to show, that the virgin larviparous individuals did not differ from the oviparous individuals in the ovarian part of the organs, but in the absence of the "spermatheca," and "bursa copulatrix" concerned in the act of impregnation, and in the absence of the colleterium, or organ secreting the adhesive matter which creates the eggs in the oviparous female.

The contents of the ovarian tubes differed, inasmuch as they contained oval masses of granules or nuclei, comparable to the "germ-mass" in its state of utmost subdivision, and not ova, with the germinal vesicle.

In denying the presence of ovaria in the larviparous *Aphis*, it would seem that Professor Steenstrup had been biassed by a predilection for the metaphorical name of *Amme*, which he applies to them, and by an *à priori* conclusion, which he thus enunciates, viz., "that as in the more perfect females an *ovary* especially is formed, so, in the '*nursing*' individuals, a much-developed *uterus* is presented, in consequence of which, they, as individualized *uteri*, have assigned to them, as the object of their existence, the performance of the functions of a *uterus*." (P. 113.) And, no doubt, the Professor remarked, the relations of the larval *Aphis* to the embryo developing within it are much more truly uterine than mammary—more maternal than nutricial. Had the Danish physiologist rightly recognised the anatomical structure of the generative organs of the larval *Aphis*, he might have discerned a much closer relationship between the ovaria and the act of larval propagation than between this and the uterus.

When, in regard to the analogous generation of the *Medusa*, Professor Steenstrup says that the polypiform *Scyphistoma* "is a *precedent* generation of the kind in question," viz., "alternate generation," and that the *Strobila* is a *precedent* individual or *preparative* individual, we have here only a different and more formal mode of expressing Siebold's and Sars's facts, viz., that the individual form of the *Medusa*, which Sir J. G. Dalyell called the *Hydra Tuba*, precedes the more perfect form, and that the next larval individual, which Sars called '*Strobila*,' is preparatory to the production of the young *Medusæ*.

It does not explain why the *Hydra* precedes the *Strobila*, or how the *Strobila*, prepares the *Medusa*. The conditions of the organization that render the gemmation of the *Hydra Tuba* and the spontaneous multifission of the *Strobila* possible are not pointed out; these phenomena are left as unexplained as they were before; at least the words that "they take place agreeably with the law of alternate generation," and the metaphorical comparison of the *Hydra* and *Strobila* with "wet-nurses" (*Ammen*), bring no information as to the organic conditions of the phenomena: the facts, as discovered by Sars and Siebold, remain just as absolute and empirical as they were before. They had, however, been grouped together with corresponding phenomena in other species, and many of their analogies had been pointed out for the first time by Professor Steenstrup. The inadequacy of the Alternate-generation theory to explain the phenomena, had been exposed in able reviews in the *Annals of Natural History* and the *Medico-Chirurgical Review*. And in the latter work the reviewer offers what he believes to be a clearer and more philosophic view of the subject. This view may be briefly stated to be based upon the belief that gemmiparity or the process of gemmation is altogether distinct from oviparity or the process of development in and from an ovum; viviparity being rightly shown by the Reviewer to be a mere modification of the process of development from an ovum. He defines oviparity as being effected by the concurrent agency of two sets of sexual organs, situated on the same individual, or appertaining to two different beings; and where there is no evidence of such concurrence, the presumption is held to be strong that there production is really carried on upon the gemmiparous plan, which is defined as a multiplication of cells by a process of *continuous growth*, or growth in continuity with the parent, effecting gemmation, and also spontaneous fission, in contradistinction to multiplication by means of germs detached from the parent. With this process, as illustrated by the growth of the Conferva, the Professor compared the first steps in the development of the bud from the polype, and of the uncinated and suctorious individual developed by gemmation from the mother-cyst of the Cœnurus and Echinoccus. And with regard to the distinction drawn in favour of the germs detached from the parent, it was argued,

that the germ-mass in the larval and larviparous Aphis is as really distinct and detached from the parent as is the egg in the oviparous Aphis. The first steps of development are identical in both: they might equally be defined as "a multiplication of cells by continuous growth and independent vitality;" but this definition would be simply an expression of the well-known fact, that cells do multiply, and especially germ-cells, and so produce what may be called "continuous growth," as in the Confervæ, and that both the cells and the parts they form have vitality. What the physiologist required was, the condition of such growth by multiplication of cells, which is essential to their forming a germ-mass, and laying the foundation of a future individual; and his conception of this condition would be in the ratio of his comprehension of the purport of the process by which the germ-mass is formed in all animals.

When it is seen that the development of the *Aphis*, and its continuous growth by the metamorphosis of a germ-mass, resulting from multiplication of cells, takes place within the body of the larval Aphis, without any previous detachment of an ovum, properly so called, or any pre-existent ovum, like that in the larviparous Blue-bottle Fly, a phenomenon is recognised which is essentially similar to that which, by multiplication of cells in so-called "continuous growth," produces the bud in the *Cœnurus*, in the adult *Hydra viridis*, and in the larval *Hydra tuba*. But, in the *Aphis*, the gemmation, instead of protruding through the side of the abdomen, extends into an oviduct; the progressive growth distends the tube into an uterine sac, and the progeny escapes "per vaginum."

The analogy of the virgin *Aphis* thus propagating by a kind of internal gemmation—the germ-masses commencing the growth being neither more nor less independent than those which lay the foundation of the bud in the *Cœnurus* and *Hydra*—would guide the physiologist in his opinion as to the sex to which those seemingly sexless animals might be referred. And since growth by cell-multiplication producing a germ-mass and bud, instead of being "altogether distinct from" the growth by cell-multiplication and the formation of a germ-mass in an egg, was essentially the same kind of growth or developmental process, the same analogy would furnish the botanist with a reason for viewing a budding plant as essentially "female," and for regarding the so-called males of the Palms and other Linnæan *Diœcia*,—plants which terminate their series of successive gemmations by elaborating the true male individuals or "stamens,"—as stem-bound aggregates of female gemmiparous individuals, in the form of leaves and buds; and these, by the light of zoological analogy, also may be viewed as "larvæ" in comparison with the more advanced and more individualized stamens, or males.

According to the popular idea of a tree, as an individual organised whole, with roots for nutrient organs, leaves for breathing organs, and flowers for parts of generation, the reproductive phenomena seem to constitute a single generation instead of making *two*, as represented by Steenstrup; and the Reviewer, in so arguing against the "alternate-generation" hypothesis, had truly observed, "that men are not in the habit of speaking of leaf-buds and the flower-buds of a plant as of two distinct generations." The learned Professor of Botany in King's College had defended Steenstrup against his Reviewer, by adducing what he believed to be the true, or morphological view of the individual plant, as opposed to the popular view. The true relation of the individual plant to the individual animal, and of the generations of both, was illustrated by extending the analogies. It was admitted by both reasoners, that the seed of the plant answers to the fertilised ovum of the medusa-parent, and that the polype that grows from it resembles the first leaf-bud into which the embryo expands. From this bud are at first produced others, by the *process of continuous growth*, which are repetitions of itself; and these in the plant usually remain connected with each other. The analogies were further extended by Professor Owen. The fertilized ovum of the medusa-parent is like the fertilized ovum of the *Aphis*, and the polype that grows from it resembles the first larva into which the embryo *Aphis* expands. From this larva are produced by the process of continuous growth (if such words seem to any to explain the mode) other larvæ, which are repetitions of the producer or parent; these larvæ in the *Aphis* remain disconnected from each other, and do not combine to form a compound structure as in plants and certain zoophytes; they become detached like the bulbels of the *Marchantia* or the lily, only they are rather more advanced in individual development. But under certain conditions a new and different series of embryos forming male and female perfect insects are produced; these, too, become detached, and by their inherent power of movement, through the possession of wings, they carry the germs of a new generation to a distance from the plants which their larval parents have devastated. Now, no physiologist has ever defined the series of virgin larviparous Aphides, ultimately producing male and female oviparous Aphides, as constituting a single generation, or the generation of the parts of one and the same individual; nor, if the above comparison were true, have we better grounds for so defining the succession of distinct animals which have received the names of *Hydra tuba*, *Strobila*, and *Medusa*, or the succession of those which have been called ciliated gemmules and planulæ, digestive polypes, generative polypes, Tintinnabulum or free medusiform polypes of the Campanularia and Coryne; or the successively-developed cotyledons, leaves and flowers of a plant which are combined by the stem into a seeming individual whole.

The analogy between the procreating larvæ of the *Aphis*, the *Medusa*, and the *Coralline* is so true and so close, that if the larval *Aphis* be a distinct individual and not a part, so must be the strobila, the planula, and the gemmiparous leaf; if the succession of larval Aphides produced without the access of the male be truly described, as it always has been described, as a succession of generations, so must that succession of *Hydra tuba* and strobila which leads to the oviparous Medusa; and that succession of nutritive polypes which precede the detachment of the free procreative medusoid polypes in the Coryne, and the like with the plant-generations of leaves and buds preceding the flower.

After referring to the phenomena of the metamorphosis of the leaf into the petal, stamen, &c., and conversely, as described by Linnæus in the "Prolepsis Planterum," and by Goethe in his "Morphologie," the Professor proceeded to say, that the archetypal form of plant nowhere, perhaps, existed in actual nature, but was presented under various modifications adapted to different conditions and functions, and deviating from the archetype as those functions become exalted. The most familiar, if not the commonest form of the individual plant, was the leaf. Specimens of a Bryophyllum were exhibited, which illustrated the power of re-producing other individuals by the buds which had been developed from the angles of the marginal crenations. In one of these, the buds had developed individuals having the same form as the parent, viz., the leaf, and they had sent down an organ for independent nutriment called root. The Professor remarked, that he had long ago pointed out in the Physiological Catalogue, with regard to these very specimens, how characteristic it was of the leaf individuals which enjoy unusual power of gemmiparous reproduction to retain much of the primitive cellular substance or structure. The popular notion of a tree and a coralline, as being respectively individual organisms, derived seeming support, from the fact, that in each species of composite plants and animals, the aggregate of individuals assumes a definite or specific form, whence the terms "Oak," "Ash," and "Bell-coralline," "Fern-coralline," "Sea-oak-coralline," &c. But, by parity of reasoning, the nests or "combs" of certain Hymenoptera and the nidamental capsules of most testaceous mollusks might be regarded as individuals, for the separate ovigerous cells, of which they are respectively the aggregates, are grouped together in each species, in so constant and specific a form, as to be readily recognized after having been once defined.

Diagrams were explained, illustrative of the parthenogenesis of the plant, polype, and aphis, alternating with the generation by impregnated seeds and ova.

The wingless larval Aphides are not very locomotive; they might have been attached to one another by continuity of integument, and each have been fixed to suck the juices from the part of the plant where it was brought forth. The stem of the rose might have been incrusted with a chain of such connected larvæ as we see the stem of a fucus incrusted with a chain of connected polypes, and only the last developed winged males and females might have been set free. The connecting medium might even have permitted a common current of nutriment contributed to by each individual to circulate through the whole compound body. But how little of anything essential to the animal would be affected by cutting through this hypothetical connecting and vascular integument and setting each individual free! If this operation were performed on the compound zoophyte, the detached polype might live and continue its gemmiferous re-production. This was more certainly and constantly the result in detaching one of the monadiform individuals which assists in composing the seeming individual whole called "Volvox globator." And this liberation Nature has actually performed for us in the case of the *Aphis*, and she thereby plainly teaches us the true value or signification, in morphology, of the connecting links that remain to attach together the different gemmiparous individuals of the Volvox, the zoophyte, and the plant.

From plants to Aphides, inclusive, the phenomenon of Parthenogenesis is presented under manifold modifications, alike in this essential, that they are all examples of organized beings from the impregnated ovum of which many individuals may be successively developed.

In the Vertebrated and in the higher Invertebrated animals only a single individual is propagated from each impregnated ovum. Organized beings might be divided into those in which the ovum is uniparous, and those in which it is multiparous. Generation is either polyphyonous or monophyonous, if a term might be invented for the phrase descriptive of that property of the ovum which produces the results defined by Steenstrup as "alternate generation." This was the first and widest or most general distinction to be considered in regard to generation, and in proportion as we might recognise the nature of it would be our insight into the true condition on which Parthenogenesis or the "Lucina sine concubitu" depends.

The phenomena which immediately succeed the act of impregnation, and the first steps in the formation of the germ-mass and embryo, were then minutely described.

The reception of the matter, or principle, of the spermatozoon by the germ-cell is essential to the commencement of this growth by multiplication of cells. When the primary division of the germ-cell takes place, it must divide its properties with its matter between the two cells resulting from its spontaneous fission: and this result must follow every subsequent division until the germ-cells were reduced to a nuclear or granular character, as in the ovum of the Ascaris before the formation of the cambium, and as in the germ-masses of the virgin Aphis. It was scarcely figurative, therefore, to say, that the primary or parent germ-cell had equally divided its spermatic virtue amongst its countless progeny.

In proportion to the number of generations of germ-cells, with the concomitant dilution of the spermatic force, and in the ratio of the degree and extent of the conversion of the contents of these cells into the tissues and organs of the animal, is the perfection of the individual, and the diminution of its power of propagating without the reception of fresh spermatic force.

In the Vertebrate animal the whole of this force, originally diffused amongst the cells or nuclei of the germ-mass, is exhausted in the development of the tissues and organs of the individual, in the mysterious renovation of the spermatic power in the male by a special organ; and in the development of ova

or cells prepared fit for its reception in the female. It now and then happens, even in the highest of Vertebrata—the human species—that an ovarian cell sets up the process of embryonic development, but without sufficient of the spermatic and plastic power to complete even a larval form: some crude materials of the embryo are the sole result: teeth, it may be, or hair, with irregular amorphous ossifications, such as are met with occasionally in ovarian cysts.

The completion of an embryonic or larval form by the development of an ovarian germ-cell, as in the Aphis, without the immediate reception of fresh spermatic force, has never been known to occur in any Vertebrate animal.

After testing this explanation by the organic conditions of Parthenogenesis in the Infusoria, Polypi, Trematoda, Medusæ, Annelida, Entomostraca, and Aphides, the Professor summed up as follows:—

It would be needless to multiply the illustrations of the essential condition of these phenomena. That condition is, "the retention of certain of the progeny of the primary impregnated germ-cell, or, in other words, of the germ-mass, unchanged in the body of the first individual developed from that germ-mass, with so much of the spermatic force inherited by the retained germ-masses from the parent-cell or germ-vesicle as suffices to set on foot and maintain the same series of formative actions as those which constituted the individual containing them.

How the retained spermatic force operates in the formation of a new individual from a secondary, tertiary, or quaternary derivative germ-mass, was not professed to be explained; neither is it known how it operates in developing the embryo from the primary germ-mass, or this from the impregnated germ-vesicle of the ovum.

The physiologist congratulates himself with justice when he has been able to pass from cause to cause, until he arrives at the union of the spermatozoon with the sperm-cell as the essential condition of development—a cause ready to operate when necessary circumstances concur, and without which those circumstances would have no effect.

What the Professor had endeavoured to do has been to point out the circumstances which bring about the presence of the same essential cause in the cases of the development of an embryo from a parent that has not itself been impregnated. The cause is the same in kind though not in degree, and every successive generation, or series of spontaneous fissions, of the primary impregnated germ-cell, must weaken the spermatic force transmitted to such successive generations of germ-masses.

The force is exhausted in proportion to the complexity and living powers of the organism developed from the primary germ-cell and germ-mass. It is consequently longest retained and furthest transmitted in the vegetable kingdom; the zoophytes manifest it in the next degree of force; and the power of retained germ-cells to develope a germ-mass and embryo by the remnant of spermatic virtue which they inherited, is finally lost, according to our actual knowledge, in the class of Insects, and in the lower Mollusca.

The secondary circumstances attending such development of a germ-cell or germ-mass retained unaltered in the body, differ from those which attend the development of an ovum, and vary from one another as much as the accessory circumstances in the development of an ovum vary.

A germ-cell is the essential part of an ovum.

An impregnated germ-cell is essential to the development of the germ-mass and embryo *in ovo*; it is the primary impregnated germ-cell.

A derivative germ-cell, the progeny of the primary one, retaining a due amount of spermatic force, is essential to the development of a secondary germ mass and embryo within the body of the primary one.

The gregariniform larva, or locomotive ovum, of the *Distoma tarda* most plainly exemplifies the above propositions and the essential condition of, or power of propagating "sine concubitu."

The phenomena now grouped together under the term "Parthenogenesis," have hitherto remained the most obscure and seemingly anomalous in the chapter of Comparative Physiology relating to Generation; but, with this understanding of their nature, they enter into the ordinary laws of function, and are disguised only by accessory and non-essential modifications. "If," concluded the Professor, "in the place of such explanations, I had salved these phenomena by the proposition, that "they were a process of continuous growth by multiplication of cells," or, "that they took place agreeably with the law of alternate generation; by the vital powers and by means of the bodies" of the producing individuals; and had I applied to the cercarial larva of the Distomata, to the polypoid larva of the Medusæ, and to the apterous larvæ of the Aphides, the metaphorical phrase of "wet-nurses" and "nursing generations," I should have succeeded in concealing my own ignorance of the causes and organic conditions essential to these remarkable re-productive processes, in the same degree in which such propositions and phrases might have seemed or sounded to you like explanations of the facts; but I should have done no more: you would have had apparent instead of real knowledge. No one, as it appears to me, who carefully analyses the language of the Generationswechsel theory of Professor Steenstrup, will be able to conceal from himself that it conveys no idea leading, even by a single step, to a closer knowledge of the essential conditions of the development of an *Aphis* in the body of a virgin parent. But all will readily concede to him the merit of the assemblage of the phenomena, from scattered memoirs, into one convenient work, and gratefully award to the ingenious author the praise due for this useful labour, as well as for the confirmation of some of the facts and the addition of others, which yet must have remained as unexplained and empirical phenomena, until the organic conditions had been pointed out which are essential to the 'Lucina sine concubitu.'"

LECTURES ON FEVER.

BEING AN ATTEMPT TO DEVELOPE MORE DEFINITE VIEWS OF ITS NATURE AND TREATMENT, BY THE CONSIDERATION OF THE PHENOMENA, AS OBSERVED IN THE PRACTICE OF MEDICINE AND SURGERY; BEING IN CONTINUATION OF "MEDICINE AND SURGERY ONE INDUCTIVE SCIENCE."

By GEO. MACILWAIN, F.R.C.S., Author of the above-mentioned Work, "Unity of the Body," "Tumors," &c., &c., &c.

Lecture VII.

(Continued from p. 428.)

Surely nothing can more conclusively mark the reality of the link formed by the previous condition of the body, or the prevailing *general* similitude of *that condition*, as illustrated by such thousands and thousands of cases, than that, in a disease so malignant, with a poisonous influence so real, we should still be able to prove, not only its *presence*, but its *influence* and *power* in so remarkable a manner. For my own part, were it not that, in certain phenomena in surgery, we have the power of observing on a large scale, and where *poison* is out of the question, the *general effects* of injurious influences in every *variety of kind*, I should think the facts of small-pox sufficiently conclusive, even in the absence of more direct demonstration, of that state of organs on which I would insist as the condition of the body which usually precedes fever; but there is no want of evidence in aid of the demonstration, as I will endeavour to show as clearly as I am able.

In the first place, I wish to impress the fact, that not one person in twenty is in a fit state of body to contend with any material degree of extra exertion *in the œconomy, without preparation*, however varied, opposite, or apparently trivial the exertion may be; and I wish to remind you that, the contention with injurious influences is only *one* form of exertion, *one* requisition for power. I shall cite a few examples of different kinds, because the more contrasted their external phase may be, the more teaching, I hope will be their intrinsic identity. Take almost any man, and tell him to do something involving unusual exertion, and yet nothing excessive,—such as to carry fifty pounds for 100 yards, run a mile at a moderate pace, or put on the boxing-gloves for half an hour: you will see how different his state is from that of a man who is previously prepared; how hurried his respiration and circulation,—in short, how fatigued he is. To get him to do anything unusual, even *with safety*, you must let him begin softly, let him get into a gentle perspiration,—in short, let his circulation be *equalized*. But this is true even of young men; were you to exact even exertions like these from many men of middle-age, say forty, you would scarcely do it in every case without injury. Because neither is, in fact, in "condition." All those engaged in the Gymnasium are perfectly aware that, if you require any exertion beyond the every-day business of life, that you must obtain the power by degrees; because people seldom possess the required "condition." Another class of cases, which comes a little nearer our subject, is that furnished by the history of pugilistic contests. Now, here the system is about to undergo great exhaustion and, in general, some actions of repair; and we have here, as in small-pox, abundant experiments, showing us what happens when the required preparation is carefully conducted, when it is negligently administered, or when it is entirely wanting. The preparation, when carefully conducted, consists mainly in a man being thoroughly watched, so that he lives temperately, but well; he takes the maximum of exercise to which his powers are equal without excess; he is made to breathe good air; he is made to abstain from *everything* that can weaken or derange the functions of his body; he rises early; he retires in good time, and all this is found to greatly increase his power. He now contends with an antagonist, (perhaps, equally well trained,) for an hour, with half-minute intermissions; he sustains great fatigue, is knocked about, receives several severe falls, and, in short, undergoes injuries which have, in rare instances, proved fatal; but, although carried off the field exhausted, perhaps senseless, and his face and body one mass of bruises, you see him in three or four days walking about as if he had had scarcely anything the matter with him. Not so, however, if he has been *negligently trained*; not so if intemperate habits of any kind have induced him to elude the vigilance of those who have watched him. In that case he is very slow of recovering; and, if the training have been utterly neglected, and his courage still has compelled him not to yield without a long contest; it has not unfrequently happened that the result has been fatal. When I was young I used to be surprised at the resiliency with which, in certain cases, these men recovered in a few days from degrees of injury which would certainly have been fatal in the majority of persons; and I was always informed, that a *fatal* issue to a prize-fight was scarcely known, *except* when a man was notoriously of intemperate habits, or had been *negligently or badly* trained.

We observe just the same phenomena as regards the state of organs in animals. A horse may be in *apparently* good health, but, if not duly prepared, and you were to put him to hard work, or to gallop him at three parts speed for a mile or two, the chances are that you would injure him; because he is not in condition. You will say, in what respect? I reply, compare him with a wild animal, or with a racer who *is* in condition, and going to run,—you will soon see how definite the differences are: the racer and the wild animal have little or no fat; the skin in both shows the circulation to be vigorous and energetic at the surface; the muscles in both are firm and hard; there is every proof of equalized circulation, and you obtain every evidence of unusual energy, at the surface of the body, just where you will *not* see it in a horse that is not in condition; and activity at the surface is, of course, *cæteris paribus*, the great test that you have unproportionate distribution of blood in the internal organs. I say, distribution of blood, because the ratio of function required in an organ, to keep in health, is, of course, direct as the quantity of blood sent to it.

In short, there is no contest of any kind, involving even moderate increase of exertion, in which there is not, in the preparation, necessary, constructive evidence, that the body is in a state *requiring* correction; as the whole facts of "training" sufficiently illustrate. Much of the objection to the boating in some of our public schools (and this is the more instructive, because it refers to the young, and so-called healthy), consists in the exertion being made without attention to *the condition* necessary. Boys are often selected for matches without due reference to their organisation, and are either not properly trained in reference to their powers, or, what is still worse, left to train themselves. Whoever considers the life of a school-boy, will immediately see how regular is the *sedentary* portion of his habits,—how constantly he is stuffing his digestive organs with trash, and how *irregular* and ill-conducted is the physical part of his management. We cannot be surprised, therefore, that boys are so often *permanently* injured by exercises which, under due physical management, would only increase their powers. As much of their mode of living involves inattention to the physiological laws, on obedience to which the whole of their vigour depends; so there must be a proportionate diminution of power, which can only be raised to the natural standard again, by obedience to such laws; in which, in fact, *good* training consists.

Very many other cases impress the necessity of preparation wherever the body is to undergo any unusual exertion, whilst they afford to those who who will look for these abundant proofs of the actual and *ordinary* presence of an ill-balanced state of the various functions.

Surgical operations not unfrequently establish requisitions for temporary increase of exertion in the economy; and, although preparation is now seldom neglected, yet hereafter I shall probably have too abundant illustrations that it is not by any means so carefully conducted as it ought to be; and that operations are still too frequently performed in violation of the most obvious, well-grounded, and, I believe, acknowledged requisitions of operative surgery, and, of course with the results which might have been anticipated. On the other hand, it is but fair to observe, that many surgeons have very well-considered convictions on this subject, and that operations are sometimes performed under extremely inauspicious circumstances, but wherein the preparation has been carefully conducted, with the happiest results.

I can safely say, that for one twenty years of my life, I hardly ever performed any of the operations I was called on to do in one Institution,—the largest of its kind at that time in the metropolis,—under what could be fairly considered as really auspicious circumstances; and yet I believe it will be admitted by those who were at various times connected with me, but few were more successful. I always attributed the success entirely to the general treatment of the patient; and I find that Professor Dudley, of Lexington, who has probably had as great a success in lithotomy as any man living, attributes it entirely to the mode in which he treats the general health of his patients. In operating on the eye, I have especially been struck by the entire absence of any untoward symptoms, in cases where I at first thought the hope of success so faint as to have refused to operate. Gouty cases have, of course, impressed themselves more strongly than others; and I recollect one gentleman, with cataract who was a mass of gouty concretion, on whom I at first refused to operate; whose left eye had been lost by an unsuccessful attempt by a very good operator, and yet whose right eye, on which, after due preparation, I was reluctanly induced to operate, did well without a single bad symptom. The fact, indeed, that induced me to operate, was accidentally ascertaining that the surgeon who operated on the other eye had done it 48 hours after first seeing his gouty patient.

I must not forget to advert to the evidence afforded of both the general fact, and the particular states of organs antecedent and co-existent with fever, evidenced by the history of fevers of particular forms —such as the spleen, and, probably, the whole portal system in Ague. The prominent part taken by the liver in the bilious remittent of warm climates, and, again, in their yellow fever. The history of these diseases also, when we consider, the influences to which the patients have been commonly subjected, affords no reasonable ground whatever for supposing that these organs are all at once or suddenly deranged, independently of their previous condition. However, as I have said, we may take almost any person, and obtain direct demonstration of the general existence of the condition we seek to prove; and we shall take the more difficult one, and that which it is of the greatest practical consequence to impress,—I mean, a want of balance in the functions of the body; because anybody would admit, that the existence of absolute organic disease would be sufficient to determine the badness of type or the fatality of fever, or any other consequence deducable from deficient power. Now, the question to be determined is really very simple; we have only to observe the facts in such persons as we have an opportunity of doing, and to examine whether we do or do not find quite as great a number as are ever affected by any epidemic, demonstrating, that a state of unbalanced organs is the rule. Medical men have quite sufficient opportunity of doing this; and the investigation requires no greater information than is, I believe, in the possession of every practitioner, whilst the evidence usually lies, as it were, near the surface. A very few questions will almost always elicit sufficient to show the *general prevalence* of the condition referred to; its more definite *form* requiring a still *simple* but more careful investigation. Organs, to be out of balance, must of course secrete more or less than their usual quantity; and we know that, allowing a certain range for that ordinary interchange of function which is strictly compatible with real health, that the quantity done by any organ is proximately an appreciable quantity. We know, also, that naturally one organ does not take on even the usual interchange of function, without the *presence of influences* explaining it, such as that of the kidneys and skin in variable temperature; but even that difference in the function of these organs, with the presence of certain temperatures, would be sufficient to *show* them to be out of balance, if there *were no circumstances* of the kind present to explain it. Then, again, *proximately* we can get at the general sum of work done by the whole of the functions, so that, if we wish to test the general prevalence of the condition contended for, we have all the elements necessary for determining, in a general way, whether the various functions are performed by their *respective organs* in moderately due proportions. Besides this, in the adult, we know also where, as well as how, to look. Man's volition will, as the rule, generally impose most labour on those organs which combine the greatest *necessity* with the most *prompt* and *easily* acquired, or most *rapidly recurring* fruction. Now, none combine these attributes in anything like the same force as the digestive organs; and the whole habits of civilized society are an elaborate exemplification of how fully they are exercised from the cradle to the grave. With regard to the young, if we wish to know, in them, *where* as well as how to look, their *tendencies* may usually be gathered from the combined evidences of obvious temperament, previous disease, and history of the parents, especially with reference to the transmission of *acquired* peculiarities,—a great law, which has by no means been inquired into commensurately with its immense moral as well as medical importance.

Now, if you take any set of healthy (so called) animals, you very soon find signs of loaded organs. Now, the digestive organs are the most worked; but here comes a fact of great practical consequence; they are the most important, and the result is, that the *signs* of their disturbance are not always seen in the organ *primarily* deranged, but in some other, greatly influential in the œconomy, it may be, but not *so* immediately essential to life, having more ready communications externally, and so on; so that, as I have elsewhere remarked more at large, you have this great practical fact, that the symptoms of disease are probably seated in one organ, whilst the cause is in another. A very little examination will, in the majority of persons, detect plenty of indications of the state which we wish to prove. In one, the quantity, quality, odour, and even colour of the secretions of the skin; in another the qualities of the breath; in a third, the quantity, quality, or both of the urine; in a fourth, the state of the liver and bowels; and in others sundry combinations of these will be detected with quite sufficient ease and frequency, to show them to be the rule. And, though we knew nothing on the subject practically, we might be certain, that no state of system in which the functions were unequally distributed *could be* a state of normal or natural power, because, if we thought otherwise, we should at once perceive, that we were in the dilemma of supposing that, whether the functions of the body were naturally performed or otherwise, that the power would be the same, which I repeat would be a physiological absurdity. We find, in fact, that people are in the condition referred to, and that, if they are subjected to injurious influences of a *certain gravity*, that fever occurs. If my Professional Brethren are not more familiar with the conditions which I am, I fear, but dimly shadowing out, it can only be from not looking for them, for they exist everywhere, amongst us, and the detection of them is most easy.

Nothing, however, is more common than to hear medical men speaking of the general health being good, when the circumstances, and very frequently the context of their own narrative affords most unquestionable evidence of the contrary. It is only a few weeks ago that, at the Royal Medical and Chirurgical Society, I heard two persons spoken of as having their general health good, as being subjects of a disease, which, of course, was a proof of the contrary; and when I suggested that it would be desirable that authors should accompany the statement that the general health was good by the grounds on which the statement rested, some little conversation elicited that the two individuals who had been alluded to,—were the one a milliner, the other a cook; persons who are so notoriously examples of anything but health, that I might indeed have well asked the ground for the assertion.

There is one kind of person, however, whose system is in a state extremely unfit for that exertion which contest with injurious influences implies, and who is very unlikely to contend against anything disordering without fever, and who may yet not present those evidences of *unbalanced* function on which I so much insist. In fact, *that* condition has not yet taken place in the one in question. The case I allude to is the *bon vivant*, who is young, or at least not advanced, perhaps, beyond thirty, and whose organs, under the excitement of full living, may all be doing their duty, but at the maximum of their power. Here is a man, living, as Mr. Hunter phrased it, above par, and now, if you establish any *requisition* in the economy, implying continued resistance or *repair*, you find that there is no power to spare. The effort required is the *effort* "fever," and probably of a very powerless type; beginning with great excitement, too commonly ending in rapid *subduction* of power. It seems to me that, whatever form of fever we examine, after carefully considering the whole of the circumstances constituting the history of such fever, we obtain the strongest evidence of the *dominant* influence of the previous state of the body, and in no sense more strikingly than in the result as favourable or otherwise. We see, in the facts recorded by Dr. Hancock, in relation even to the plague, how varied the type of that disease is, by the *dominant* power of the *organs known to have been previously* affected, giving the *difference* of type in *different* cases. It seems, then, clear to me, that the propositions, hitherto considered, rest on facts which are in themselves indisputable, and which admit of no other conclusion than that which is drawn from them. These facts might be greatly multiplied, had we space, or did it not render the argument unreasonably tedious. We shall, however, have occasion to test the propositions still further, as we proceed to the end. In the meanwhile, it is clear that, if the previous state of the body be the important *fact* which I contend it is, that *an intimate and definite*

knowledge of that *state* must be *absolutely* essential to any approximation to clear or correct views of the *special* treatment of fever.

The remaining propositions will be considered in the next lecture, when we shall begin to see their bearings on treatment.

LECTURES ON MATERIA MEDICA,

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS.

By GOLDING BIRD, M.D., F.R.S.,
Materia Medica Professor to the College.

[Reported expressly for this Journal.]

LECTURE I.

THE MATERIA MEDICA OF THE 17TH CENTURY.

MR. PRESIDENT,—On two successive sessions I have had the high privilege of addressing the College as its Materia Medica Professor, and I then selected a series of subjects, important alike for the extrinsic interest and intrinsic novelty presented at least by some of the statements I then brought forward. Two years ago I drew your attention to the influence of that wondrous agent presiding over the polarity of matter, and which is recognised in the phenomena presented by electricity; and I then endeavoured to bring before you, not only the evidence of the influence of this agent, on living and dead matter, but ventured, so far as I dared, to be in advance of the recognised position of my subject, and hinted at results rather possible than proven. With a similar spirit, I attempted last spring to wield the wand of the chemical philosopher, and endeavoured to lay bare before you those penetralia of the living fabric over which Chemistry presides. I here brought before you the results of the labours of our contemporaries and fellow-workers, so interesting, that the attention of every thinking member of our Profession must of necessity have been arrested by the magnitude of the effects thus resulting. For the introduction of such subjects no apology was due, save for the imperfect mode in which I treated them. I feel, however, that the text of my present lectures may suffer by comparison with the past, for, at the outset of this subject I propose, not to advance beyond the present state of general scientific knowledge, but to recede a couple of centuries, and even retrace some of our steps, and in the first two Lectures to draw your attention to the labours of the good and the great of early times, who devoted their energies especially to the development of the therapeutical part of our knowledge. I feel perfectly conscious that the subject I have chosen for these Lectures may excite surprise in some minds, who have done me the honour of attending the Courses previously delivered in this College, and some explanation on this point is necessary.

With the Materia Medica of two centuries ago, it may be assumed by some, that we have nothing to do, and that the errors and theories of our ancestors ought to be allowed to moulder in the dust of ages; but I hope to be able to show that they have more to do with the perfection and excellence of the nineteenth century than many suppose. It is true, that with the therapeutical knowledge of those days there was a vast accumulation of dark and misty error, but under that very mass there lurked a smouldering fire of rich experience, and for which, under the favouring breath of scientific research, we are indebted for the brighter flame shining on our own appliances. It is not, however, with the intention of reviving old and exploded theories that I have chosen my subject, although, in my reading, I have been amused to find a striking illustration of the experience of the wise King, that there is nothing new under the sun, for there are few of reputed modern discoveries, as well as of new empiricism and fashionable follies of medicine which I have not met with. Some of these, and to which I have as yet seen no allusion, I shall have occasion to notice in the course of these Lectures. We ought, too, to remember the many ornaments of the Profession in the list of Fellows of this Society, who aided in the compilation of that Materia Medica. Sanctioned by the names of men so well known as those of Theodore Mayne, Dr. Gulstone, Dr. Wm. Harvey, Dr. Hamer,—(who so loved his Profession that, with a rare virtue, he refused the offer of a knighthood from his Sovereign, for fear of diminishing the lustre of his professional fame. A note of this circumstance exists in the College Annals, in the words of Dr. Whistler, the President; he says:—"Equitis aurati a Regia magistate non semel obtinendum titulum cum gratiis non voluit; nè Doctoratûs excellentiam contaminaret;")—of Dr. Francis Glisson, Dr. Willis, Dr. Charlton, and of the immortal Sydenham,—surely a collection of remedies sanctioned by such as these is worthy of attention, even after a lapse of two centuries, coupled with the fact of the very high estimation in which the physicians of those days were regarded; two, if not more, of the higher ranks of the nobility, figuring as Fellows of this Society, a Duke of Montague and a Marquess of Dorchester, the latter having bequeathed to it his library, then valued at 4,000*l*.

But the real reason why I have selected this topic for my Lectures is—a sense of duty. In my capacity of one of the Curators of the Museum attached to our College, I have under my charge the Materia Medica of that Museum. This collection is most unique, containing every drug used in medicine from the time of James I. A single glance conveys to one's mind the vast progress of science in the last two centuries, as completely as a collection of coins does of the chronological revolutions of a particular nation. This collection was commenced by the late Dr. Burgess, who destined it for a private one, being anxious that it should not become attached to a public Institution. Mr. Brande, however, to whom it was bequeathed, did not sympathise in this desire, and gave it to the College, according to a tablet in the theatre.

"Anno 1809.

"Mr. Everard Augustus Brande gave an extensive and valuable collection of Materia Medica formed by the late Dr. Burgess."

This was afterwards collated with that of Dr. Coombs. I, therefore, thought it incumbent on the Materia Medica Professor of your College to bring before you some idea of the nature of this remarkable collection. But there is something of greater interest still connected with it. At a first glance, any one must be struck with its odd and heteroge neous character. Some are, as remedies, completely worthless, and others seem more suited for the diablerie of witchcraft. One might almost imagine that Shakspeare had taken his witches ingredients from it; it does not certainly contain

"Nose of Turks and Tartar's lips;
Fingers of birth-strangled babe,
Ditch-deliver'd by a drab;"

but it does contain the skull of a murdered man; the hand and jaw of a mummy; the horn of a rhinoceros; the teeth of a sea-wolf; the teeth of a wild boar, or, I presume, of the Barbarossa hog; frogs and toads; the palate of a sea-wolf; the blood of a man (but mark, it must be of a young man with red hair); the testicles of a horse; the dung of a dog and of a peacock; scorpions, vipers, sea-lizards; and also these very important articles,—the penis of an ox and the penis of a stag.

That such a collection of odd and disgusting remedies are now banished from our Materia Medica is matter of no great regret; but still we should not refuse to give credence to the observations of the old physicians, nor neglect their statements of facts. I believe there was a very large amount of curious physiological matter in vogue two centuries ago; and I would especially refer to the Honourable Robert Boyle, whose labours and writings were the earliest offspring of the inductive philosophy of Lord Bacon. His honest and sincere devotion to truth, led him not to rest satisfied with the observations of others, but to search out for himself; and, on reading his experimental researches on the physics of ponderable bodies, on the properties of elastic bodies, on the elasticity of the air, his discovery of the propagation of sound by the air, the reciprocal attraction between an electrified and a neutral body, and his laborious verification of the theorem of Torricelli, it is impossible not to be attracted to him. Are we, then, justified in refusing his observations on the frame of man? Some of these are of a character which none would wish to falsify. If the effects of a certain remedy given to an hysterical girl be recorded, we may, indeed, feel suspicion; but if, under the influence of a remedy, a tumor disappears, we cannot deny the fact. Now among his receipts, I find two which have been claimed as the results of modern science. Boyle says, for diarrhœa he gave a grain of opium and a scruple of calomel; and for burns and scalds, linseed oil and lime water; and here we should admit his statements to be true, because we know the effects of such medicines from modern practice. But he also says: "Tumor in the neck will disappear by the application of it to the neck of a dead man." In this Boyle could not have been deceived, because the tumor was a visible, tangible thing, concerning which there could be no doubt. Instead of laughing at this statement and rejecting it, can we not successfully search for a physiological explanation of the result, the truth of which cannot be denied, unless we are driven to the preposterous notion, that while Boyle could not utter a falsehood in physics, that he could not utter truth in physic. Again, he recommends for the treatment of acute erysipelas of the face, the application of the warm blood of a hare, under which application he saw many do well: here, again, if we smile at the remedy, can we not give a satisfactory explanation of its excellence and efficacy.

I am anxious here not to be misunderstood. I am the last who could wish to waste valuable time by drawing attention to follies and day-dreams of enthusiasts, merely because they lived two centuries ago; or to imitate the man who, in the words of the author of a recent leading article, was said to have shut up his intellect in a dark-lantern, and engaged himself in endeavouring to discover the day before yesterday. But I am anxious to claim some little attention for the physicians of that period, men imbued with the spirit of Bacon and of Boyle, who have left us carefully recorded directions, men who observed facts, and then conceived their theories. And let me here observe, that in the absence of the refined pathology of our own time, unaided by any of our powerful instruments of diagnosis, the practitioners of a former day did most certainly watch with more care the results of their therapeutical appliances than we are accustomed to do. It is true, their too great credulity often led them to accord more credit to remedies than they really deserved; still, I venture to affirm, that in their writings we meet with more attempts to connect the symptoms of disease with the application of remedies (however imperfectly) than is now the fashion. Therapeutical reasoning is far too much neglected, too generally voted a nuisance; and it is often with pain that I observe our pupils anxious to verify a diagnosis in the dead-house with the utmost zeal, whilst the treatment of the case and alleviation of the patient's distress is hardly thought worth notice. Too many now enter practice totally unfitted to wield the weapons they are licensed to use. A therapeutical society, I have often thought, would be a greater boon to the Profession than one of abstract pathology. I would claim for the writings of some of our predecessors such an amount of attention which so many of their cotemporaries were unworthy of, and simply unworthy, because they obviously fitted their facts to their theories, the reverse of the great axiom of inductive philosophy. As an illustration of that class, let us turn now to that notorious quack, Sir Kenelm Digby, who, in his book, has not left one fact which a schoolboy might not falsify. He assumes that there are certain properties of matter, by which like attracts like; the moon he considers to be aqueous, so much so, that he says: "Therefore, if one should expose a hollow basin, or glass, to assemble them, (the beams of the sun and moon,) one shall find, that whereas those of the sun do burn by such a conjuncture, these (of the moon) clean contrary do refresh and moysten in a notable manner, leaving an aquatick and viscous glutining kind of sweat upon the glasse. One would think it were a folly that one should offer to wash his hands in a well-polished silver bason, wherein there is not a

drop of water; yet this may be done by the reflection of the moonbeams onely, which will afford a competent humidity to do it."—*Discourse made in a Solemn Assembly of Nobles and Learned Men at Montpellier in France, Touching the Cure of Wounds by the Powder of Sympathy.* 1658. He also writes as follows:—"A neighbour of mine had a very pretty and delicate child. One day I found him very sad, and his wife a weeping, whereof demanding the reason, they told me that their little child was very ill, that his stools were covered blood, and that he refused to suck." I told them with that I fully expected the attack, for, the last time I was with them, he let fall his excrements on the ground, and his nurse presently took the fire-shovel and covered it with embers, and then threw all into the fire, which burning, entered the child's rectum, and produced inflammation."—*Ibid.*

This doctrine of sympathy appears to have been in vogue 500 years ago, from the writings of John of Gadesden. He relates the curing of small-pox in the infant son of Edward I., by wrapping the sick boy in a scarlet cloth, in a room hung with crimson drapery, and recommends this as an excellent cure: "Capiatur scarletum, et involvatur variolosus totaliter, sicut ego feci de filio nobilissimi Regis Angliæ—et feci omnia circa lectum esse Rubea et est bona cura." (See Rosa Anglica Practica Medicine a Capite ad Pedes.)

I am convinced that great good has been effected by our ancestors, if it is only that we may escape their mistakes. To look at the result of observations made in the 17th century by the light of the 19th is not fair; we must look at it, if possible, with the eyes of those times, and then, I rather think, we shall feel surprise at the extent of their information. The very peculiar fancies, even then, belonged only to the few; and our successors might, with equal justice, contemn the science of the Fellows and Licentiates of this College, merely because one of its alumni advocated the use of cold water, or invisible quantities of drugs, or attributed cures to motions made before the fixed gaze of his patient.

Before commencing the description of some of our therapeutical curiosities, I must beg permission to initiate you, very briefly indeed, into the chemical views dominant when the first Pharmacopœia was issued by this College in 1618. At that time the definition of a chemist was the "artist by fire;" and in a Treatise on Chemistry of the period, I find the word Chemistry derived from $\chi\acute{\upsilon}\omega$, to melt, with the following definition:—"The art which teacheth to draw the essence or very life of things by force of fire, bringing forth tinctures by extracting, spirit and oil by distilling, flowers by subliming, and salt by calcining."—"Salmon, New Lond. Disp." Second Edition. 1682.

Every existing form of matter was supposed to consist essentially of Body, Spirit, and Life, thus defined:—

1. *Body* is a principle fitted for the reception of the spirit, without which it would be inactive or dead; and in this sense it is the containing principle.

2. *Spirit* is the formal principle of everything, being the source of action, and of the vital or living principle.

3. *Life* is fire or heat, which actuates and invigorates the former two, and without which they would be a mass of deadness, insensibility, and unanity.

Thus, in the flame of a candle, there would be—1st, the *body* of the flame, which is light; 2nd, *spirit*, which informs it and gives it motion; 3rd, the inward life, fire or heat, which makes the spirit and body also move, and preserves in that form and agitation; which third and last principle, as it is most inward, so is most difficult to be discerned, unless by an inward and spiritual eye. The perfect union of these makes them appear to be truly and indeed but one, according to the nature of the Divine Triad, and, as it were, a demonstration of the same." In an inorganic body these attributes were supposed to be readily traced out; thus, in a crystal, the mass is the body; the attraction of aggregation holding the atoms together, is equivalent to the spirit; and the cause of this attraction, (analogous to what we now designate polarity,) was regarded as the life. Applying these views to the chemical constitution of the body, the old chemists recognised these three primordial elements in three generic constituents, which they respectively called salt, sulphur, and mercury, to which was afterwards added phlegm;—the salt, of which common salt was the type, answered to the body, sulphur to the spirit, and mercury to the life. These views were not long after exchanged for a recognition of the four elements, earth, air, fire, and water, in all bodies, of which salt, sulphur, mercury, and phlegm, were the types. The tendency to detect mystic relations in all the phenomena presented by the imperfect chemistry of the day curiously characterised the writings of the adepts. But it is not less curious to see how closely much of the reasoning of the old men approaches, or even, after translating their language into intelligible terms, identifies itself with some of the recently much-lauded enunciations of science. Look, as an example, at the remarkable lecture of Dumas on the constitution of organised beings, which, two or three years ago, attracted so much attention. He, in his own elegant and demonstrative manner, pointed out the non-existence of death in organised matter. Thus, a vegetable lives; then, from some cause or other, is said to die; but really, in submitting to the chemical laws of putrefaction, is resolved into constituent elements, which are melted into the air, or fall to the earth again to enter into the composition of new organic beings; thus the so-called death is a development of fresh life. After expressing the same thing in the quaint and antiquated terms of two centuries earlier, one of the old physicians ends his statement, after tracing the revolution of a vegetable into its supposed three constituents, and their recombination in other forms—that "they (the results of decay) are comprehended in the three, which again unite in one, so that death (which was the putrefaction and corruption) is now swallowed up of life."—Salmon, page 809, par. 13. A terse and quaint enunciation in three lines of what the French philosopher occupies as many pages in expressing. Following up this kind of reasoning, chemical analysis became a very simple affair, consisting simply in submitting the body to the influence of heat. Some bodies, like the metal and gems, gave the operator nothing for his pains. The cause of this was, in his view, plain enough; all the elements existed in the body, but too closely united to yield to the force of fire. Other bodies required their pores opening first, and this was done by allowing putrefaction to occur—a process generally effected by placing them in proper vessels, and laying them for forty days in a mass of heating horse-dung, and then distilling them. It is hardly necessary to observe, that animal and vegetable bodies thus treated would, by distillation, yield nearly the same results, at least in a majority of instances. As an illustration, fresh urine (always provided it is not voided by young men with red hair) was looked upon as a potent source of remedies, an idea not a little heightened by its yielding phosphorus, then recently discovered. If distilled fresh, it gives off but little of its virtues; but, after putrefaction in horse-dung for forty days, it is stated, that it will readily give off its volatile salts. Of course, this is to us intelligible enough; for, by the forty days putrefacton, the elements of urea are resolved into carbonate of ammonia, which readily distills over. Some of this being dissolved in the water is a fetid ammoniacal fluid regarded as the spirit, that subliming in a solid form being regarded as the salt; the third element finding its representative in the phosphorus, yielded by a protracted and tedious distillation. By these processes, peacocks, storks, toads, frogs, vipers, human fæces, and a host of other odd things, were made to yield a spirit and a salt—all possessing, even in the views of the physicians of the day, the same virtues, being employed in epilepsy, hysteria, and allied diseases. It is curious, that counter-irritation with these fetid ammonical fluids in the course of the cranial suture, is recommended in strong terms for different cerebral affections—a practice very likely of great service, and analogous in its action to the long caustic issue lately recommended. Those who are inclined to adduce new illustrations of the oft-quoted adage of King Solomon, might find a remarkable anticipation of late investigations conducted by many of the zealous pupils of Baron Liebig, in the submitting animal matters to putrefaction, as a means of developing new products,—a mode of investigation which has produced, very lately, especially in the remarkable cases of putrefied casein and bile, results of the most singular interest and importance; whilst it is a curious coincidence, that the old chemists used putrefaction for the purpose alluded to, the results at which they arrived were, of course, comparatively worthless—a necessary result of the rude analysis by fire which they employed, contrasting wonderfully with the refined and elegant modes of investigation devised chiefly by the consummate skill of the head of the Giessen school. Among the most striking errors of the old chemists was one which, resulting from the rudest analogies applied by the most hasty generalizations, it is a matter of surprise, could be entertained by the many shrewd and intelligent reasoners of the time. Starting from the familiar fact, that of rectifying or redistilling the alcoholic fluid obtained by submitting various fluids to heat, they, in their ignorance of the chemical composition of bodies, fancied that any fluid, by repeated distillation, might be made more volatile, acrid, and pungent. More than one have left their opinions on record, that if they continued distilling even the dew over and over again, an acrid fiery spirit might be obtained. The labours of the chemist were, consequently, invariably directed, in the search of specifics and catholicons, to what he applied the term of alcholats, quintessences, magisteries, and benoars or counter-poisons. These terms, consequently, figure in all the older authors, and in the medical writings of the time we are considering.

Another circumstance, which exerted a powerful influence in the times we are reviewing, was the general notion of the influence of the planets on the patient, his disease, and the treatment. Not only were herbs supposed to be under the influence of the planets, but they are spoken of as animated with feeling when so influenced. Thus, a herb under Venus would exercise an influence on that part of the body which was so allied to that planet; and a planet of Mars would promote strength and vigour. It may be supposed that there was some curious medical reasoning under which these views were announced; but though they were of this mythological character, yet they were seriously propounded, and never did the Druids more devoutly sever their mistletoe at a particular time, than did the physicians of old apply their remedies under the presidency of particular luminaries.

I shall, in these lectures, direct your attention to members of the Materia Medica of that age, which illustrate these points, or which, on other accounts, are of value, and which comprise a most interesting list of agents. And now permit me to notice some drugs introduced under the influence of a singular hypothesis of a poetical character. I refer to the Doctrine of *Signatures*. That was a beautiful dream which regarded everything in the world as stamped for the particular use of man. I believe it is not generally known, that this doctrine was not limited to Materia Medica, but was, in fact, a system of philosophy. The best exponent of it is Crollius, in his "Tractatus de Signaturis Internis Rerum," and "Basilica Chymica." He does not look up to Paracelsus as the author of the doctrine, as others did, but traces it back to the Inspired Writings. He says—"The heavenly signature is not from the form but from the heart; that is, it manifests men by their works and fruits; so our Saviour reproves the *fox*-like mind of Herod, and John the Baptist taxeth the Pharisees with *viperine* subtilty."—Treatise of Signatures of Internal Things. Pref.

On this philosophical system, man and the world

were supposed to be the one a signature of the other, —a kind of magnetic polarity. "Per sol id est, cor macrocosmi vivit cor microcosmi,"—thus relating the heart of man to the source of heat. Besides connecting man with the earth, he also connects the very diseases of man with objects of the earth. The movements of the planets found their analogue in pains of the wrist; an eclipse in apoplexy; a deluge in dropsy; a tempest in epilepsy; and thus connecting epilepsy with a tempest, he proceeds thus: Before a tempest arises, there are fitful breezes in the air; these have their analogue in the slight paroxysms; the cloud is indicative of the dull eye; the rising of the wind of the extension of the abdomen; the thunder, of convulsions; the lightning to the sparkling eye; the thunderbolt to the fracture of limbs; and clear weather is the signature of a return to reason. The earth represents the flesh; rivers the veins; and so on.

At considerable length Crollius endeavours to explain this:—"Incolam autem Dei invisibilis in Creaturis Vestigium, Umbram, Imaginem Creatoris Creaturis impressam, seu internam vim illam et arcanam operandi virtutem quasi Naturæ dotem Plantæ ceu Animeâ summo Deo inditam ac infusam, primò per Signaturam, mutuamque membrorum corporis et Plantarum Analogicam sympathiam et conspirationem à sagaci medico investigandum." "Omnes herbæ, flores, arbores, aliaque è Terra provenientia sunt libri et signa magica ab immensa Dei misericordia communicata, non quod illa signa sint nostra medicina, sed quod per illorum cognitionem ad veram medicinam, id est, signatum venire possimus." And then he reads a very severe lecture:—"Medicus instar Virginis debet videre ea quæ sunt ante pedes, non ulta marina ambitiose inquirere! Sufficet suæ Regionis productum."

ORIGINAL CONTRIBUTIONS.

OBSERVATIONS ON STRICTURE OF THE URETHRA, AND ITS APPROPRIATE TREATMENT.

By BARNARD HOLT, F.R.C.S., Assistant-Surgeon to the Westminster Hospital.

The meaning of the word "stricture," in the common acceptation of the term, I imagine to be such an alteration in the component structures of a canal, that the passage of its necessary contents are interfered with, and expelled with increased difficulty. Strictures of the urethra have ordinarily been divided into irritable, spasmodic, and permanent. I would, however, suggest the propriety of limiting this classification to incipient, or that where the lining membrane is tumefied, and in different degrees of inflammation and permanent, one or more of the several parts of the penis having undergone some structural change, whereby the diameter of the canal has become permanently altered. Irritable and spasmodic conditions of the urethra are most frequently met with in persons who are but very slightly the subject of stricture, and depend upon digestive derangement, an unhealthy condition of the urine, constitutional excitability, and the different atmospheric changes that there may be, and very frequently is a degree of irritability attending a permanent stricture is not for a moment denied. But to admit the existence of spasmodic stricture *per se*, would be to imply a muscularity of the urethra which does not exist. Irritable and spasmodic conditions of the urethra usually depend upon irritation, or slight chronic inflammation of the mucous lining of the urethra, the muscles in the immediate vicinity becoming spasmodically contracted whenever the urine comes in contact with its surface; the bladder, in the same manner, sympathises with the urethra, and, contracting upon every small quantity of urine transmitted to it, produces that frequent desire to micturate which usually accompanies the disease. This affection is not very frequent, and mostly confined to persons of a nervous exciteable temperament; instances are, however, not wanting in remote parts of the body, to illustrate what I have been endeavouring to explain. If a small particle of sand or other substance get into the eye, the lids are spasmodically contracted, and it is with the greatest difficulty they can be separated,—should any offending substance become entangled in the mucous lining of the nose an immediate involuntary effort is made by sneezing to remove it,—if an instrument be introduced into a healthy urethra, and the turn not conducted with great care, the muscles surrounding the canal become excited, and the instrument is firmly grasped, —how much more are the tissues likely to be affected when in an inflammatory condition.

The stomach, when in a state of irritation, will not permit the smallest particle of food to be introduced without its muscular coat becoming affected, and its contents immediately rejected, a sympathy of the most exquisite kind existing between its several component parts and those muscular structures which assist in the act of vomiting; and, although only one be irritated, the whole become sympathetically affected. In congestive or irritative inflammation of the stomach, the muscular tissue is not in a state of inflammation, yet it assists the mucous in getting rid of that which is offensive to it. The urine, although the fluid to which the mucous membrane of the urethra is accustomed, does not, in its healthy state, become a cause of irritation, yet when diseased or altered in its composition, is a source of excitement which adds most materially to the inconvenience experienced; and although, in the first instance, the obstruction may be caused by the continued inflammation of gonorrhœa or gleet, it is kept up by the irritation of the urine coming so frequently in contact with the slightly changed condition of the mucous membrane, and thus the several changes are effected, which, in a less irritable part, would subside.

The causes of stricture are so various, and attended with such different results, that it becomes a matter of difficulty to determine what may or otherwise produce this formidable affection. Unquestionably, any cause exciting a certain amount of inflammatory action is capable of producing an impediment to the flow of urine in this highly sensitive canal. Gonorrhœa, from the facility of infection and inflammatory tendency, is, no doubt, a very frequent cause; but it may be much questioned whether its more ordinary and simple forms are generally followed by obstructions in the urethra. Almost every third man who presents himself as an out-patient at this hospital is the subject of gonorrhœa, and yet the cases of stricture are comparatively rare. There may be many in whom it exists in a mild premonitory form, the symptoms not being sufficiently appreciable to oblige them to seek professional assistance. Thus they will not appear in the same ratio with cases of gonorrhœa; but, independent of this, they are so disproportionate that, in the generality of instances, it requires either the more severe forms of the affection, or the protracted gleet, to produce this disease. Where the cause can be traced to an attack of gonorrhœa, it will be generally found the scalding was severe, the inflammatory symptoms running high, and the discharge scanty, or that, from some injudicious attempt to curtail the attack, by the too early employment of injections, a greater amount of inflammatory action was excited, frequently implicating the ejaculatory ducts and testicle.

A great deal depends on the length of the canal which becomes the seat of this affection: thus, in the more mild form, or that which quickly yields to judicious remedies, a very small portion is inflamed, whereas in the erysipelatous, where not only the meatus but the glands are also violently red, a much greater surface is implicated, the inflammation frequently extending the whole length of the canal to the neck of the bladder, producing the most distressing symptoms, from the constant efforts of this organ to expel every drop of urine as soon as it is received from the kidney. These in a great measure depend upon the state of the constitution at the time of infection. Mr. Hunter says—"The state of the constitution at the time of contraction of a specific disease will produce a healthy or unhealthy product: thus, in gonorrhœa, if the constitution be sound and healthy, the effects will be the suppurative and specific joined, the limits of both confined according to the constitution and nature of the specific disease; but, if the constitution is such as readily to fall into the erysipelatous, then it becomes the erysipelatous and specific joined; and, although the extent of the specific affection may be limited, the erysipelatous is not, the consequence of which is that it spreads along the whole canal, and occasionally over the glans penis." Thus the specific, like the more common forms of inflammation, is bounded by the adhesive preventing its continuance beyond a limited extent. Hence in the more mild forms of gonorrhœa, but a very small portion of the urethra is diseased, and stricture very seldom results; but when combined with the erysipelatous, it is capable of being extended over a much larger surface, involving the more important parts of the canal. The foundation of stricture depends in a great measure upon the susceptibility or inflammatory tendency of the party attacked. Two men shall have connexion with one woman on the same day; one will be affected with a free discharge, very little scalding, the inflammatory symptoms will be mild, and, by judicious treatment, may be controlled, and probably got rid of at the expiration of ten or fourteen days; while, in the other, the inflammation will be exceedingly acute, the scalding intense, and the discharge occasionally tinged with blood; the meatus and glans covered with an erysipelatous blush, and the cells of the corpus spongiosum agglutinated from the effusion of coagulable lymph, producing the most painful chordee. Mr. Cooper has remarked the same thing in syphilis. Much will depend upon the treatment adopted in the kinds of inflammation described. Copaiba and cubebs are, in my opinion, commenced much too early to be of that benefit which will be found to accrue from their administration at a later period. I believe, in all cases of gonorrhœa, the attack may be shortened by the moderate use of cathartic medicines, by which the bowels are kept rather relaxed for the first four or five days, when, ordinarily, the inflammation will begin to subside, and the copaiba or cubebs may be had recourse to with much greater benefit than if they had been given in the commencement of the attack. This must, of course, be followed by the strictest attention to diet and abstinence from every exciting or stimulating liquor. Many practitioners are in the habit of prescribing injections in gonorrhœa, although heat and pain in micturition exist. I believe it to be a most injurious practice to attempt its cure by astringent injections until every symptom of scalding has subsided; swelled testicle is very frequently produced, and the disease has to be brought back almost to its primitive condition before it can be effectually subdued. There can be little doubt this method of treatment may be advantageously employed after the acute inflammatory symptoms have subsided, and the discharge remains somewhat altered in character. Here it is an essential matter the urethra should be restored to its original state as quickly as possible, and the use of mild injections will undoubtedly tend, in many instances, to such a result, by which the irritation of many months is avoided, and the foundation of stricture frustrated. Upon the same principle as that with which I commenced, namely, inordinate excitement of the canal, may be classed the too frequently repeated sexual intercourse, masturbation, or protracted toying with women. By any of the former excesses, a degree of excitement is produced which the urethra is unable to bear without considerable irritation; and the frequent repetition of any of the above causes is sufficient to produce inflammation and subsequent alteration of structure in one or more of the tissues of the penis. These are, however, the exceptions, and are rarely met with in any other class of patients than those who are predisposed to inflammation, or what is termed an inflammatory diathesis. The presence of a tumor, or the presence of an abscess, will cause an interruption to the flow of urine, and, until the exciting cause be removed, produce all the symptoms of stricture; but as these can always be removed by the excision of the tumor, or giving exit to the matter, they ought not to be classed among the causes of stricture.

Any injury interfering with the integrity of the mucous membrane, or submucous tissue, is sufficient to lay the foundation of this disease, and frequently produce strictures of the most unmanageable character, as, by lacerating the mucous membrane, the wound is liable and frequently does heal in a puckered form, so altering the natural channel as to offer the most serious impediment to the introduction of any instrument. From the same cause there is frequently a band formed, extending in different shapes, from one side of the urethra to the other; thus it may be free above and below, or the convexity of the obstruction may be adherent to half the diameter of the canal in a crescentic form, commonly termed valvular stricture. There is a degree of obstruction caused by the non-assimilation of the urine, by its irritating particles not being held in solution by acidity and other imperfections, which render the urethra irritable, and occasionally cause retention. When I come to the treatment of these several affections, I shall have an opportunity of illustrating by cases the inconveniences they occasion.

5, Parliament-street.

[To be continued.]

ON THE PHYSIOLOGICAL ANATOMY OF THE SPLEEN.

By WILLIAM R. SANDERS, Esq.
Member of the University of France, and late President of the Royal Medical Society of Edinburgh.
(Communicated by Professor LIZARS.)

Having been engaged, for some time past, in investigating the minute anatomy and physiological relation of the component parts of the spleen, I take this opportunity of communicating the results of my researches,—reserving, for some future occasion, those details of description and argument, &c., which have been recorded in my thesis, delivered to the University of Edinburgh, on the 31st of March of this present year.

The anatomical observations, I trust, may be relied on, as they can at any time, with sufficient care, be unequivocally demonstrated, (the minuter elements under magnifying powers of from 300 to 500 diameters:) the physiological interpretations are made according to the recognised principles of that science, more particularly with reference to the secreting function of the nucleated cell, and the essential elements of glandular acini.

A concise view of what has been positively made out is contained in the following propositions:—

I. The malpighian glandulæ or sacculi, and the pulp of the spleen, constitute a true secreting apparatus.

A. The malpighian sacculi are hollow spherical membranous bags, completely closed, and filled with organised contents; they are attached to the trabeculæ by an arterial pedicle, and are imbedded in the pulp.

Saccular Membranes.—The outer membrane of the sacculi is fibrous, and contains *arterial* ramifications, and numerous capillaries; their inner membrane is granular.

Saccular Contents.—On the inner surface of the membranes is applied a *complete layer of nucleated cells;* which are clear, (not granular), of about 1·1200 inch diameter, and of a light yellowish colour, when not altered by the action of water. The rest of the interior of the sacculus is filled up by free corpuscles, containing nucleoli of a light greyish colour, and of about 1·4000 inch diameter, corresponding precisely with the nuclei of the cells, and by a homogeneous or slightly granular plasma.

The perfection of the forms, the constancy and uniformity of appearance of these corpuscular elements, together with their re-actions under water, acetic acid, &c., are extremely characteristic, so that they are easily and distinctly recognised. There is also evidence of the growth and maturation of the sacculi. This part, therefore, of the glandular anatomy of the spleen exhibits characters as perfect, and as truly distinctive, as the glandular elements of the liver, kidneys, salivary glands, &c.

The sacculus is the *formative secreting organ*, analogous to the acini of known secreting glands.

B. The splenic pulp consists, like the *contents* of the sacculi, of plasma and corpuscles; but the *nucleated cells* are extremely few and mostly granular; (hence the reason why they were not detected by observers who did not examine the sacculi apart from the pulp with sufficient care;) the *plasma* is full of granules, which are distinct and infinitely more abundant than within the sacculi; and the corpuscles, instead of a regular, uniform shape, are mostly angular, deformed, with great variety of shape and appearance, and *breaking up into granules.* These corpuscles are often, also, of a reddish colour, and, besides them, coloured semi-crystalline particles, of a deep red or yellow hue, and whose true relation is not yet perfectly made out, are found in the pulp.

The pulp is, therefore, that part of the glandular apparatus where the corpuscles of the spleen become disintegrated and dissolved into granules and plasma; and, if the sacculi are analogous to acini, it is probable that they burst and effuse their contents into the pulp, where they undergo degenerating changes, becoming thus fit for absorption. The pulp being a reservoir or *duct*, in which the secreted product is lodged for a time, and undergoes the ulterior changes of maturation and solution.

II. The veins are the absorbent elements of the spleen, and carry away its secretion.

This is rendered probable by their extraordinary number and size; by their abundant ramifications in the *pulp* (while the *arteries* are spread over the secreting *sacculi*); by evidence derived from the composition of the splenic venous blood, as shown in Béclard's recent Comparative Analysis of Splenic and other Venous Blood (Archives Générales de Médecine, Oct., Nov., Dec., 1848); and by general analogy in the nature, functions, and relations of the portal circulation in the adult and in the fœtus.

III. The blood circulation within the spleen is peculiar, but the peculiarities are not confined to the venous circulation, as has been generally supposed, but are common to it with the arterial. Its general principle is, "the sudden and immediate transition from very large to very small vessels," which renders the circuit of the blood-current extremely short. This general rule does away with all the minor differences of vascular distribution found in the spleens of man, the horse, and dog, &c., compared with those of the sheep, bullock, &c.

The venous cells of the spleen, though, under certain circumstances, an undoubted appearance, are entirely artificial, and always produced by methods of preparation, on which no reliance should be placed.

There is no satisfactory evidence that the lymphatics are the excretory ducts of the spleen; nor that its fibrous tunic or trabeculæ are muscular, or anything more than very elastic.

Conclusion.—The spleen is a true secreting gland; and its product, which is some organised or organisable albuminous compound, is absorbed into the venous blood of the portal system, and *contributes*, but are not necessarily essential to, nutrition.

The elements here mentioned are constant; they are easily made out in the spleens of the bullock, sheep, &c., *when quite fresh.* In the human spleen, they are in general less easily analysed; but the microscope shows them to be identical, and, further, thus affords the means of recognising and establishing the existence of the malpighian sacculi, when (as not unfrequently happens in the human spleen) they are not visible to the naked eye, or, at least, are not distinguishable from the pulp.

The comparative anatomy of the spleen, in other classes of the vertebrata, than the mammalia, I have not yet investigated with sufficient frequency, to enable me to make any positive statement in regard to that subject. The analogy of nature leads, theoretically, to the conviction, that the spleens of all animals will yet be shown, by sufficiently accurate, patient, and candid research, to be identical in essential structure with the spleens of mammalia.

11, Forres-street, Edinburgh,
April 6th, 1849.

VENEREAL DISEASES.

A SKETCH OF THE MEDICAL HISTORY OF THE 47TH REGIMENT.

By GEORGE SAUNDERS, Esq., Surgeon, 47th Regiment.

The renowned author of the "Principles of Military Surgery" has well observed that "soldiers are gregarious in their amours." During the period of our service in Portsmouth, Chester, Liverpool, Dublin, Cork, and Limerick, daily experience proved to us the correctness of Dr. Hennen's observation.

The following is an Abstract of Venereal Diseases in the Regimental Hospital from the 15th October, 1834, to 31st December, 1848. Total treated, 1,261:—

Diseases.	Ages.	Stations and Period of Service. Mediterranean 7½ years.	West Indies, 2 ½ years.	United Kingdom, 5 years.	Total.	Average Number of Days under Treatment.
Syphilis Primitiva.	Under 20 years	8	2	103	108	24⅔
	From 20 to 25 ,,	29	19	209	257	
	,, 25 to 30 ,,	34	8	83	125	
	,, 30 to 40 and upwards	20	3	59	82	
		86	32	454	572	
Syphilis Consecutiva.	Under 20 years	...	...	8	8	31 2/24
	From 20 to 25 ,,	...	2	37	39	
	,, 25 to 30 ,,	1	1	18	20	
	,, 30 to 40 and upwards	2	...	19	21	
		3	3	82	88	
Bubo Simplex.	Under 20 years	2	1	29	32	33 1/2
	From 20 to 25 ,,	25	3	63	91	
	,, 25 to 30 ,,	14	3	29	46	
	,, 30 to 40 and upwards	7	2	11	20	
		48	9	132	189	
Gonorrhœa.	Under 20 years	6	...	53	59	14
	From 20 to 25 ,,	38	3	96	137	
	,, 25 to 30 ,,	41	3	39	83	
	,, 30 to 40 and upwards	28	...	18	46	
		113	6	206	325	
Hernia Humoralis.	Under 20 years	...	...	9	9	14 4/31
	From 20 to 25 ,,	7	2	28	37	
	,, 25 to 30 ,,	10	1	13	24	
	,, 30 to 40 and upwards	7	...	4	11	
		24	3	54	81	
Stricture Urethræ.	Aged 37 years ...	1	...	...	1	20
Phymosis et Paraphymosis.	Under 20 years...	...	...	5	5	24
Grand Total		275	53	933	1261	

The Abstract is sufficiently comprehensive without entering into explanatory details.

Of those who contracted the primary disease in the Mediterranean and West Indies, not one had secondary symptoms; the cases were generally of a mild description, and yielded readily to the ordinary local plan of treatment, although several presented the genuine characters of the indurated ulcer. The six cases of secondary syphilis which the Abstract shows to have occurred in the Mediterranean and West Indies appeared in men who had recently joined from the depôt in Ireland, where they had contracted the primary affection.

Syphilis Primitiva.—Under this head are included all ulcers which have appeared on the genitals consequent on impure intercourse. These ulcers occupied various situations on the glans, prepuce, &c., and presented innumerable varieties, depend-

ing, for the most part, on the peculiar nature of the original virus, the state of the constitution, and the situation of the ulcer. For all practical purposes it is unnecessary, in the present instance, to attempt a classification of these ulcers.

Treatment.—The entire surface of every primary syphilitic ulcer is at first destroyed by the free application of lunar caustic, continuing its daily employment so long as there is reason to apprehend that the sore possesses poisonous properties. The sooner an ulcer of this kind is healed, the less probability is there of constitutional symptoms. After the cauterization, a piece of wet lint is applied over the ulcer, or interposed between the glans and prepuce, should the ulcer be therein situated. At the same time a soluble state of the bowels is maintained, together with rest, cleanliness, and simple diet. When the ulcer presents a healthier appearance, with purulent secretion, which it will generally be found to do in the course of a few days, a solution of the nitrate of silver is applied, varying in strength from two to ten grains to an ounce of distilled water, according to the circumstances of each case. In this stage the calamine cerate is also a very useful application; also, the lotio nigra, or a strong solution of sulphate of copper. This local plan of treatment we have commonly found most successful, but in the following description of cases mercury was of great benefit. The value of this mineral, when carefully and judiciously employed in certain forms and stages of the primary sore, we regard as undoubted.

Ulcers, which are slow in their progress, and do not partake of a healthy granulating character in a reasonable course of time, and after a fair trial of the local remedies, require mercury to expedite the cure.

Case 1.—J. P., aged 21, admitted November 5th, 1848. Fall, moderately stout, and fair complexion; first attack since enlistment; a small circular, rather deep, ulcer on glans, close to urethral orifice; another, very small, of a greyish aspect, on inside of prepuce, near the frænum—both without hardness, and of about three days' duration. Local treatment, &c.—6th.—Ulcers, especially the one near frænum, inflamed; surface not so grey; secretion yellow. 9th.—Ulcers not imflamed, and disposed to heal. 13th.—Ulcers reddish, very small, little secretion; granulating. On the 18th, without any apparent cause, both ulcers broke out, and assumed an aggravated form, and several others of an unhealthy character appeared along inside of prepuce, near its anterior or free margin; raised, grey surface, thin edge, and soft base, with phymosis, and rather abundant yellow discharge. The usual local remedies were employed till the 10th of December, and having effected no important change, beyond the subsidence of all inflammatory action, mercury was administered. ℞ Pilulæ Hydr. gr. iij.; Ex. Hyoscyami gr. iss.; misce. Ft. pilula ter in die sumenda. On the 21st.—Ulcers almost healed, and the contraction of the prepuce completely removed. 24th.—Gums slightly affected; omitte pilulæ. 31st.—Quite well; discharged to duty.

Case 2.—S., aged 22, admitted November 24th, 1848; stout, healthy looking man; first venereal attack; general good health; several ulcers of an unhealthy gray aspect along free margin of prepuce, with swelling and contraction of latter, constituting phymosis, and secreting thin yellow matter; no hardness. All local remedies were of no avail. On the 8th December, ulcers became chronic, with some hardness of their base. On the 11th instant, began to take the pill as in No. 1 case. On the 18th, ulcers reddish, hardness much less. 31st.—Gums slightly affected; contraction of prepuce almost gone; omitte pilulæ. January 2nd.—Ulcers healed, and the man was discharged cured on the 8th instant.

Case 3.—S. C., aged 21, admitted October 7th, 1848; fair complexion; general good health; first venereal attack; an irregular greyish ulcer, with thin yellow secretion, but without hardness; situated in furrow beyond root of glans; an inflamed bubo in right groin; both of about fourteen days' duration; bubo opened, and a quantity of thick yellow matter evacuated. 9th.—Ulcer rather red, and disposed to granulate. 17th.—Ulcers healing; granulations healthy. 18.—Some ulceration of glans around urethral orifice, of a pale, red, irritable aspect; edges thin; the ulcers speedily increased to about the size of a shilling, and assumed an indolent form; secreting yellow viscid matter, which formed soft yellow crusts on the surface. The other ulcer healed. As these crusts came off, new ones would readily form; and this character remained unaltered for a month, notwithstanding the various applications that were employed. On the 20th November, the same quantity of blue pill and extract hyoscyami, as in the other cases, was given three times a day, which slightly affected the gums. On 16th December, ulcer now reddish and healing; omitte pilulæ. January 7th.—Quite well; discharged cured.

It is seldom that we have met with ulcers of so obstinate a nature which local treatment was not found sufficient to effect a cure, nor have we deemed the employment of mercury always necessary in that form of ulcer, the distinctive feature of which is hardness, commonly known as the Hunterian chancre; for, even in such cases, have we occasionally observed secondary symptoms to follow after any treatment, and after any length of time.

Neglect and want of common attention to primary venereal ulcers, especially when hidden beneath the prepuce, may give rise to phagedæna, the prepuce swells, becomes red and indurated, and contracts over the glans, producing phymosis, with a thin, ichorous, and offensive discharge from the preputial orifice; if the ulcerative absorption be not checked by tepid water injections, cataplasms, and other suitable applications, sloughing may ensue, which may go on so rapidly as to destroy the prepuce, a part or the entire of the glans, or a considerable portion of the penis.

When phymosis exists and sloughing is apprehended the prepuce should be slit up. To arrest the progress of phagedænic ulceration, no remedy is so valuable as the application of the strong nitric acid (a).

Authors on veneral diseases, in advancing opinions in favour of any particular plan of treatment for the cure of the primary affection, have invariably attached too much value to the occurrence of secondary symptoms, without adverting more particularly to the precise effects which they have upon the constitution. Enlargement of the cervical glands to such an extent, as to render men unfit for military service, nodes and caries of the bones, ulceration of the palate, &c., and syphilitic cachexy, are too commonly the result of long courses of mercury, especially in scrofulous habits.

Syphilis Consecutiva.—The only varieties which constitutional syphilis have exhibited in our Hospital were of the exanthematous, papular, and tubercular forms.

The abstract shows that eighty-eight cases of secondary syphilis have occurred in 572 of the primary affection. Now, these proportional numbers may be received with fidelity, as the utmost care has been taken throughout to avoid error; and no case has been omitted where secondary venereal has been observed at the "Health Inspections" of the men, made weekly by the medical officers, which is an important circumstance to be remembered in these calculations.

The most frequent variety of all was the exanthematous, and the tubercular, by far less rare than the papular.

The febrile symptoms usually attending the production of these eruptions were of the mildest type, and seldom were of long duration.

The *treatment* employed in these cases was in *general* the non-mercurial; and the same which we continue to pursue, believing the method of treating syphilitic diseases according to any known fixed laws, as laid down by the mercurialist, or the non-mercurialist, to be inconsistent with the true principles of pathology; but, in the adoption of a more rational course, based upon the symptoms of the patient as concerning the form, duration, and character of the disease, and guided particularly by the state of the constitution.

On the first appearance of the eruption we abandon the idea of mercury altogether, and administer the mistura antimonialis (a) in ʒij vel ʒiij, doses three times a day, and so long as any pyrexia is indicated by the presence of much thirst, loss of appetite, high-coloured urine, headache, pains in limbs, &c., combining with each dose, after the more active symptoms have subsided, an ounce of the decoction of sarsaparilla, which forms an excellent adjuvant or vehicle in guarding against griping pains in the abdomen, or much sensation of sickness, which the tartar emetic is sometimes liable to cause when given by itself. This alone, with aperients, when required, constituted the treatment of the exanthematous form, and of the early period of the other varieties.

During the more advanced stage, after the subsidence of all pyrexia, and when the eruption was about to decline, or desquamate, especially if the patient now complained of pains in the bones, the iodide of potassium, and the decoction of sarsaparilla were given with the happiest results, gradually increasing the dose of the former from three to ten grains three times a day.

Although the majority of the cases got well without mercury, instances did occur now and again, in which the employment of this mineral was deemed indispensably necessary.

When the disease was of a protracted nature, and when the general health appeared to suffer, in consequence, perhaps, of a badly managed primary sore, neglected by the patient himself, and the virus allowed to pervade the system. Cases of this sort, both of primary and secondary syphilis, and open buboes of a troublesome character were not unfrequently receive from detachments where the regular Hospital discipline is but imperfectly conducted. For example:—

J. S., aged 36, admitted March, 1848, has just arrived from T—— Detachment Hospital, where he has been for fifty-nine days, suffering from constitutional syphilis, for which no important medicine has been administered; his general appearance now betrays a most miserable object; he is greatly emaciated; countenance of a coppery hue; the tubercular form of eruption over face, forehead, posterior part of scalp and back; also over the thighs and arms; hair falling off; a chronic glandular enlargement in right groin; a swelling about the size of an orange, not very hard, situated above right testicle, closely attached to scrotum and chord, without presenting much of an external protuberance; constant dull aching pains in limbs and joints, without swelling, so that he obtains no rest at night; total loss of appetite; his debility is so extreme that he is scarcely able to walk across the room; previous to the present complaint the man enjoyed good general health. In '32, was eleven days in hospital for gonorrhœa; in December last was for about a fortnight under treatment for a large swelling in right groin, and, as he states, without previous ulcer (?)—that about twenty days ago the pains first seized him,—that shortly after an eruption appeared all over his forehead, body, and limbs; that ever since his health has been failing him; wine and sago were ordered him daily, with small doses of the nitric acid diluted, and sarsaparilla. By these means his general state became somewhat improved; and, on the 9th of April, there was decided improvement, although the severity of the pains continued the same. From the history, nature, and extent of his complaint, it was apparent that a mild course of mercury was clearly indicated, and accordingly two grains of calomel and a quarter of opium, made into a pill, were administered to him three times a day, which affected his system in a moderate degree in two days, without much perceptible improvement; the pills were now, of course, discontinued. Having recovered from

(a) When we come to the subject of "Abscesses and Ulcers," phagedæna will be particularly alluded to.

(a) Mistura antimonialis. ℞ Antimon. P. T. gr. xvj.; Potassæ nit. ʒi.; Aquæ destillatæ ʒvj. Mis. et adde Tinct. opii ʒii.

the slight ptyalism, in a few days after the pills were again employed. His system was again speedily brought under the influence of calomel, and from that moment the pains began to leave him; his strength improved, with a remarkably good appetite. Nutritious diet, iodide of potassium, and sarsaparilla, completely restored him to his usual state of health, and the man was discharged to duty on the 20th of May. In June following he had a mild attack of arthritis. In August, iritis of left eye, pinkish zone of red vessels around cornea, iris triangular in shape, the angle towards inner canthus, vision imperfect, no pain, or any deposition of lymph; cured by the spirits of turpentine and the extract of belladonna; health now quite good.

Iodide of potassium is a remedy of the utmost value in affording decided relief to the dull aching pains consequent on syphilis, which usually take their seat in the shafts of the long bones. It is the remedy, in conjunction with sarsaparilla, which we have invariably employed in the treatment of secondary syphilitic affections, and the results have been so far satisfactory, that caries of the bones, ulceration of palate, pharynx, &c., obstinate venereal nodes, syphilitic cachexy, or any other train of troublesome symptoms, did not occur in a single case.

Whatever the therapeutic effects of sarsaparilla may be in these and other diseases, we will not now venture to discuss; its employment, however, has been of the utmost advantage in almost all of the cases of constitutional syphilis which have come under our observation.

The preparations of mercury which we employ in the treatment of syphilitic affections, are as follow:—Pills containing calomel and opium; the strength adapted to the circumstances of each case, in which this form may be deemed applicable; that is, in cases when we desire the system to be speedily brought under the influence of mercury, as in syphilitic iritis. Pilula hydrargyri more generally given for the primary ulcer in the chronic stage; pilula hydrargyri chloridi composita, or more commonly known as Plummer's pill, administered in alternative doses with great benefit, when the venereal eruption is on the decline, and becomes scaly, as in the advanced stage of the papular form, but only when the process of desquamation is slow and indolent, and when the health appears to suffer, and never until the other remedies have failed in producing the desired effects. Salivation is always to be dreaded. A mercurial course should be conducted under the most guarded circumstances. Confinement to bed is not necessary while a patient is undergoing such a plan of treatment; and the diet should be rather nutritious, consisting of a certain quantity of animal food for the dinner meal.

It is presumed, that the injurious effects of long and incautiously directed courses of mercury are sufficiently well known not to require any special comment; to whatever extent, however, this practice may be fearlessly resorted to in civil life, it becomes a matter of the deepest concern in the treatment of soldiers, that their constitutions should in no way suffer from the ill consequences of an illiberal use of this mineral, when it is remembered that the nature of military duties renders soldiers liable, at any moment, to endure exposure to the severest kind of weather.

Warm and tepid baths, suited to particular cases and individuals, have been employed with great advantage.

Bubo Simplex.—Acute buboes have been treated on the same general principles as acute abscesses; blisters, iodine ointment, and compress and bandage, have acted most beneficially in promoting absorption of these swellings in the chronic stage. The compress and bandage, when properly applied, hastens considerably the removal of indolent buboes, and tends to the destroying of sinus, &c. In opening buboes, we have found the method of making a vertical incision preferable to one made in the direction of Poupart's ligament, or even to the application of the kali purum. A free exit is thus established for the passage of all the contents; the edges of the divided integuments are more healthy, and the parts are generally sooner healed; and this especially takes place when the buboes are early opened.

Gonorrhœa.—In the treatment of gonorrhœa we commence with an injection of sulphate of zinc. A grain of the salt, dissolved in an ounce of water, employed every two hours during the day, should there not be much ardor urinæ, or inflammation of the glans penis, or any reason to apprehend swelled testicle coming on to counter-indicate its use; and these signs must be always regarded as sufficient causes for the immediate discontinuance of the injection. Irritation of the bowels, or any tendency to inflammatory action, should be removed by an occasional dose of tartar emetic and epsom salts. In cases of considerable ardor urinæ a blister along the track of the urethra was of great benefit. A suspensory bandage should be worn when the testicles and scrotum require support, and much attention must be paid to this circumstance. The strength of the injection should be gradually increased from one to three or four grains, guided by the state of inflammation that may be present.

In chronic gonorrhœa, or gleet, a stronger solution of the sulphate, such as six grains to an ounce of water, has been employed with infinite benefit.

In order to prevent, as far as possible, the occurrence of swelled testicle, stricture, and other consequences, which some have ascribed to the use of injections in the treatment of gonorrhœa, although we have met with no such cases in the course of our practice, it is a matter of the greatest importance that each patient should be well instructed in the proper manner of their employment. The syringe should be held with the right forefinger and thumb, while those of the left hand compress the glans, with the prepuce interposed, so as to protect for a short time the escape or immediate return of the injected fluid.

Hernia Humoralis.—("Swelled testicle," "tumeur des testicules," "orchite," "épididymite blennorrhagigne"). (a) The following is the plan of treatment for affections of this kind, which we have found most successful:—Constant rest, fomentations, the local abstraction of blood by opening one of the most prominent veins of the scrotum, cataplasms, cathartics of tartar emetic and Epsom salts, and, as soon after the adoption of these measures as possible, on the following, or subsequent day, perhaps, compression,—general, equal, and firm compression, made by enveloping the affected testicle with strips of the ordinary adhesive plaster, which should be re-applied as frequently as the encasement becomes loose, until the organ is completely restored to its natural state. Several cases of swelled testicle have been cured by pressure alone, employed from the very commencement of the attack. No unfavourable result has followed this treatment, which is the best proof in favour of its more general adoption (b).

Only one case of stricture of the urethra occurred during the period embraced in the abstract, which presented nothing remarkable.

Phymosis et Paraphymosis.—In cases of long prepuce, with obstinate phymosis, much time will be saved by performing the operation of circumcision, and thus rendering the patient less liable to contract disease when hereafter exposed to the virus of syphilis. In some other cases it is merely sufficient to remove "the extremity of the foreskin with a single stroke of a sharp bistoury," as recommended by Mr. Fergusson of King's College (c). When paraphymosis exists, an attempt should be made without any delay to bring the pressure over the glands, and avoid, if possible, the necessity of dividing the constriction, which generally requires to be done if the other means fail.

(a) *Vide* "Acton on Venereal Diseases." London, 1841. Part I., sec. iii., p. 88.—"Epidydimitis."

(b) See Acton *op. cit.* p. 101, *et seq.* for some excellent observations on the "Method of employing Compression."

(c) See his admirable "System of Practical Surgery," p. 541, *et seq.*

EXTRAORDINARY BIRTH.

By FREDERICK SMITH GARLICK, Esq., Surgeon.

On Monday, April 9th, 1849, I was summoned hastily, at a quarter-past seven o'clock p.m., to attend Mrs. D. in labour, the wife of a respectable shopkeeper in this town. She is thirty-five years of age, well-formed, and rather corpulent. Has had two children before, one aged seven years, the other five, both living. The husband is a strong, active man.

Mrs. D. had attended a funeral on the afternoon of the above date, and was taking tea with the party, a few doors from her own house, when labour commenced. She went home, walked up stairs, and pains coming on in rapid succession, the child was born at half-past seven p.m. At this time she was alone, but her cries brought assistance. A neighbour woman divided the cord, and carried the child down stairs to the kitchen fire, not having yet noticed anything unusual. The child cried lustily.

On my arrival, which was immediately after the separation of the child, I proceeded to extract the placenta, and was then called down stairs in a most mysterious way, concern and amazement being depicted in the messenger's countenance. On examination of the child, (a male,) I found it possessed neither upper nor lower extremities; but, in place of them, four short stumps, between two and three inches long, and closely resembling the ordinary stumps after amputation. The head, chest and abdomen were fully formed—the genitals also. The anus was small and contracted, but a director passed readily into the bowel, and the child had already voided meconium into the wrapper. On passing the finger along the median line of the sacrum, a projection or spicula of bone was to be felt, giving the impression that the lower posterior arches of the sacral canal were not complete. The two central incisors of the upper and lower jaw are quite distinguishable and prominent in the gum.

Friday, April 13.—I have this day seen the child. It is well, and takes nourishment. I obtained the following measurements:—

	Inches.
BODY.	
1. Entire length of body from vertex to nates	12
2. Round chest under axillæ	11½
3. Round abdomen	11
HEAD.	
1. From nasal to occipital protuberance	6½
2. From ear to ear across vertex	7½
3. Circumference of head above the ears—viz., from ear to ear across frontal bone 8½in., continued across occipital bone 5in.	13½
EXTREMITIES.	
1. Stumps of two upper extremities equal	3
2. Stump of right lower extremity	2
3. Stump of left lower extremity	3

I certify that the above is a correct statement.
5, Cheapside, Halifax.

ROYAL PHYSICAL SOCIETY OF EDINBURGH.—This Society held its ninth meeting for the session in the Institution Rooms, York Place, on the 11th instant, when there was a full attendance of members—Professor Fleming in the chair. The first communication was—"On the Cerebral Development of the Vertebrata during the earlier and middle palæozoic periods, by Hugh Miller, Esq. The paper was illustrated by an extensive series of remains from the old red sandstone, and likewise organisms of existing fishes, with which they were compared. This paper of Mr. Miller's excited a very deep interest, and called forth several very strong expressions of approbation from those members of the Society who had devoted their attention to the study of comparative anatomy. The next paper was by Professor Fleming. "On the remains of the Epidermis of the Mytilus *Crassus* from the Carboniferous Limestone." In several specimens produced, the epidermis was still obviously adhering to the shell, which had been changed into calcareous spar.

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THE MEDICAL TIMES.

SATURDAY, APRIL 21, 1849.

Nunc Dea, nunc succurre mihi.—*Tibull.*

THE historical records of Medicine present many curiosities interesting to the antiquarian and philosopher. The art had its origin in the necessities of mankind, and by successive steps it gradually rose to the dignity of a science. Doubtless, as classic authors inform us, no single individual can justly claim the honour of having discovered a large number of useful remedies for human diseases and accidents; Herodotus and Galen affirming that in the early ages of the Grecian Commonwealth the sick were openly exposed, so that casual passers-by might employ any remedies which they had found useful in their individual experience.

The renowned Æsculapius was the first who exclusively devoted himself to the study and practice of the healing art, and his success elevated him to the rank of a celestial deity. Like the modern physician, after having learned what he could in his own country, he travelled to other climes in search of knowledge. Denied the privileges of Universities and Schools, he diligently sought from the most obscure sources *professional* information, and his great mind was enabled to associate and apply the facts which had been accumulating for a hundred generations, but which had proved of comparatively little value from being scattered through almost as many countries.

The great Hippocrates is charged with having acquired his knowledge from the records which he found and studied in the temples dedicated to Æsculapius; for the practice obtained in Greece, that all those who had been cured of any remarkable disease should record the fact in the temples, and the means which were successfully employed in combating the malady. It would be unjust, under these circumstances, to assert, that, in those early times, there were none of the "gentler sex" practitioners of medicine, and that the Father of Physic was not under some obligations to women for the fame which he afterwards acquired. While, however, history affords us no evidence that this was the case, we distinctly learn that there were female deities, whose temples were frequented by the maimed, halt, blind, and lame, with the hope of obtaining help for their several afflictions. Tibullus informs us, that in the Temple of Isis were numerous pictures, which represented patients afflicted with different diseases, who had been cured by attending to the commands of the oracle.

Nunc Dea, nunc succurre mihi, nam posse mederi
Picta docet templis multa tabella tuis.

The fame of Æsculapius, of Hippocrates, and of Galen, gave the "lords of the creation" an entire supremacy in the republic of medicine, while the daughters of Eve sunk to the level of quacks, nurses, and midwives.

When Universities were founded, no provision whatever was made for the admission of females to academical honours. The classic cognomen of "Doctor" is of the masculine gender; and we know not how it is possible, by the exercise of the most learned ingenuity, to make it of any other sex. A University Female Doctor, however, has appeared, a classic hermaphrodite, the offspring of the Geneva Medical College, in the State of New York, and Republic of America. The sages who were called upon to confer on a young lady the highest medical degree, were sadly at a loss how to address her. After searching all the classic authors in vain for a word which might meet the case, the Senate was compelled to address the lady graduate by the title of "Domina." Henceforth, therefore, it must be understood, that the feminine of "doctor" is "domina," and the Universities of Europe will now be at no loss how to address any fair candidate for the title of M.D.

It reflects high credit upon the Geneva Medical College that it has given a fatal wound to prejudice which the lapse of ages had almost rendered invulnerable. It was an astonishing act of moral heroism in a young lady to encounter and overcome all the difficulties which beset a female in following out the prescribed course of Medical Education. The natural modesty of the sex would appear, at first sight, almost an insurmountable barrier to the study of certain sciences in public schools; yet an American female triumphs over them all, and an American College has the magnanimity to admit her to an examination, and to confer upon her a Degree. Both the members of the Senate and the young lady must have felt rather ill at ease in each other's presence, and we presume that the fair candidate furnished herself with a veil expressly for the occasion.

However, a difficulty has been surmounted which may possibly lead to a great revolution in the Medical world, both in America and in England. The young lady appears to be possessed of talents above mediocrity; she may, therefore, establish a School for Female Medical Students. Out of this will arise, not only female Physicians and Surgeons, but a female Board of Examiners. The most modest young lady, under these circumstances, may venture upon the study of every branch connected with the healing art, when there are female Professors of Anatomy and Physiology, female Surgeons, and female Examiners.

The revolution, thus commenced in America, will extend to England. Who can tell how soon a young woman of our own country may appear, whose modesty not allowing her to study Medicine in British Medical Schools, may journey to the Western Continent, and, under female Medical Professors, there acquire such a knowledge of Medicine as will entitle her to a diploma, and fit her for becoming a teacher to her sex in her native country! Who can say, that, within half a century, we shall not have at the College of Surgeons a Female as well as a Male Board of Examiners, and that our hospitals shall not have attached to them Surgeon-*esses?*

The following is the account of the recent admission of the young lady to whom we have referred in this article, as a Medical Practitioner in the United States:—

"Last season, much was said of the sensation produced by a female student attending lectures in the Geneva Medical College, Miss Elizabeth Blackwell, who evinced a persevering determination to be regularly educated to the Profession. She has finally triumphed, and the Journals thus describe the public ceremonies, which took place on the 23rd of January, when the lady had conferred upon her the degree which she had sought:—'Next followed the presentation of the diplomas. All eyes were fixed in expectation. The young men, in groups of three and four at a time, were called upon the platform, and received their parchment—seventeen were graduated. Then was called "*Domina* Blackwell;" Miss Blackwell ascended the stage. The audience held their breath. The President rose, and after pronouncing the usual Latin formula, delivered the diploma into her hands. Instead of turning away, she stood a moment, as if something remained to be done, and then in a modest, but audible voice, said, '*I thank you, Sir. It shall be the effort of my life, by God's help, to shed honour on this diploma.*' The feelings of the audience could be restrained no longer, and a round of applause testified their interest in this novel and exciting scene. Professor C. A. Lee then proceeded to deliver the customary address to the Graduates. At the close of it he said, 'An event connected with the proceedings of this day deserves some notice on this occasion, calculated as it is to excite curiosity and comment, and to be held up as an example to other Institutions to imitate or condemn. I mean the conferring of the degree of M.D. upon one of that sex which is supposed to be wanting in the physical, if not moral qualifications necessary for the successful practice of the healing art. So far as I am informed, this is the first instance, in this country, or any other, of a female graduating in medicine, after having gone through the regular prescribed course and terms of study; and, in the present instance, it is my duty to add, without the omission or slighting of any branch of study, and that, too, in so thorough a manner, as to leave nothing unattempted or unattained which it is necessary for one to know, who expects to practise with honour and success in every department of the Profession.

"'Such an instance of self-sacrificing devotion to science; of perseverance under difficulties and obstacles next to insurmountable; of unremitting, unrelaxing toil, in pursuit of that knowledge so important to, and yet so rarely possessed by her sex—and that, too, for the purpose of mitigating human misery, relieving the sick, and extending her sphere of usefulness in the world—this, I say, deserves, as it will receive, the heartfelt approbation of every generous and humane mind. This event will stand forth in all future time, as a memorable example of what woman can undertake, and accomplish too, when stimulated by the love of science, and a noble spirit of philanthropy.'

"Miss Blackwell's inaugural thesis on Ship fever is published in the February Number of the *Buffalo Medical Journal.* Its literary merits are above the average of such productions, and it manifests persevering and praiseworthy research."

THE PAUPER CHILDREN'S STEPFATHERS.

A lover of the curious might extract from Mr. Drouet's trial a certain receipt for making patriots and good citizens. Take 1,200 small boys, whose parents have generously abandoned them to the State, send them to Tooting, or some such convenient suburb, and place them under the care of Mr. Drouet. Teach them self-denial by never satisfying their appetites, and ground them in self-knowledge by withholding from them all other instruction. A little starvation will be the surest way of making them feel for the hungry, and airy clothing will cause them to sympathise with the naked. Good fellowship will be facilitated by making them sleep four in a bed, and generosity of disposition may be inculcated by allowing them to give the itch to each other. Unremitted castigation will instil passive obedience, and indifference to complaints will lead them to respect constituted authorities. In due time, a succession of meek and docile citizens will be produced, who are not given to extravagant expectations, and whose modest wishes are prudently circumscribed within narrow limits. They may be broken in spirit, but then they are less likely to join the Chartists; their constitutions may be ruined, but, in that case, they will not so long burden the Poor-rates.

We can fancy the Parent State contemplating the gratifying result, and anxious, as is the custom with our generous Government, to reward honest merit, to be thrown into a serious dilemma in the attempt to distribute its recompense fairly to all parties. To whom is the great result attributable? To whose exertions are we to affix the national gratitude? That worthy body, who assume the singular name of "Guardians of the Poor," devised the system, the "Commissioners of the Poor-law" sanctioned it, and Mr. Drouet administered it. These three parties acted, it is true, with praiseworthy unanimity. The Guardians might have pampered the boys with such luxuries as potatoes which were not black, meat which was not unwholesome, and bread which more than balanced the four-ounce weight. They might have stimulated the boyish appetite with a less mephitic atmosphere, or have destroyed the chief delight of having three bed-fellows, by keeping each boy warm with enervating blankets. The Commissioners might have objected to the experiment of ascertaining the *minimum* diet of a pauper child. They might have instituted inconvenient comparisons between the Tooting diet and that which does not cause the face to assume in infancy the worn look of age; the cheeks to be pallid with weakness, or flushed with fever; the belly to grow tumid, and the limbs to dwindle; the eye to be bright from hectic, or heavy with the pangs of an unnatural decay—for instance, the Diet of our Prisons. They might have misconceived their office, and have fancied their enormous salaries were given them as the Protectors of the Poor, and not as the Punishers of Pauperism. They might have caused great mischief by accusing the Guardians of carelessness, inattention, incompetency, inhumanity, and barbarity. But, they did none of these things. A superintending body, they did not superintend; a regulating body, they did not regulate; a supreme Junta, they abdicated their supremacy, and allowed the Guardians to neglect their duty.

Can there be a doubt on whom the national gratitude should rest? What has Mr. Drouet done that can give him claims on an applauding country? Would not any man, so prompted and so backed by his superior authorities, have acted in like manner? Are there not hundreds of Drouets in every corner of this free country wherever there are Guardians and pauper farms, who pursue the same plan and with equal success. Then why single out an individual exponent of the system? Why regard the instrument at all, why not give all our gratitude to the inventors and approvers of the scheme?

It is true that some bigoted and old fashioned individuals may feel disposed to cavil at our enthusiasm, and may demand, whether unoffending children, though they *be* penniless and deserted, are to be treated worse than criminals, and initiated prematurely into the hardships of the poor man's lot. They may contend, that tyranny will give rise to a dishonest resistance, rapacity engender covetousness, brutality be answered by bitter hatred, and under such influences, the tender breast of youth be torn asunder by the most cruel passions. Such sensitive persons may possibly consider that the present system of farming children is not likely to be attended by other results than moral as well as physical degradation. If this be their opinion, we can only say, that although they may censure the immediate actors in these frightful tragedies, yet that, ultimately, the guilt and the expiation will fall on the nation which has heedlessly permitted them; and it behoves those who have recognized that the individual is responsible for national sins, to leave no stone unturned until the evil is redressed, and the innocent and the helpless are sheltered beneath the watchful care of a truly parental State.

Next week we shall take up some points which concern us more nearly as Medical Men, particularly as regards the all-important subject of Poor-law relief and superintendence.

CITY NUISANCES.

At length we have some prospect of relief from that great nuisance—the Smithfield Nuisance, and all its abominations. The House of Commons, on Monday last, agreed to a motion by Mr. Mackinnon, for the appointment of a Committee, which we hope will be able to accomplish the task. But we live in a world of progress, and as the attainment of all good seems to be progressive, we shall just take an onward glance, and point out those other not less Sanitary subjects that press upon our attention. It is true that these matters of minor moment may be said to be involved in the major—they must fall. But *preparation* is needed. It is the all but universal rule of nature—violence is her strange work—and it should be the result of reason. The Press has been preparing the public mind on the one hand, and echoing it on the other, till after many days the end seems within view. The requiem of Smithfield, its pains and its penalties, will once again have to be sung.

We have not heard much of the sayings and doings of the Commissioners of Sewers, since the time we saw it stated that their labours were gratuitous, and that they had even given up their complimentary dinner. We dislike eleemosynary services; we remember the rampant days of the "unpaid"—how they, nevertheless, took it out "in kind;" if not in meal, in malt; and justice and judgment were often perverted. Thanks to the liberty and freedom—not the licentiousness—of the Press, those days have passed; and in our public administration not a serious mistake can be made, nor a personal prejudice indulged, without impalement of the offender. But turn we now to matters more germane. We find, from a most elucidatory article, given in that justly termed leading Journal—the *Times*, that a proposal has been made to the Commissioners of Sewers, by a competent and responsible party, to relieve this great City of its impurities, without dishing them up in another form, and again presenting them for reproduction. In other words, so to act upon the sewerage of the City of London as to preserve in their purity and usefulness the waters of the Thames. And not only this, but offering to pay the sum of two shillings and sixpence per ton for such permission. Is not this a boon?—are there any vested interests here?—will the citizens complain? The flounders of our noble river may have cause, perhaps; but we fear not them, and hope to hear of no other impediment. The duty of the Commissioners is clear—paid or unpaid; it is to enforce public cleanliness and public decency, within their bounds. Are they efficient for this purpose? We think not. We perceive no progress in remedying the defects lately alluded to in our Journal, and felt by thousands. In other matters, a kind of "do-nothing" inspection is accorded,—an exclamatory "how can it be remedied" uttered,—the Worshipful Company pass on, and—the nuisance remains. These are not the kind of men under whom to place the Sanitary safety and comfort of the inhabitants of the largest City of the World. Men appointed for this purpose should possess suggestive minds, enlightened understandings, experience and judgment. What Rowland Hill has been to the Penny Postage, should be sought for, and might be obtained for the Sewerage and Sanitary state of the City of London.

Emerging from the Thames, our way happening to be north, we approach the heart of the Metropolis, and enter St. Paul's Churchyard, and here, should it be summer-time especially, our senses would be addressed by no mistakeable affair—there is a nuisance of no ordinary description. We remember that on this spot a late Master of the Mint, on his way from his princely mansion in the West to his Pluto-like palace in the East, as was his wont, called to crunch a biscuit just in the nick of time, on a "melting day," when the full benefit of this nuisance was experienced. Oh! how angry, how indignant was the worthy man. "Why (said he) do you put up with this—why is it not indited—why not put down?" The man of flour replied—"Sir, we cannot; illness, and an addi-

tional residence have been the result; we have tried, we have complained, and so have all our neighbours; but no redress." We suppose that because Newgate Market is near, it is allowable and necessary that a tallow-melter should be near also. "Where the carcase is, thither will the eagles be gathered together." Such a man as we have suggested, would, we opine, soon relieve Her Majesty's lieges of St. Paul's from this nuisance. Just at the time of our writing, we perceive that a Mr. Barber has presented the tallow-melter's nuisance to the notice of the said Commissioners. We hope he will be successful, and shave them from the surface of their present site. Here seems a case for Mr. Simon. Surely Mr. Barber may reckon on the assistance of this gentleman, if, indeed, he should not have been by him spared the necessity of the invidious effort.

Passing on, we come to a street called Goswell-street, not half a mile from the very centre of the City, and our readers who are strangers to the fact, will hardly believe that here there is established what is called a lay-stall, or, in other words, a receptacle for night-soil! dust! bones! &c., &c.,; and, to add to the perfection of the "charm," at the back of these premises there are Gas Works, so that the odour from this compound, as may be imagined, is enough to poison a whole people. That such an abomination should be suffered at all,—that it should be carried to such an extent,—and that it should remain so long, is a libel upon common sense, cleanliness, and propriety. We have taken some trouble to inquire into this matter; the defence is, there must be such a receptacle, for a large part of London is still destitute of sewerage, and, for obvious reasons, it must not be at too great a distance; how, therefore, can it be remedied? Here, again, our notion of a proper man would help us. He would see that the sewerage was complete wherever the power to compel it existed, or he would urgently represent the defect, and cease not till he had obtained its removal; for the duty of Mr. Simon extends not beyond the City bounds; he has quite sufficient therein to engage his attention, and we shall be glad to hear more of his activity and success.

We think that the abatement of self-evident and proven nuisances should not be left to the impulse of public-spirited individuals, but should come under the cognizance of men possessing the due qualifications and receiving their proper reward.

THE LONDON UNIVERSITY.

From a Circular which has just reached us we learn, that the Graduates of the University of London are invited by the Senate to attend at Somerset-house, at nine o'clock on the evening of the 9th May, for the purpose of being presented to the Chancellor of the University.

We rejoice that at last the University of London is to be something more than a mere graduating machine, erected in the second floor back of a building in the Strand. Who, without a smile, could contemplate that little, dirty, printed card, which so long, and, for aught we know to the contrary, still dangles from the bannister, to amuse every student of the School of Design? "The London University on the second floor." At last its Graduates, who, like the true heroes of romance, began with being nobodies, are about to turn out somebodies, and we heartily sympathise with them in their efforts to obtain from the Crown a more liberal Charter than the one they now possess. If a University be founded in London in the 19th Century, let its constitution be framed in the spirit of that Century, and then we may one day hope to see it rival in renown those which are the boast of the other capitals of Europe.

We cannot, however, help referring to one little stain in the Resolution agreed to by the Senate,—"that the Graduates be invited to attend in academical costume." We trust the practical good sense of the Graduates will induce them to decline this part of the invitation. Caps and gowns had, when originally introduced, a use in halls where old associations threw a fictitious charm around them, and there they may still be tolerated. But to begin their use in 1849, is to encourage a "sham;" and the genus Sham is detestable. We do hope that, depending for their standing, as the Graduates of London must, on the real value of their degree, they will cast aside, as unworthy of them, all meretricious ornament, and be content to appear, on public occasions, in the costume of gentlemen of the Nineteenth Century.

MR ALFRED SMEE, F.R.S.

To publish a book is sometimes a very senseless act; for its Author to be angry with the Reviewer of that book is still more senseless; but, to threaten that Reviewer with an action at law, because he cannot see wit in the witless thing, is, indeed, the climax of folly.

In reply to a request from Mr. Alfred Smee, that we would give up the name of the gentleman who wrote the review of his work on Electro-Biology for our Journal, we answer, that from that gentleman's intimate acquaintance with the subject on which he has written, and from his uprightness of character, he is above all suspicion of having been influenced by unworthy motives; and that, therefore, we decline to do so.

None can be more willing or happy than we are, when it is compatible with our resolve on all occasions to let the honest conviction of the truth of what we write guide our pens, to bestow praise on the works that come before us; and we earnestly trust that Mr. Alfred Smee will, by first having distinct ideas on some subject, and then clothing those ideas in intelligible language, afford us an opportunity of proving that our very unfavourable notice of his Voltaic Mechanism of Man and the Materiality of Life was dictated neither by private pique nor unkindly feeling. But Mr. Alfred Smee may rest assured, however unpalatable those truths may be which clash with a man's estimate of his own abilities, and which set a low value on the pet production of his brain, we shall never fail to tell them when circumstances demand; and, at the same time, we must also warn him, that if he again venture to print and publish a work so remarkable as the Elements of Electro-Biology for a "total absence of established facts, just reasoning, depth of thought, clearness of expression, and common grammatical accuracy," we shall—bound by the vow that is on us—again speak the truth, uninfluenced and undismayed by "counsels' opinion," or "the judgment" of Mr. Alfred Smee's solicitor.

Having thus dismissed Mr. Smee, F.R.S., with no intention of again alluding to him, unless he has the rashness to refer his cause to the searching ordeal of our Courts of Law, we may be permitted to say a few words of ourselves. It is, and will be, our most anxious endeavour to discharge justly our office of Public Censor. In our judgments of authors and of their works, we will not allow our criticism to be influenced either by knowledge or ignorance of the writer; by his position at the foot, or at the summit of the mountain of Fame; by the reputation he has previously acquired, or by the obscurity out of which he has not yet risen. We will judge each work as it comes before us on its own merits. What we justly think, we will boldly utter. Where we deem that errors have been committed, we will fearlessly expose them; where folly has to be lashed, we will not hesitate to wield the rod; but where true merit is manifested, we will be the first to recognise its lustre, and to add our plaudits to those which greet the discoverers of truth. Whatever may be alleged to have been the case in times past, the present Editors of this Journal are fully resolved neither to pass over the errors which demand condemnation, nor to allow the curtain which shields them from public gaze to be a veil to hide the blush of shame, which would mantle on their cheeks if the words they wrote were ever dictated by petty malice, or bore the stain of personal invective or of ungentlemanly abuse.

DISTRICT LUNATIC ASYLUMS IN IRELAND AND THE NON-RESIDENT MEDICAL SYSTEM ENFORCED THEREIN.

From a perusal of the Table of Cures, published by the Society for the Diffusion of Useful Knowledge, regarding Ireland, a serious question arises—why has a fact so plain, palpable, and startling, as the difference per cent. in cures in similar Institutions, under or supposed to be under, similar inspection and control, passed unnoticed and uncared for? Or why, for a series of years, has a confused and contradictory scheme, been permitted to exist in Ireland, where alone the treatment of Lunacy might have been tested and judged by a standard of some accuracy; inasmuch as these Institutions had been from the beginning placed under Government control exclusively, and were, therefore, the best calculated to aid in solving the problem of the treatment and cure of insanity.

In the swelling tide of Irish taxation, this subject is now destined, like every other violation or neglect of sound and unerring principles, to demand with compound interest an attention which can neither be treated with present indifference nor postponed for future consideration. The New Asylum in Cork will cost nearly 100,000*l.*, of an immediate, independent of a future and permanent outlay; and the accumulation of incurables, arising partly from the inequality of cures, and partly from the causes adduced above, will soon demand an

equally heavy Grand Jury outlay for every other part of Ireland.

"*Quiquid delirant Reges plectuntur Achivi*," and the sad inequality of cures in our Irish District Asylums, unnoticed, perhaps uncared for, supplies, by the extensive ruin of the human intellect, a melancholy paraphrase on the aphorism of the ancient satirist.

We repeat, extensive ruin of the human intellect; for no writer, statistical or otherwise, has dared to put forward that the inhabitants of one *district* in Ireland are more prone to incurable insanity than another, and a neighbouring one; that there is, in fact, a species of insanity in the Maryborough district which permits only 13 per cent. to be cured in its Asylum, in an average of ten years; while in the next district, separated from it by merely an imaginary line at Granard, there have been cured in the Armagh Asylum 27 per cent. average, for the same long period.

We instance these two Asylums because they are next each other, because they are not provided with any Resident Medical Superintendents, because on each a Medical practitioner of high professional character attends. Yet strange, passing strange, *one* Asylum cures but 13, while another cures 27 per cent., on an average of ten years, according to the aforesaid returns.

A deeper inquiry might go far to explain this striking discrepancy in Institutions under similar rules; but that inquiry has never yet been fully or fairly entered on—nor probably will it ever be done, until the Asylum Inspection of Ireland is merged into a general Medical Charities' Board. However, the following may *partly* explain discrepancies so striking. In Maryborough, the Rules of 27th March, 1843, had, from its opening, been in active but solitary operation. They were drawn up by local parties, and were tolerated or sanctioned by the then authorities.

In Armagh, not only were these rules, or the leading features of them, which place all power in a non-resident Medical Officer's hands, unknown, but, even since March, 1843, they have never been acted on in their essentials. In the Report of the Inspectors, printed in 1845, the following remarkable passages occur at pages 15 and 14:—

"The new Rules are not yet fully acted on in our Asylums; in some cases the Board of Directors consider them *impracticable*; it might be well to remodel and reconsider them." At page 15, referring to Armagh Asylum, wherein these rules had not been then or *since* acted on, the Inspector reports, "I confess I know not how to suggest any improvement" (in this Asylum). And this, too, in an Institution where, two years before, these Rules had been received, but not acted on in any of their essentials!!

With one or two observations calculated to prove how anxiously "the Irish Board of Control exercise *their* powers for the convenience of the poor, for whose exclusive benefit Parliament had originally intended these fine buildings, we will conclude our preliminary remarks, and then proceed to a review of the Rules. On the confines of Connaught province, and immediately contiguous to Leinster, is situate the town of Ballinasloe, noted only for its annual cattle show. In this (so far as the Asylum district is concerned) remote town, the Commissioners recommended that the Asylum for one and a half million of inhabitants should be built, and it was so built there. It might have been thought that the site would have been wisely chosen, and in accordance with sound sanitary principles. At page 26, of the Parliamentary Report on Asylums for 1844, we find, however, the following passage:—"There are twenty-two statute acres attached (walled in) to the Institution, of which *five* consist of low marshy ground incapable of cultivation!!!"

We conceive that a *better* situation could not have been chosen for the development of diseases, and sense and humanity demand that the Irish Lunatic Asylums should be placed on a level with those of England. A searching investigation is at once required, and the unfortunate patients should, at least, be favoured with the attention of resident Medical Officers, who would see that the most enlightened system of treatment was adopted, to benefit those afflicted with the most appalling of all human diseases.

THE COLLEGE OF SURGEONS AND MEDICAL REFORM.

We understand, from good authority, that the Members of the Council of the Royal College of Surgeons have, during the last week, unanimously resolved to oppose any measure of Medical Reform which does not concede to the Court of Examiners of the College only the right of examining Candidates in Surgery.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—April 10, 1849.

Thos. Addison, M.D., President.

Before the Minutes of the previous meeting were confirmed,

Mr. Norton (in reference to a discrepancy which had occurred in Dr. Macintyre's Paper, read at the last meeting) said: In justice to Dr. Macintyre, I wish to remark, that I must have misunderstood the observations of Mr. Hewett, when I represented that gentleman as not having seen cases of perforation of the stomach; and that, so far as Dr. Macintyre is concerned, the matter rests entirely with me.

A Paper was read, entitled—

On the Utility and Necessity of Performing Paracentesis Thoracis in certain Cases of Pneumothorax. By Hamilton Roe, M.D., Physician to the Westminster Hospital, &c.

The object of this Paper is to show that Pneumothorax is not a necessarily fatal disease, and that paracentesis is the best remedy which can be applied for its cure. The Author adverts to the fact, that the disease arises from a great variety of causes, and that, not unfrequently, there is either no alteration of structure in the lungs, or so little, as to warrant us in supposing that it might be cured. He relates two fatal cases that have come under his own observation, in which paracentesis was recommended by him, but not performed, and in which, after death, it was found that there was in one instance no perforation of the lung, and no disease of the lung whatever; while in the other, the opening in the pleura was very small, and, although four small caverns, and a small number of tubercles of inconsiderable size existed in it, there was no organic disease immediately fatal, and life might have been at least prolonged, had the lung been relieved from the pressure of the air in the pleura by the operation of paracentesis. The author then refers to several other writers who have narrated similar cases, and especially to the thesis of M. Saussier, who has shown that the possible causes of pneumothorax are seventeen. The author himself arranges the varieties of cases under four heads: 1. Those where the air is secreted by the pleura; 2, those where it arises from decomposition of fluid; 3, the cases where it escapes from a distended or ruptured emphysematous cell; and 4, those where it issues from a fissure in the lung. The first three varieties are susceptible of cure; and the fourth is not necessarily fatal. After describing the symptoms distinguishing these different varieties of the disease, the Author proceeds to show that the mere presence of air in the pleura is not a source of danger; that the air may in some cases be absorbed; and that it is, therefore, only where air is accumulated in such quantities as to cause great difficulty of breathing, that we are called on to remove it by tapping the chest. The operation, in order to be successful, ought be performed before the lung by compression has become carnified, and the other lung congested. The objection, that the air admitted from without will itself compress the lung, the Author meets by saying, that if the wound made by the canula in tapping be kept open, the lung, if healthy, will expand on being relieved from pressure, and may, if the air can escape, as fast as it enters, not only come into contact with the costal pleura, but contract adhesions to it and obliterate the pleural cavity." In support of this statement he gives the particulars of a case observed and related by Mr. Benjamin Phillips, in which, by sloughing of the soft parts, the cavity of the pleura was completely laid open in two intercostal spaces to the extent of several inches, and where "at every act of ordinary inspiration, the lung came into close contact with the ribs; at every expiration the lung retreated to the extent of half an inch from the ribs." The author then refers to published reports of nineteen cases, in which paracentesis thoracis has been performed for pneumothorax, in ten cases successfully; and, after observing that the question whether the opening made in the operation should be closed or kept open is yet to be decided, but that it seems to him desirable to keep it open when the air enters the pleura through an opening in the lung, and to close it in the other cases, he concludes his paper by relating a case in which the wound was left open with a favourable result.

Dr. Webster: The paper just read is exceedingly satisfactory, both as to its details, and also as to the benefit arising from the operation. But my chief object in rising is to ascertain whether I misunderstood a statement in the paper, viz., that this operation was first performed by a French surgeon, about the end of the last century; because it is my opinion that the operation is a very old one,—one which had been performed long before there was a School of Medicine in France. I think it will be found that Hippocrates performed it.

Dr. Baly: The paper states that a French surgeon first practised tapping *in cases of pneumothorax*.

Dr. Webster: In reference to the benefit arising from paracentesis, I may observe, that I met with a case some years ago, where, from the *post mortem* appearances, it was clear that, if the operation had been performed, it would have saved the patient's life. On examining the body after death, an abscess was found on the surface of the lung; and, from all appearances, I have no doubt that the case would have had a favourable issue if paracentesis had been performed. I must express my obligations to Dr. Roe for his communication. Some time ago that gentleman had communicated another paper, in which there were detailed several cases in which this operation had been successful; and I should be glad if Dr. Roe would state, whether any of those patients continued well for any length of time after it.

Dr. Snow: I think the last case detailed in the communication was not one of pneumothorax, strictly speaking. It seems to me that there was no air except that which got into the pleura, in the process of tapping; and this explains why that side of the chest was not larger but smaller than the other. Dr. Roe would explain this by stating, that adhesions to the pleura prevented extension; but I think it was from the admission of air in tapping. Then, again, the opening which was said to have been preserved, I think was not exactly so; for it appears that the tube was plugged, and opened only at intervals. It also appears to me, that there must

be some mistake in the allusion to the case at Westminster Hospital; viz., that the lung receded during expiration, and the contrary on inspiration; it must, I think, have been meant to state the reverse of this.

Dr. Baly again read the statement from the paper.

Mr. Barrow: I think we are much indebted to Dr. Roe for bringing this subject before the Society,—one of very great difficulty, and on which the Profession is much divided. On the one hand, our patient is likely to die asphyxiated; and, on the other, we know that he may have been suffering from some previous disease, and that, therefore, a remedy applied for pneumo-thorax, may be attended with bad results to the former. I agree with the author, that the dangers connected with the presence of air in the pleura have been overrated; the danger depends very much on the quantity of air, and the previous state of the lungs. In such a case as that of pneumothorax arising upon the fracture of a rib, it is then very dangerous, and also in cases of hooping-cough, where some of the cells may have been ruptured. If, on the other hand, the air only enters in small quantities, and the lung be diseased, the system will often tolerate the presence of air. In reference to the subject of paracentesis in pneumothorax, I cannot say much in its favour. Of the cases detailed, the first appears to have been one of pleurisy, with effusion and the presence of air; that air was fetid, and was supposed by the author to be caused by the decomposition of the fluid effused in pleurisy. Whether that was so or not I think doubtful, because it might have been pleurisy excited in consequence of a small ulcer of the pleura itself. I have met with a case similar to the third one read, in which the operation was performed; there was a large quantity of fluid, but the symptoms of exhaustion were so great that the operation was not repeated, and the patient died; there was a small ulcer of the pleura on the left lung. In the second case, one of phthisis, I think the operation would have given no relief, for if the air had escaped (which is doubtful), there is no probability that the lung would ever have resumed its functions. The third case I should rather call one of empyema than of pneumothorax, cured by paracentesis thoracis, and by the opening being made permanent. I think it very doubtful whether this mode of treatment will be found generally successful or not. I have had such cases, but not followed by a favourable result. I am acquainted with one case under Mr. Clayton where it was necessary to perform paracentesis thoracis; and in a second, where there was a considerable quantity of air, I thought it right to have a permanent opening; that operation was attended with great constitutional disturbance, with a fetid discharge, and the patient, a young man, sunk in three months. I think, although we may be sometimes fortunate, yet it is attended generally with serious consequences; and the cases in the paper do not materially advance us in the question as to the desirableness of the operation.

Dr. T. Ogier Ward: Some time ago I had under me a case of gangrene of the pleura; the lungs were seen to press against the ribs on expiration, and a quantity of fetid pus was evacuated. I have had opportunities of seeing cases of pneumothorax. In one case a wound was made between the fifth and sixth rib, and a quantity of matter evacuated, and then the wound was closed; a second opening was then made between the third and fourth; after some time this second was closed, and the patient suffered much inconvenience until there was a discharge of matter through the mouth. Immediately after this the chest became exceedingly resonant; there was no metallic tinkling, but bourdonnement. The removal of the matter was owing to the expansion of the lung. In another case, in Birmingham, I tapped a child of two years and a half old, three times. On the second operation a quantity of air entered the chest, and when the child made a movement, it was heard very distinctly. After the third opening there was still a quantity of air left, but ultimately recovery took place. Three years ago, I had another case; that of a female, where there was œdema, and the fluid was discharged. Unfortunately the wound closed; the patient lived three years after, but died at last, partly of exhaustion and of gangrene of the cavity. On another occasion, where I had a patient under me for œdema, the operation was unfortunate; the air entered into the chest, and gangrene of the pleura was the result. With regard to the last case, which has now been brought before the Society, I think it is a very instructive one, and one which may induce us to persevere in our treatment with the hope of ultimate recovery.

Dr. Baly: There are two points in connexion with this subject which strike me; the means of relieving the patient at the time air enters the chest, and the possibility of cure. I think that the distressing symptoms may be ascribed to the lung being so depressed that the blood cannot circulate through it. In one case I took a large quantity of blood from the patient, and the relief was very marked indeed; I have frequently since adopted the same plan. Shortly after the case I have just mentioned, I had one of partial paralysis with pneumothorax; the patient was in great distress, and a pint of blood was taken from the arm with great relief; he became tranquil, and no other remedies than opiates were given. This occurred twelve months since; the signs of air in the pleura disappeared, and were replaced by a fluid; he is still under my care, but is not a subject upon whom I would perform paracentesis. I had also another case, proving the second fact,—that air in the pleura is absorbed,—where, after a time, the bourdonnement disappeared, the fluid poured out, and afterwards nearly wholly removed.

Dr. Theophilus Thompson: I would make one remark on a point which has been referred to in the paper read,—and for which I feel much indebted to Dr. Roe,—that of the great apprehension which has been entertained of the mere idea of puncturing the chest. My own opinion is, that it does not involve any great danger. It has occurred to me to observe, from time to time, considerable admissions of air into the chest during the operation. It seems to me, that the danger of puncturing the chest has no particular relation to the operation, but to other circumstances: 1st. To allowing delay in the puncturing; 2. To permitting a continuous introduction of air; and 3. The attempting the removal of a great quantity of fluid at one time. If a great quantity be taken, the lung is then rendered less liable to expand, because a part of the space gained by drawing off the fluid is immediately occupied by air, which is very difficult of removal. Merely puncturing the chest is not dangerous; but it is better to repeat it over and over again, than to draw off too much of the fluid at once. A case came within my knowledge, in which an elastic plug was introduced into the trocher, and was drawn into the chest.

Dr. Roe: I beg to state, that I have never advocated indiscriminate tapping of the chest, but only in cases where the difficulty of breathing was very great, and where there was a sudden introduction of air into the chest. In one case, my reason for not tapping was, that the patient was far advanced in tuberculous disease. In reference to the first case in the paper, I may mention, that it was that of a gentleman who had disease of the heart. There was no possibility of the escape of the air from the lung into the cavity of the pleura; here was a case in which a quantity of air was generated without any disease of the lung whatever; and I quoted that case to show, that pneumothorax might arise from more causes than one. The second case was one in which the extreme collapse of the lung was sufficient to show that there was very little disease. Now, the difficulty of breathing in this case was most distressing; and, keeping in mind that the lung was compressed to the size of a fist, I ask the Society, what would have been the probable result if tapping had been resorted to? I think, where the lung is very little altered in life, if an opening be made in the parietes of the stomach, much of the air would escape. But, although this may not be a well-founded hope, yet I think no one who has witnessed the distress produced by the escape of air into the lung, would hesitate at performing the operation in question. It appears to be very questionable whether the abstraction of blood would produce absorption of the air. With regard to the third case, it has been said, that the symptoms were produced by the quantity of air which was allowed to get into the chest. I may say, however, that great care was taken to prevent air getting into the cavity of the pleura, and therefore it must have come from some other part,—I believe through the bronchial tubes.

Dr. Baly: I must have been misunderstood, if it was supposed that I meant absorption of the air might be caused by the abstraction of blood; I meant, that there might be too much blood, and that by diminishing the force of the circulating fluid, the patient might be relieved.

The President: Perhaps, Mr. Phillips will give some explanation as to the ascent or descent of the lung, as noticed in the paper.

Mr. Benjamin Phillips: The lung was exposed to a considerable extent, and I had daily opportunities of looking at it, and this served to show that the lung had an independent action. It is quite clear that the effect mentioned in the paper did take place; and one motive I had in giving the paper to Dr. Roe was, to show that the air was not sufficient of itself to compress the lung.

The meeting then adjourned.

PENCILLINGS OF EMINENT MEN.

JOHN HUNTER, F.R.S.

(Continued from page 462.)

Hunter had no home amusements, as cards, chess, &c., for the relaxation of his mind, and the only indulgence of this kind he enjoyed consisted in an evening's ramble amongst the various denizens of earth and air, which he had congregated at Earl's-court, Brompton, where he slept, and with his family spent the greater part of his time during the autumnal months.

In January, 1776, Hunter received the appointment of Surgeon Extraordinary to the King, the first and only one which brought him within the atmosphere of Royalty; in this year, at the request of the friends of the Royal Humane Society, (an Institution just then very much occupying the public attention,) Hunter wrote, and produced before the Royal Society, a paper, entitled "Proposals for the Recovery of Persons apparently Drowned,"—a paper containing sound physiological principles and which still continues to guide the conduct of those who may be called to the assistance of a fellow creature suffering under this form of asphyxia. In the autumn he was taken extremely ill, brought on by anxiety of mind at being called on to pay a large sum of money for a friend, for whom he had become security, and which his circumstances made it exceedingly inconvenient to pay. The nature of his complaints made his friends, as well as himself, consider his life to be in danger. When he reflected upon his own situation, that all his fortune had been expended in his pursuits, and that his family had no provision but what would arise from the sale of his collection, on which he told Mr. Lynn he had expended £70,000, he became very solicitous to give it its full value, by leaving it in a state of arrangement. As soon as he was able to leave his room, his first object was to make a catalogue of his collection, but his weak state prevented it, and his friends urged him to resign business for a time, and retire to Bath. In compliance with this advice, he proceeded thither; but, before doing so, set Messrs. Home and Bell to work in making descriptions of the preparations, leaving blanks for such as they were unacquainted with. At Bath he was visited by his attached friend Jenner, who was greatly shocked to perceive the alteration which had taken place in his appearance, and concluded, from the symptoms under which he laboured, that his disease was *angina pectoris*. By his stay at Bath he found his complaints were a good deal relieved, but his impatience to return to town made him do so before he was well. He continued, however, to amend, and very soon recovered.

In 1780, an unfortunate disagreement took place between the Hunters in consequence of John presenting to the Royal Society a paper on the structure of the placenta, in which he claimed for himself the honour of discovering the true mode of union between that organ and the uterus,—a discovery which his brother William had communicated as his own, in his work on the Gravid Uterus. It is impossible to conjecture what could have been the motives that induced Hunter to bring forward such a claim twenty-five years after the alleged discovery, and five years after the publication of Dr. Hunter's work, who, in a letter to the Royal Society, denied having derived his information from his brother, asserting that the discovery was the result of many years' patient investigation of the subject on his part. To this a rejoinder was sent by Hunter, re-asserting the truth of his account, but adding that, as his brother seemed unwilling to allow him the whole merit, the former should be welcome to share it with himself and Dr. Mackenzie, who had assisted John in the discovery. Here the discussion ended, the Royal Society deciding on taking no further notice of the affair. But the estrangement produced by the dispute between the brothers continued undiminished until Dr. Hunter was on his death-bed, when his brother requested permission to see him; this was granted, and he continued to visit and afford him professional assistance until his death. Notwithstanding this apparent reconciliation, the feeling of soreness seems not to have been quite obliterated, as Dr. Hunter died without leaving his brother any portion of his property.

In March, 1781, Hunter appeared as a witness at the Warwick Assizes in the celebrated trial of Capt. Donellan for the supposed murder of his brother-in-law Sir Theodosius Boughton. The Oxford Professor of Anatomy, and the gentlemen who examined the body, decided that the deceased was poisoned. Hunter, on the other hand, with that proper caution which resulted from his extensive knowledge, avoided drawing so hasty a conclusion; the reader, however, is referred for a fuller account to "Adams' Life of Hunter," p. 216, to which, as well as Mr. Ottley's "Life," we are indebted for these particulars. In 1781, Hunter was elected a Fellow of the Royal Society of Belles Lettres at Gottenburg, and, in 1783, a member of the Royal Society of Medicine and the Royal Academy of Surgery of Paris. The lease of his house in Jermyn-street having expired, he purchased the remainder of the lease of more extensive premises in Leicester-square. Here he expended all he could spare from his income in building a proper room for the reception of his collection, which was not finished until 1785.

Notwithstanding his architectural engagements, Hunter found time to take an active part with Dr. Fordyce and others, in the formation of the "Society for the Improvement of Medical and Chirurgical Knowledge."

On the return of Mr. Home from Jamaica, where he had been acting as Staff-Surgeon, he found Hunter advanced to a very considerable share of practice, and a still greater share of public confidence. There appears, however, a great diversity of opinion respecting Hunter's dexterity as an operator. His large experience, and his extraordinary skill as an anatomist, almost always enabled him successfully to complete any operation he undertook; though slow he was sure. He would frequently observe, "To perform an operation, is to mutilate a patient we cannot cure; it should, therefore, be considered as an acknowledgment of the imperfection of our art."

In December, 1785, Hunter planned and carried into execution his famous operation for the cure of aneurism, that of tying the artery at a distance from the tumor, and between it and the heart, instead of laying open and emptying the sac, and then seeking for the orifices of the vessels, according to the old operation.

In 1786, on the death of Mr. Middleton, Hunter was appointed Deputy-Surgeon-General of the Army, the emoluments of which, though not considerable, were a very desirable acquisition to his income. In the same year he published his grand practical work on the "Venereal Disease," generally admitted to have been unknown till the close of the fifteenth century. On this work he bestowed great pains, submitting the sheets for the revision of his friends Sir Gilbert Blane, Dr. Fordyce, Dr. Pitcairn, and Dr. Marshall. So highly was this work appreciated, that so many as 1,000 copies were sold within the twelvemonth, without the assistance of the bookseller. Whilst engaged in literary occupations, he never neglected his museum; his eagerness to obtain rare and valuable specimens for which, often led him to pay more than its worth for any object he desired to make his own, as the following will show:—In 1783, O'Brien, the Irish giant died. He had been in a declining state for some time previously, which Hunter knew, and, anxious to procure his skeleton, set his man Howison to keep watch on his movements, that he might be sure of securing his body at his death. O'Brien learned this, and, as he had a horror of being dissected, he determined to take such precautions as should insure his not falling into the hands of the doctors. He accordingly left strict orders that his body should be watched day and night, until a leaden coffin could be made, in which it was to be inclosed, carried out to sea, and sunk. O'Brien died soon after, and, in compliance with his directions, the undertaker engaged some men to watch the body alternately. Howison soon learned this; found out the house where these men went to drink when off duty, and gave information to Hunter, who forthwith proceeded, with the view of bribing them to allow the body to be carried off. He had an interview with one of the party at the ale-house, and began by offering him 50*l.* if he would allow the body to be kidnapped. The man agreed, provided his companions would consent, and went out to consult them. He returned shortly, saying that they must have 100*l.* Hunter consented to this, and thought the affair settled, but the men finding him so eager, soon came back with an increased demand, which was also agreed to, when further difficulties were found, and larger and larger demands made, until, it is said, they raised the price to 500*l.* The money was borrowed to pay them; and in the dead of night the body was removed in a hackney-coach, and, after having been carried through several streets, was transferred to Hunter's own carriage, and conveyed immediately to Earl's-court. Fearing lest a discovery should take place, Hunter did not choose to risk the delay which the ordinary mode of preparing a skeleton would require; accordingly, the body was cut to pieces, and the flesh separated by boiling; hence has arisen the brown colour of the bones, which, in all other respects, form a magnificent skeleton and ornament in the Hunterian Museum.

The Royal Society this year conferred on Hunter the Copleyan gold medal, as an honourable testimony to the importance of his discoveries in natural history. He had been nearly thirty years known in the metropolis before he was admitted to the honour of a Fellowship, and nine years a Fellow before he was thought worthy of this distinguished prize.

Hunter's friends had long been desirous to engage him to sit to Sir Joshua Reynolds for his picture; but he had always hitherto declined to do so, not choosing that it should be done at the expense of others, and thinking the price too high for himself to pay. He was, however, at length, induced to comply, chiefly to oblige Sharp, the eminent engraver, who had received much notice from Hunter, and who was very anxious to be permitted to make an engraving from Sir Joshua's picture. Reynolds found Hunter a bad sitter, and had not been able to satisfy himself with the likeness. When, one day after the picture was far advanced, Hunter fell into a train of thought, in the attitude in which he is represented in the portrait, Reynolds, without saying a word, turned the canvas upside down, made a fresh sketch, with the head between the legs of the former figure, and so proceeded to lay on over the former painting the colours of that which now graces the walls of the Council room of the Royal College of Surgeons. From this portrait Sharp executed his engraving, which is admitted by the best judges to be one of the finest, if not the very finest, specimen of the art ever executed. Sharp always considered this engraving as one of his happiest efforts, and was found poring over it with admiration forty years after he had executed it. Hunter took fifty copies of the engraving at two guineas each, and the plate proved a milch cow to the artist. (a)

In December, 1788, an event occurred which left to Hunter the undisputed title of the first surgeon in England; this was the death of the veteran Pott, whom he also succeeded in the Council of the Royal College of Surgeons, on the 12th of February, 1789. He was always solicitous for some improvement in medical education, and readily accepted the honour offered him by the Master, to whom he had previously addressed the following very interesting letter, never before published, and for which we are indebted to the present Librarian of the Royal College of Surgeons, whose collection of medical autographs is, perhaps, one of the best in London. The letter in question is addressed:—

"TO THE MASTER, WARDENS, AND COURT OF ASSISTANTS OF THE CORPORATION OF SURGEONS, LONDON.

"Gentlemen,—At this period, in which the surgeons of Great Britain have deservedly acquired the highest reputation in Europe, both by their practice and publications, it appears to be a reflection upon them that the Corporation of Surgeons of London should not be possessed of a public surgical library, a circumstance so extraordinary that foreigners can hardly believe it.

"If a custom had been established at the time the surgeons were incorporated, that every member should send a copy of his publications to the Company's library, it would have at present contained the works of many of the best writers in surgery, which might have proved a valuable collection of instructions for the improvement of the Profession.

"As the smallest beginnings may in the end lead to the greatest acquisitions, I have done myself the honour of presenting to the Company, through your hands, the few observations on Anatomy and Surgery which I have published; and should the other members of that body be induced to follow my example, and by presenting their works establish a library, which shall hereafter become both a public benefit and an honour to the Corporation of Surgeons, I shall consider it as one of the happiest events of my life to have been at all instrumental in such an establishment.

"I have the honour to be, Gentlemen,
"Your most obedient humble servant,
"JOHN HUNTER.

"Leicester-square, August 14, 1786."

Upon the death of Mr. Adair, Hunter was appointed Inspector-General of Hospitals and Surgeon-General of the Army, and was elected a member of the Royal College of Surgeons of Ireland, and in 1792 he was chosen one of the Vice-Presidents of the Veterinary College, then first established in London; he was also one of the original members of, and zealous supporter of the Society for the Improvement of Medical and Chirurgical Knowledge.

We have already given in our Journal an account of the closing scene of this great man, who, in his sixty-fifth year, expired, "celebrated alike as a surgeon and as a naturalist; in neither of which capacities has he had many equals—in his combined character, none."

In person, Hunter was about the middle stature, of a vigorous and robust frame, and free from corpulency; his shoulders were high and his neck short. His features were rather large, and strongly marked, his eyebrow projecting, his eyes of a light colour, his cheeks high, and his mouth somewhat underhung. In dress he was plain and gentlemanlike; and his hair, which in his youth was of a reddish yellow, and in his latter years white, he wore curled behind.

Hunter's body was interred in a private manner in the church of St. Martin's-in-the-Fields, accom-

(a) It is not generally known that this plate is now in the possession of William Clift, Esq., the attached and faithful friend of Hunter, who purchased it at the sale of the effects of Sharp. Our readers can obtain prints from it of Mr. T. M. Stone, of the College of Surgeons.

panied only by a few of his medical friends. Some time after his death, his widow felt anxious to erect a monument to his memory in Westminster Abbey, but the fees demanded for permission to occupy a niche within that venerable fane were too great for her reduced fortunes, and she, therefore, reluctantly abandoned her intention. It is gratifying, however, to find that it has been decided on erecting his statue, amongst other distinguished men, in the new Houses of Parliament. We would here inquire, *en passant*, what has become of the Hunterian Committee who met a year or two ago, at the College of Surgeons, to decide on a fitting memorial of this renowned physiologist? Surely there can be no want of funds? But the author of the Hunterian Museum needs no other memorial of his worth than the proud one he has himself erected.

On examining into his affairs, his executors found that his property, exclusive of the Museum, would scarcely suffice to pay his debts, and it was, accordingly, to the produce of the sale of this, that his family had to look for their future support. The disposal of it to the British Government was, on all accounts, most eligible, but it was no easy task to bring this about. The attention of Parliament and the nation was wholly directed to the events of the French Revolution, and there was a great unwillingness to expend money on any objects not essential to the conduct of the war. When Mr. Pitt was applied to on the subject, his reply was:—"What! buy preparations! Why I have not money enough to purchase gunpowder." And it was not until 1799 that the Government purchased it for 15,000*l.*, the collecting and preserving of which had cost Hunter 80,000*l.* This valuable collection was presented, on certain conditions, to the College of Surgeons. In drawing this sketch to a close, we beg to refer the reader, for a more particular account to an elaborate Memoir by Drewry Ottley, Esq., certainly the best of his biographers; that of Adams displays marks of indiscriminate and unbounded partiality towards Hunter, as that of Jesse Foot's does of bitter hostility; to the former we have been greatly indebted for this "pen-milling." O—i

REVIEWS.

The Discovery of the Use of the Hair, in the Animal Economy. By G. CALVERT HOLLAND, M.D. London: William Headland, Princes-street, Hanover-square. 1849.

It is something now-a-day to make a discovery. We do not mean those "translations from the German" that men palm upon us as their original conceptions, and frighten the medical world from their propriety while they listen to their "moving accidents," their patients' "hair-breadth 'scapes," and their histories of men "whose heads do grow beneath their shoulders"—but a real live discovery such as Dr. Holland's, which will not only benefit science, but most decidedly, if the discovery "takes," induce us to become, like Bottom, "marvellous hairy about the face."

But, joking apart, who is Dr. Calvert Holland, for his pamphlet is dated London, and yet no such name appears in the Medical Directory? Well, we knew Dr. Holland as a fellow-student with ourselves in Edinburgh, where he was marked as a man devoted to the study of physiology, and commanding at all times the attention of the societies to which he belonged; and let us add, that when men as students can do this, they offer a rich promise for the fruits of their maturer years. Even in those days Dr. Holland was a hairy man, and he is still an Esau, as the reader would probably guess, if he is tempted to adopt the theory now propounded. We may add that, although the Doctor has only lately come to London to take his part in the great battle of life in which we are all engaged, he was long an eminent Practitioner and Physician to the General Infirmary at Sheffield, where he published works of a very high and intellectual character.

Having thus stated briefly the claims which Dr. Holland has to command the attention of our readers, we will state his views, and offer a remark or two upon them.

The Author first notices the fact, that no hints or suggestions have yet been thrown out as to the functions of the hair, except that it was to protect certain parts of the body from heat or cold; and this deficiency he now attempts to remedy.

The office, then, of the hair, according to Dr. Holland, is to act as a *species of safety-valve to the nervous system, or as a means of enabling those nervous organs, whose energies are not wasted in ministering to the demands of organic life; that is, in fact, those concerned in what Bichat terms the "animal" functions, to form extensive and vital relations with the great principle pervading the universe.* To attempt to form an idea of this very novel theory, it is necessary to have studied a previous work of the author's, termed the "Philosophy of Animated Nature," in which he considers that a peculiar agent animates the entire of the nervous system, and that the vital properties of all organised matter are according to the quantity it receives, the distribution of which is constantly varying, and permanently modified at every period of life. All organs, he considers, within certain limits, have a ready means of throwing off any excess of this principle,—the stomach, the liver, the intestines, and all mucous surfaces and glands, by increased secretion, and, occasionally, by the rejection of their contents. These organs, from the office they exercise, have ample outlets for the often occurring accumulation and the disturbing influence of the vivifying fluid: to supply a similar means of discharge to the other nervous organs, Dr. Holland considers the hair is provided by Nature.

The attempts at explaining, on this theory, the variation in the distribution of hair, at different ages, and in the two sexes, is undoubtedly creditable to the ingenuity of the author, even if it should not succeed in convincing the reader, and merits considerable attention, though we are afraid we must agree with Dr. Holland in our sense of the difficulties opposed to the reception of such novel views, based on the existence of a nervous agent, susceptible of accumulation and dispersion, to the influence of which all vital phenomena are to be traced. Having thus briefly stated Dr. Holland's general views, and our own opinions concerning them, we proceed to lay before our readers a few extracts from the work.

"P. 13.—The profuseness of the hair in every situation, as a rule, *is proportionate to the prevailing vital energies.* These must not be confounded with mere mental activity, or a facility of bodily motions, which may co-exist, and frequently do, but they are not necessary accompaniments. The definition implies a vigorous development of the animal system. The digestive and assimilating organs usually ample and active, the lungs capacious, and every fibre richly endowed with vital properties. The individual is generally a sensualist in the comprehensive meaning of the term. He riots in the enjoyment of the teeming resources of nature.

"P. 14.—We shall now proceed to show, that the situations in which the hair particularly abounds, are distinguished by the concentration of nervous matter exercising important nervous functions. The eyebrows and eyelashes are striking illustrations of the fact. Its presence in these organs may, perhaps, be regarded as protecting the eye from dust and perspiration. It has other and more urgent duties. When we consider the great amount of nervous power in association with the instruments of vision, imparting sensibility and motion to them in a refined degree; and further, the necessity of their action to the well-being of man, the external provision is in beautiful harmony with the requirements.

"P. 15.—That the face possesses a large quantity of nerves will not be questioned, whether it be studied in reference to expression, or the other motory uses of its organs. The acute sensibility of the lips, and their constant play in speaking, eating, and drinking; and, also, the powerful action of the jaws in the process of mastication, are conditions demanding a liberal distribution of nervous matter, and the regions in which it exists, are the most profusely endowed with hair."

"P. 20. The pubis, in both sexes, is copiously supplied with hair. The parts in its immediate vicinity are possessed of extreme sensibility, consequently are liberally furnished with nerves. It is not necessary to particularize the extraordinary changes of condition to which they are subject. They need no elucidation. There is no region, save the head, where the co-operation of the external provision is more imperatively required than here. It is associated with organs ministering to the gratification of powerful instincts, and its protuseness will be found to be in the ratio of the innate vigour of the vital operations. Concerning any other office that it may, with propriety, be supposed to exercise, we shall, from obvious reasons, make no remarks. This would not, however, explain its actions in other situations.

"P. 21.—Hair, in the male, is developed around the external parts of the anus. Its absence in the female, may possibly appear to militate against the use assigned to it. The further consideration of the subject will, nevertheless, not only remove any objection arising from such discrepancy, but will tend in a peculiar manner to confirm the justness of the views propounded. This, and other extraordinary differences between the sexes, will throw great light on the influence of important organs in the animal economy."

We recommend Dr. Holland's pamphlet to the attention of our readers. Whether they accept or reject the views it developes, we are sure they will examine them with as much gratification as we have ourselves, for there is a freshness and a vigour about them which, in these humdrum and unimaginative days, are quite delightful and refreshing.

Practical Observations on the Pathology and Treatment of Certain Diseases of the Skin, generally pronounced intractable. Illustrated by upwards of forty cases. By THOMAS HUNT, M.R.C.S., Eng., L.S.A., &c. London: John Churchill. 1849.

This Treatise is of a decidedly practical nature. It has for its chief object to make known to the Profession the Authors experience of the effects of arsenic in the treatment of certain chronic diseases of the skin. These diseases are Lichen, Prurigo, Lepra, Psoriasis, Pityriasis, Chronic Urticaria, Purpura, Impetigo, Ecthymo, Eczema, Acne, Lycosis, Lupus, and non-congenital Nævus.

Mr. Hunt regards all these affections as really one disease, manifested in different individuals, by different kinds and degrees of cutaneous inflammation or irritation. This view of their pathology has the recommendation of great simplicity; but we doubt its soundness, and, most assuredly, it is at present "not proven."

The necessity of removing every local or constitutional disorder which complicates, originates, or sustains the eruption, is clearly laid down; and it is only after this has been effected, and the diseased condition of the skin yet remains, that the Author advises recourse to be had to arsenic; and so confident is he of its success, when used as he directs, that he declares, "it acts with such uniform efficiency as to leave nothing to be desired." A bold assertion, and one we heartily wish was true. Excellent rules are given to guide the practitioner in the use of the all powerful arsenic, and these rules are evidently the result of the Author's experience. For the following statement we were certainly not prepared:—"Arsenic in small doses soothes the bowels, and is of immense utility in checking either the chronic diarrhœa, or the gastric irritation which frequently complicates disease of the skin." Now, as we think, this is either riding the hobby hard, or the homœopathists are right, and "*similia similibus curantur.*" To his own method of administering his favourite remedy the author attributes much of his success in the treatment of obstinate skin affections. This method may be comprised in a few words: the arsenic is given, at first, in very small doses, never exceeding five minims of Fowler's solution; the dose to be continued for a considerable time, and then gradually diminished. Redness of the eyes is stated to be as sure a criterion that the arsenic is affecting the system, as is tenderness of the gums of the action of mercury "A full dose being first administered, at regular intervals, in a few days (or, probably, weeks) a pricking sensation is felt in the tarsi, and the conjunctiva becomes slightly inflamed. At this

crisis the disease is brought under arrest." "The dose may now be reduced, and, in some cases, a very small dose, taken with exact regularity, will suffice to keep the eyes tender and the skin healing." "A slight amount of conjunctivitis, in about forty-nine cases out of fifty, takes precedence of the more grave affections which indicate an over-dose." We cannot conclude without expressing our fears that other practitioners will fail to obtain the success Mr. Hunt appears to have had in the treatment of skin-affections with arsenic; and our conviction is, that he has greatly over-rated the efficacy of the drug, and under-valued the part which nature played in the case of his patients; and, as grounds for our belief, we would especially refer to the chapters on Local Prurigo, Urticaria, Impetigo, Eczema, Lupus, and Nævus. At the same time, we believe no one can rise from the perusal of the work without some insight into the cause of the frequent failure of arsenic as a remedial agent in affections of the skin apparently well suited for its exhibition. Nor ought we to omit bestowing on Mr. Hunt that praise which is his due for having abstained, in a small work on skin diseases, from all quackery and self-laudation. His book is written as though it was really meant for the Profession, and not, as is so often the case, nominally addressed to medical men, but, in fact, intended to inform the innocent public that Mr. So-and-so is "wonderfully clever in all eruptions."

ON DR. STEVENS'S SALINE TREATMENT OF ASIATIC CHOLERA: BEING THE SIXTH LETTER OF E. A. TURLEY, M.D., IN CORRESPONDENCE WITH G. ROSS, ESQ.

My Dear Sir,—I have examined your last letter with great attention, and my determination thereon is, that I have just reason to be dissatisfied with it, not only personally, but also as regards our Profession and the public, for all are injured by your conclusions. In the commencement of our discussion, I was fully aware of the unequal contest you were engaged in, and, therefore, on every fitting occasion defended your assertions from malignant censure, by covering you with the shield of innocence as to the real grounds of your opinions. This I did, knowing that you were ignorant of the true nature of the opposition against Dr. Stevens and his saline treatment. I am able still to defend you on this point; and I am the more anxious to do so from your having voluntarily brought forward a serious opponent to your views, viz., Mr. Leckie, who has saved nineteen out of twenty cases of cholera *lately*, by adopting Dr. Stevens's treatment, so far as he at first knew it. I may now inform you, that I have at command fuller and better information on the topic of our contest than any other man in England, save one. I told you early in this affair that *truth* and *humanity* were my objects. I now repeat, that no inducement on earth shall compromise them whilst I breathe.

I shall now speak generally of the injurious effects of your published Tables and opinions. I believe that your opinions and assertions disseminated widely, as they are calculated

1st. To prejudice the Profession and to incline it to cast the true saline treatment for cholera into disuetude.

2nd. To destroy the just reputation of Dr. Stevens, by representing him as a man morally deficient and guilty of wilful falsehood and deceit.

And 3rd. To maintain the present mortality from cholera, by depriving the afflicted of the security afforded them, nay, the only aid on which they can safely rely for life, when attacked with this fatal pestilence.

When you first brought forward your voluntary attack against Dr. Stevens, your proofs rested almost entirely on mere assertions, but now, in your last letter, you advance additional evidence to support your original statement; you certainly have a right to do this, but had you weighed well the real characters of your witnesses you would not have placed so much reliance as you seem to do on their testimony.

Now, in your last letter you re-assert all your former charges. I will examine them critically, and with the best feelings possible towards yourself.

In the first paragraph, you say that my concluding call upon you has been already answered. This I respectfully deny. I demanded your *proofs* of the failure of Dr. Stevens's saline treatment, to which you refer in your third Table. Your answer is, that twenty-five cases out of your eighty-eight, forming part of your table, were treated on Dr. Stevens's plan, under the jurisdiction of the local Board. This is incorrect, for I possess proofs, that not even *one* of these twenty five cases were treated on his plan. So much for the twenty-five cases.

You refer to a paper by which it appears that sixty-three cases were treated on Dr. Stevens's plan, of which forty-five died, and eighteen recovered, in the hospital of Dr. Egeberg, at Christiana, in Norway (it ought to be Christiania), the report of which first appeared in the *Eye*, a medical periodical. (It should be Eyr.) The blunders father this communication to the *Lancet* on Dr. Barry, for, in addition to his other blunders, he, also, in the same paper, says, that their treatment consisted in giving them "laxative salts, rhubarb, &c.,"—a treatment never either used or recommended by Dr. Stevens. Dr. Barry, moreover, makes Christiana to be a large town in Sweden, whereas it stands in Norway. But he adds *one true* fact lower down, which you should have quoted, to wit, that Dr. Stevens's treatment was only used in the most desperate [collapsed] cases. (a) Now, Sir, when you stated the fact of so many deaths out of so many patients, why did you not also state the necessary explanation that was given by Dr. Egeberg along with it; even Dr. Barry, bad as I will prove his conduct was, gave the necessary explanation, which entirely alters the case; but you have omitted it. By this omission, you have subjected yourself to a charge of having quoted a part only of the statement intentionally; for, had you, in place of a part, recited the whole truth, so far from its standing as an argument against the saline plan, it would have exhibited a strong testimony in favour of the treatment suggested by Dr. Stevens. For knowing what I now know on this subject, I have reason to believe that not one of these eighteen patients would have been recovered by any other practice; hence my proof. Therefore you have been mistaken in saying, that you have already answered my demand. You then ask, are Dr. Stevens's Tables of his treatment at Coldbath-fields House of Correction worthy of reliance? I answer, Yes, for the Tables to which I referred were not constructed by him, but by the authorities of the prison; and I have reason to know that Dr. Stevens never even saw the Journal from which these cases have been taken; yet I find his own cases given in his book *do accord* with those which *I* published from the authentic documents, and I also find them verified by the Governor and Visiting Magistrates of the prison, who, as I shall show, were *aware of the dishonesty, or disingenuousness, of Dr. Barry* and his creatures. These Tables, I believe, you have never seen, and your mode of writing would leave an impression on the dispassionate mind, that *Dr. Stevens* constructed these Tables for his own vile and selfish ends: this I indignantly deny.

You will please to observe that, in the present affair, you voluntarily came forward with a statement and a Table which, if valid, charged on the saline treatment of Dr. Stevens an appalling mortality, and, by comparison, hold up the saline treatment of Mr. Marsden as affording a most miraculous immunity to the sick with cholera hitherto unknown; and this impression you have further stamped for notice by a note of admiration [!] since omitted in quoting my letter, or the printer did so inadvertently. As I proceed in examining all that Dr. Stevens has ever said on this subject, I find him truthful to the last extent. You have impeached his moral character. He never did you an injury, and his exertions for years, to my knowledge, have been devoted to labours of humanity. I will not impugn your *motives* in this conduct, but I should do so did I not know you. I should have presumed that your attack was intended to laud your friend Marsden at the expense of Stevens, which Dr. Stewart, whom you quote, seems by his letter, to have apprehended; but on this subject I shall make Mr. Marsden speak for himself shortly. I shall prove by his own written evidence, that he has no more claim to originality in this matter than you have yourself; for, excepting for Dr. Stevens, I believe neither you nor Mr. Marsden would have ever known anything of the true nature or successful treatment of the Asiatic cholera. You may rest assured you are striving against TRUTH, and you may predict the result. You do not seem to know or, at least, to remember, that the evidence of your four witnesses has long since been proved and pronounced to be false by the only tribunal unprejudiced by *motives* in this affair; and I regret that you do not refer to this fact rather than to persons who would not see truth, because it was their interest to render it obscure. Still, notwithstanding your over-weening confidence in these men, you will, ere long, discover that they are leading you into darkness, and not into the broad path of light and truth. You will find that not one inch of solid ground will remain either under your feet or under theirs, if you attempt to make truth appear like falsehood, and falsehood like truth.

In a former communication I told you I had applied for, and obtained, certain certified documents from the authentic Journals of the Coldbath-fields Prison, containing all the cases of cholera that occurred during the years 1832 and 1833. Notwithstanding this, you persist in confounding these public document with Dr. Stevens's private memoranda. Why you do this I am at a loss to comprehend. You say you do not wish to revive discussion, then why do you still accuse Dr. Stevens of wilful falsehood, and attempt to establish your friend, Mr. Marsden, on the pedestal of truth? You admit the high talents of Dr. Stevens, and yet you attempt to deprive him of all claim to either mental integrity or moral worth. For of both these he must be destitute if your assertions are true. But to advance assertions and shun proofs may be employed for the establishment and support of error; this is not my object let me tell you. *Au contraire*, I placed no more reliance on what you call Dr. Stevens's Tables than I did on yours, until I had carefully examined both, and found the facts he advanced confirmed by the records of the prison, and other evidence, and that yours were contradicted by incontestible facts. Had Dr. Stevens possessed any means of influencing the record of the facts of the cases in the prison journal it would have been very different; my source of truth might have been poisoned at the fountain-head. Such not being the case, it seems hard that you should still try to make the ignorant believe that I rely on the patch-work tables of Dr. Stevens, and that my proofs stand impeached at the bar of truth and justice. I still assure you that this accusation of yours is not correct, that Dr. Barry and his witnesses are not worthy of reliance, and that sufficient evidence of this is recorded on grounds not to be doubted. Ere I have done my *solemn duty* to the Profession, and to the public, I must show that the testimony of Dr. Barry and his hired witnesses was long ago proved, and published in a public meeting of the magistrates, to be as false as the recorded facts at the prison are true.

You venture to assert, that the evidence with respect to the cases at Coldbath-fields Prison is before the Profession. This mere assertion, I do most positively deny. I contend that truth has been suppressed, and that the Profession has only had a part of the garbled evidence put before it, and not a clear recital of the whole. I *will* prove that Dr. Barry's *facts* were impeached by higher authority than his, and that successfully, and that self-interest, gross bribery, and corruption,—and, in one instance, acknowledged professional jealousy,—were the parents of the impeachments to which you refer. Error rests on sand, but mighty truth on a rock of adamant. And though these false impeachments have triumphed for a time, yet, when *all* shall be known, the real deceivers will gain nothing but everlasting disgrace. Their object was, to make the ignorant believe that error was truth, and truth the fountain of error,

The question now at issue is too important to be left to the decision of Dr. Barry and his medical witnesses, or even to Dr. Stevens and his friends. Both parties may have had, for the sake of argument, their own theories to support. On these I will not depend, but will demonstrate the facts.

You have, I will admit, a difficult task to perform, but I perceive, by the course you have now taken, that you incline to entertain some doubts of the justice of your cause, for, in place of clear statements and real facts, you skim over all my proofs so lightly that your readers do not obtain even a glimpse of truth. You leap, at one bound, from Coldbath-fields Prison to the City Hospital in Abchurch-lane; at another to Christiania in Norway; from Christiania to the *Lancet* office, and from the Strand to the Board of Health. In such a flight as this, but few stable facts can be registered, though you have drawn one conclusion, viz., that Mr. Marsden is the real discoverer of the true saline treatment, and that Dr. Stevens only gave a faint glimmering of the advent of the genius of Mr. Marsden, the propounder of the true doctrine. For it appears, from your own and Mr. Marsden's tables, that of all the destructive modes of treatment of cholera, Dr. Stevens's saline plan was by far the worst that had ever been tried; on the other hand, that Mr. Marsden's was by far the best that was ever used in any part of the whole world; for that

(a) "However, we should remark, that the saline method was only employed in the most severe cases."—See *Lancet*. Vol. xxxv., (1835,) page 325.

by his *own* statement, which will be quoted, so long as he trusted to Dr. Stevens's saline plan *only*, he was unable to save a single patient, but that after having discovered, by his own genius, a new method, there arose a most miraculous change; for, whatever may have been the case in 1832, it now appears, that, under Dr. Stevens's treatment, not even one patient recovered at Greville-street Hospital, yet, strange to tell, under the new Marsdenian discovery, out of 81 patients admitted at his Hospital in a state of collapse, there were only 7 deaths and 74 recoveries! Such is the tale now put forth in place of evidence; *one* of you will disprove it for me.

In my next and concluding letter, I shall attend principally to the history of cholera at Greville-street Hospital, and then I shall elicit truth by the evidence of Mr. Marden's own pen, and place it in proper connexion before the whole body of the Profession for the *first time*.

I remain, my dear Sir,
Very faithfully yours,
ED. ASTBURY TURLEY.

Ivy-house, Worcester, April 7th, 1849.

To G. Ross, Esq.

N.B. I find no proof that Mr. Marsden has obtained any English doctor's degree. If this is wrong, the fault lies with Mr. Marsden, and not with E. A. Turley.

DR. TYLER SMITH AND DR. CORFE ON CEREBRAL DISTURBANCE THE RESULTS OF UTERINE DISORDER.

[To the Editor of the Medical Times.]

SIR,—I observe in the *Medical Times*, of April 7th, a highly interesting paper by Dr. Corfe, entitled "Remarks on Cerebral Disturbance, the Results of Uterine Disorder," in which that gentleman believes himself to be describing, for the first time, a peculiar malady, which I would propose to call the climacteric disorder in the female sex. I beg, however, to state, that in the Appendix to my work on Parturition and Obstetrics, I have, as may be seen from the subjoined quotation, given a sketch of the malady referred to. As my work was published before the appearance of Dr. Corfe's paper, I have a right to claim any merit which may attach to priority of publication in this matter.

I quite agree with Dr. Corfe in his estimate of the practical importance of a just diagnosis in this affection, and I have no desire whatever to undervalue the merits of his communication; indeed, I am very glad the subject has attracted independent observations, which are in so many points confirmatory of my own views.

I am, Sir,
Your obedient servant,
W. TYLER SMITH, M.D.

7, Bolton-street, April 14, 1849.

(Extract.)

"PECULIAR MALADY INCIDENT TO THE DECLINE OF THE CATAMENIA.

"There is a peculiar malady which has never been described, belonging to the period of 'the change of life,' or the catamenial crisis, and allied in its nature to sphagiasmus (compression of the veins of the neck), which I shall take some future opportunity of elucidating fully. The so-called 'heats and chills' of this period consist of a real paroxysmal affection, allied in its nature both to intermittent fever and epilepsy, particularly to the cerebral variety of the latter; sometimes it terminates in epilepsy, or mania, or even apoplexy. In fact, this malady is a fruitful source of mania, occurring in the female after the decline of the catamenia. The disorder I refer to, appears to consist of compression of the veins of the neck, and distention of the cerebral circulation, attended by vivid sensations of heat, flushing of the face and neck, with giddiness, almost amounting to insensibility. These symptoms are soon followed by relaxation of the neck, great coldness or chills, and faintness, with perspiration over the whole surface of the body. The paroxysms are sometimes so violent as to wake patients out of their sleep, and the apprehension of the attack produces the greatest uneasiness in excitable patients. These paroxysms occur many times in the twenty-four hours, in women of delicate health at this epoch. Let any Practitioner inquire and analyse the symptoms of women at the catamenial decline, and he will find the affection, of which I have given the outline, to be very common; it is a most important subject of study, as being the basis of many of the disorders of the nervous system, which occur after the cessation of the catamenia."—Pp. 394, 395.

COFFEE *v.* CHICORY.

[To the Editor of the Medical Times.]

SIR,—Noticing a letter from one of your correspondents, headed "Chicory *v.* Coffee," I think it but fair to state what I heard Professor Brande deliver on this subject a week or two ago, at the Royal Institution, and with which I entirely concur, viz., that chicory is a nasty imposition, and contrived for the following purpose:—On chicory being roasted and ground, it yields to water a large quantity of *brown* extractive matter. Coffee, when treated in the same way also, yields its peculiar brown matter, containing all the principles so agreeable in that beverage; but then it does so in a limited degree, and when once *exhausted*, is of no farther use. Now, by the addition of chicory, one may continue to add water for a very long time,—a much smaller quantity of the mixed powder is required to give a good *brown* solution, and people say, "What excellent coffee this is; see how it stands watering to the last." Hence the *poor* prefer chicory coffee, and, from its being constantly used, the palate at last becomes accustomed to it, but it is a useless addition, except for BROWNING, so far as good coffee is concerned, and I am of opinion, too, that it is not by any means wholesome.

I am, Sir, your constant reader,
ANTI-CHICORY.

MEDICAL RELIEF AND POOR-LAW ADMINISTRATION IMPROVEMENT PETITION AT HALIFAX.

The following Petition, together with one for the correction of the anomalous state of the laws affecting the Medical Profession, was agreed to at a meeting of the Practitioners of Halifax and its neighbourhood, held at the Infirmary of that town on Saturday last, and, with one or two exceptions, has been universally signed:—

"To the Honourable the Commons in Parliament assembled, the Petition of the Medical Officers of the Halifax Poor-law Union, and other Practitioners in Medicine and Surgery,

"Humbly sheweth,—That your Petitioners would call the attention of your honourable House to the numerous evils and defects of the present system of administering medical relief to the sick poor, with a view to their redress and removal.

"That the invidious position in which Union Surgeons are placed in the frequently conflicting powers of the central and local Boards, and the very parsimonious award rendered for faithfully performed services, operate alike detrimentally upon your Petitioners, the destitute poor, and the real interests of the rate-payers. The salaries are fixed on no definite plan; but, from returns taken from 805 districts in various parts of the country, the average payment per case for medical attendance on the poor is found to amount to 2s. 7d. for the country and 1s. 7d. for urban districts, the highest of which sums is usually insufficient to do more than defray the cost price of the drugs supplied, and affords no adequate recompense for the Medical Officer's skill, time, and labour. When this scale of remuneration is contrasted with that which obtains in similar civil departments, of professional attendance on detachments of the army, the police force, and in gaols, the hardship to which the union surgeon is subjected, oftentimes to the peril of his life, in foul and infected localities, is doubly illustrated by these unjust and degrading payments.

"That, to impose new duties upon your Petitioners under the provisions of the Sanitary Acts of the last session of Parliament, on existing contracts, is a direct violation of the rights of the subject and the common principles of equity, and they would earnestly appeal to your honourable House to amend such laws as press heavily upon the interests of their Profession. Under an improved system, equally regarding the welfare of the sick poor and the medical officer, prompt attendance and the requirements of a true economy would thereby be more generally secured, and the duties of an enlightened humanity more worthily fulfilled.

"That your Petitioners are of opinion that a new principle ought to be adopted.

"1st. As to the payment for medical relief to the poor, so that a more fixed plan or scale of remuneration should prevail.

"2nd. That the appointment of the Medical Officer should be so far permanent as not to be dependent upon the whim and caprice of local Boards; and,

"3rdly. That a department should be formed under the Poor-law Board, consisting of competent Medical men, who are alone qualified properly to superintend the duties of Union Surgeons, and thus protect the interests of the public and the Profession.

"Your petitioners do, therefore, pray that the attention of your Honourable House will be given to their present position and claims, and amend a system so defective, unsatisfactory, and fruitful of discord to all parties concerned in its operation.

"And your petitioners will ever pray," &c.

THE GLOUCESTERSHIRE ASSOCIATION AND MEDICAL REFORM.

TO THE RIGHT HON. SIR GEORGE GREY, BART., M.P., Her Majesty's Secretary of State, &c., &c.

The Memorial of the Council of the Gloucestershire Medical and Surgical Association.

Sheweth,—

That your memorialists, in conjunction with the members of the Association which they represent, have, for many years, taken a deep interest in the important question of Medical Reform, and have, from time to time, memorialized the Crown and the Government on the subject.

Your memorialists are of opinion, that one of the evils of the Medical Profession is the number of corporate bodies empowered to grant diplomas and licenses; that the Colleges of Physicians and Surgeons of England, if rightly organized, are sufficient for the requirements of the Profession and the public in this country.

That the proposed creation of a new Institution for the enrolment of General Practitioners is uncalled for by any necessity; and that the establishment of another College, whilst it would increase the *existing evil* of *corporate monopoly*, would fail to effect the objects for which it was concerted.

That your memorialists have read with much satisfaction a Memorial presented to you by the Medical Men of Manchester, in reference to certain "outlines of a Bill" for the regulation of physic and surgery, proposed by a conference of parties representing the Metropolitan Corporations and the National Institute.

Your memorialists desire to record their approbation of the views and principles imbodied in the Manchester Memorial, and they respectfully urge their truthfulness and importance upon your serious consideration.

Signed, on behalf of the Council of the Gloucestershire Medical and Surgical Association,
THOMAS WRIGHT, M.D., President.
JOHN W. WILTON, F.R.C.S., Secretary.

Gloucester, April 12, 1849.

GOSSIP OF THE WEEK.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, April 12th, 1849:—Charles Augustus West, Camelford, Cornwall; Francis Edward Goldsmith, Boston; James Cummin Tostrach, South Shields; Edward Batt, Witney, Oxon; Griffith Hooper Griffiths, Cheltenham; Henry William Borlase, Helston, Cornwall; Arthur Rudge, Fakenham; John Robinson, Midhurst; John Davis, Wreckenton, Durham; Herbert Brown, Tonbridge.

ROYAL COLLEGE OF PHYSICIANS.—Gentlemen admitted Licentiates, Monday, April 2nd:—Francis Sibson, M.D., London; Augustus Henry Novelli, M.B., Cambridge; John Augustus Tulk, M.A., Cambridge.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the Diploma, were admitted Members of the College at the meeting of the Court of Examiners on the 13th instant, viz.:—Messrs. James Alexander Scott Addison, Royal Navy; Richard William Broster, Poole, Dorsetshire; George Alfred Sheppard, Worcester; Joseph Brigstock Sheppard, Oxford; Joseph German, Derby; Thomas Brutton Kenderdine, Stafford; and Clement Madely Smith, Horncastle, Lincolnshire. At the same meeting of the Court, Mr. Charles McShane passed his Examination for Naval Surgeon: this gentleman had previously been admitted a Member of the College, his Diploma bearing date August 6th, 1841.

OBITUARY.—On the 7th instant, at Saltcoats, Mr. John M'Killop, surgeon.—On the 10th in-

stant, at his residence, Nuneaton, Warwickshire, after an active and useful life, John Bond, Esq., surgeon, in the 79th year of his age.

THE BRITISH ASSOCIATION.—The Belfast Town Council has invited the British Association to fix upon Belfast as the place of meeting either in 1850 or 1851.

A SURGEON KNIGHTED.—The Queen has been pleased to grant unto John Forsyth, Esq., Surgeon in the service of the East India Company on the Bengal establishment, her Royal license and permission, that he may accept and wear the insignia of the third class of the Order of the Dooranée Empire of which His late Majesty Shah Shooja-ool-Moolk, King of Affghanistan, was pleased to confer upon him, in testimony of His Majesty's approbation of the services from time to time rendered by him during the campaign in Affghanistan, and that he may enjoy all the rights and privileges thereunto annexed; provided, nevertheless, that Her Majesty's said license and permission doth not authorize the assumption of any style, appellation, rank, precedence, or privilege appertaining unto a Knight Bachelor of these realms. And also to command, that Her Majesty's said concession and especial mark of her Royal favour be registered, together with the relative documents, in Her Majesty's College of Arms.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL.—Dr. C. B. Brown has been elected Physician-Accoucheur to Queen Charlotte's Lying-in Hospital.

CHOLERA.—The cholera is making sad ravages amongst the troops who are quartered in the temporary barracks erected in several quarters of Paris. It is believed that the dampness of the weather has much contributed to the development of the disease. Measures have been adopted for their removal to more healthy quarters.

THE MEASLES.—This exanthem is making great havoc in Madrid, especially in the public schools; several persons of rank have fallen victims to it.

THE DEPUTY-CORONERSHIP FOR MIDDLESEX.—The office of Deputy-Coroner for Middlesex has been temporarily resigned by Mr. G. J. Mills, in consequence of his health requiring a few months' relaxation from his duties, which, owing to the continuance of the recent indisposition of Mr. Wakley, have latterly been especially arduous. The duties of the office will, probably, be undertaken, for the next six months, by Mr. H. M. Wakley, a son of the Coroner.

NEW ASYLUM FOR IDIOTS.—Mr. Peto, M.P. for Norwich, has purchased a superb building, the Victoria Hotel, Colchester, which he intends to convert into an asylum for infant idiots.

LUNACY, CRIME, &c., IN FRANCE.—During eighteen years, from 1825 to 1843, it appears that in France, out of a population of 34,000,000, there were 200,000 lunatics or insane persons in the asylums, 3,000 suicides, 100,000 individuals daily kept in the hospitals by illness or infirmity, 800,000 dependent on charity, and 100,000 in prison for various offences.

SUICIDES IN ENGLAND.—The number of suicides during the last ten years is—1838, 83; 1839, 96; 1840, 102; 1841, 139; 1842, 134; 1843, 112; 1844, 155; 1845, 144; 1846, 162; 1847, 152; 1848, 100.

GRESHAM LECTURES.—The first lecture of the course on Physic, for the Easter Term, founded by Sir Thomas Gresham, was delivered yesterday, by Dr. Southey, F.R.S., and will be continued this and to-morrow afternoon, at one o'clock. They are delivered gratuitously to the public in the Theatre of Gresham College, Basinghall-street.

ILLEGAL INOCULATION.—At the Dorsetshire Assizes, Lord Chief Justice Denman sentenced a man named Squires, to two days' imprisonment for the manslaughter of Samuel Strand, by inoculating him for the small-pox. The prisoner pleaded guilty, and besides a long previous imprisonment, there were extenuating circumstances in the case. The prisoner, at the express request of the parents of the deceased, a child of three years of age, inoculated him at a time when the small-pox prevailed in the neighbourhood. Lord Denman, in passing sentence, hoped it would be made generally public, that if a party ventured to inoculate another, he was not only liable to imprisonment, but in case death ensued, he was liable to be indicted for the crime of manslaughter. He considered it a very grievous offence, as it might not only occasion the death of the party inoculated, but of thousands besides.

MORTALITY TABLE.

For the Week ending Saturday, April 14, 1848.

CAUSES OF DEATH.	Total.	Average of Five Springs.
ALL CAUSES	1066	963
SPECIFIED CAUSES	1064	959
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	241	198
SPORADIC DISEASES:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	37	48
Tubercular Diseases	197	200
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.....	144	123
Diseases of the Heart and Blood-vessels.....	38	34
Diseases of the Lungs, and of the other Organs of Respiration	198	131
Diseases of the Stomach, Liver, and other Organs of Digestion	66	62
Diseases of the Kidneys, &c.	11	11
Childbirth, Diseases of the Uterus, &c.....	6	8
Rheumatism, Diseases of the Bones, Joints, &c.....	5	8
Diseases of the Skin, Cellular Tissue, &c.	3	1
Malformations	1	3
Premature Birth.....	16	21
Atrophy	24	17
Age.....	49	50
Sudden	7	11
Violence, Privation, Cold, and Intemperance	21	33
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TO CORRESPONDENTS.

"P. B."—The Swiney affair will not be lost sight of; we shall refer to the subject again next week.

"Dr. F. Winslow."—The communication has been received.

"Amicus, Liverpool."—The Certificate of the Apothecaries' Society of London is necessary.

"Dr. R. Tuthill Massy's" cases illustrative of Nervous Phenomena have come to hand.

——— In reference to Ulceration of the Neck of the Uterus, in all probability he would not.

The Report of the Devon and Exeter Pathological Society shall appear next week.

"Dr. Tyler Smith, Bolton-street, Piccadilly."—Communication received.

"Subscriber's" remarks are founded in mistake.

"Juvenis."—The *Medical Times* forms two handsome volumes in the year. The yearly subscription is £1 5s.

"Mr. James Edward Dickinson, Hart-street, Bloomsbury."—Communication received.

"Mr. Robert Annan," on "Epidemic Scarlatina," received.

"Medicus, Bristol."—Mr. M'Dougall's address is 24, Henrietta-street, Cavendish-square.

"Dr. Kidd, Limerick," received.

"A Yearly Subscriber, S. O. W. S." asks: Is an Irish Apothecary qualified to practice in this country? No.—If not, will his Certificates be deemed sufficient, by the English Apothecaries' Company, to admit him to an examination? We think they will.

"A Subscriber" inquires: Are there examinations at Apothecaries' Hall on every Thursday throughout the year? Yes.

"Dr. Moses'" interesting paper is in type, and shall appear next week.

The Report from the Belfast General Hospital is also in type; but from a heavy press of matter, its publication is postponed to the next Number.

"Mr. F. A. Bulley's" valuable communication shall appear next week.

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ORIGINAL LECTURES.

HUNTERIAN LECTURES

ON THE

GENERATION AND DEVELOPMENT OF THE INVERTEBRATED ANIMALS.

By RICHARD OWEN, F.R.S.,
Hunterian Professor and Curator of Museum of Royal College of Surgeons, Corresponding Member of the Institute of France, &c.

[Reported expressly for the "Medical Times," and revised by the Lecturer.]

LECTURE III.

GENERATION OF INFUSORIA.—The Animalcules, so called, include types of different classes.—The Polygastria propagate by spontaneous fission, gemmation, and germ-cells; they have no true ova.—The Rotifera propagate by true ova.—Ovaria and oviducts, of Rotifera: the male.—Development of the ovum.—Experiments and calculations showing the immense fecundity of the Infusoria.—Their tenacity of life and importance in the œconomy of nature.

MR. PRESIDENT AND GENTLEMEN,—We come now to a consideration of the details of the function of generation, and to the provisions made for this, as manifested in the Infusoria. The animals of this class, whilst they are the most minute, if not the simplest, of organised beings, are the most extensively diffused, and exercise an important influence over the changes in the crust of our planet, and the well-being of its inhabitants. Leuwenhoeck was little aware how large a prospect of organic life he was opening to our view, when, in the year 1675, he communicated his discovery of the little bell-shaped animalcule, now known as one species of an immense class, and called the Vorticella Convallaria. His observations were published in one of the early Numbers of our Philosophical Transactions; much discussion on the subject ensued, and called forth the wit of the philosophers of the day. However, the records multiplied, and now we have obtained a view of the Infusoria which shows them to be the most widely diffused, and by far the most numerous of all the forms of organized life. Wherever Ehrenberg went in his travels with Humboldt, he there detected with his microscope some of the manifold forms of the Infusoria; and wherever his pupils have repeated his observations, the same phenomena have been presented. Not only in fresh water, but almost over the whole ocean species of Infusoria abound; if you catch a drop of water from the spray that rises from the paddle of the steamboat; in it you will hardly fail, with an adequate magnifying power, to detect some specimens of this class. When Ross and his companions, in accordance with their directions, took up the film from the surface of the antarctic sea, that film, in its dried remains, was found to consist of siliceous cases of the Infusoria; in the mud brought up from the depths of the ocean at the highest southern latitudes sounded by the deep-sea line, they were found; and Mr. Quekett, in examining the sand adhering to specimens dredged up at Melville Island by Captain Parry, also detected them; so that from north to south, and all intervening latitudes, these animalcules are diffused, and extend the reign of animal life beyond that of the vegetable kingdom. You may obtain specimens of Infusoria almost at will. It has been found that the creatures grouped together by Linnæus under this name, are of a very different kind and structure: all are without organs in the form of limbs, but all having distinct contractile tissues, moving by means of superficial vibratile hair-like processes, themselves moved by distinct muscles. Now, we find that some of the Infusoria present the vibratile cilia aggregated in particular organs, whilst others have them generally diffused over the surface of the body. Thus, there are two groups which manifest very considerable differences in their organisation. The characteristic feature of the lower organized group is, that the nutriment is not taken into one digestive cavity, but into several; that is their general characteristic, and hence they are termed Polygastria. They consist chiefly of cells; but, besides the nutrient cells, there are also radiated ones, one or two in number, which are contractile, and there is also a larger body which seems to be the nucleus of the animal, viewed as a modified cell. It might be thought to be almost a fair subject of doubt, how far the anatomical structure of such minute organisms could be detected—so minute, indeed, that Ehrenberg reckons that a single drop of water may contain as many individuals as there are of human species on the earth; but our ideas of size are apt to be too much confined by the habitual contemplation of those objects recognisable in the range of ordinary vision. In this class of invisible animals, there are, however, greater contrasts in size than subsist between different species of the mammalia—between the elephant and the mouse. There are some that are not more than 1-2000th of a line in diameter, while the diameter of others may be 1-4th of a line. If finely comminuted particles of coloured organic substances, such as indigo, or carmine, be added to the fluid containing the Polygastria, they are swallowed and become visible through the transparent tunics of the body. The functions of the cells that receive the nutrient particles are thus determined: it is occasionally possible to see the canals by which these cells or stomachs are joined. There is a distinct respiratory action performed by the ciliated integument; but, strange to say, it is conducted in a directly opposite manner to that which obtains in other animals in respect to its result, and is analogous to the results obtained from plants. In the summer time you will see a pond covered over with a green film, and you will also discover bubbles over its surface filled with gas which is pure oxygen, given off by the animals composing that film; so that they perform the same function as plants in eliminating pure oxygen.

In reference to the mode of generation and reproduction of the Infusoria, I may briefly state what has been described in reference to it. They used to be considered as male and female, and that generation was preceded by coitus; other species have been described as viviparous, as the volvox globator; the spherical offspring was supposed to be included within the spherical parent, even to the fourth generation; and this afforded the advocates of the "evolution" theory one of their strongest arguments. Other and later observers, among whom is Ellis, have made researches which have led them more truly to understand the nature of the phenomena which Leuwenhoeck mistook for the sexual concourse. Trembley, too, seems well to have comprehended that most strange act of spontaneous fission; and one would suppose that it was hardly possible for Leuwenhoeck to have examined them without making the same discovery, save that the human mind is so little prepared to rightly interpret a totally new phenomenon, especially so strange a one as that of an animal dividing itself into two. Having recorded the fact of spontaneous fission in all the Polygastria, and of the phenomena of gemmation in others, Ehrenberg further adds that they propagate by development from ova or germ cells. And first with regard to the phenomenon of spontaneous fission, which is the best determined mode in the generation of the Polygastric Infusoria. This is not seen in the Rotifera. As observed, under usual circumstances, the attention is first directed to a transverse line across the body; then a gradual constriction is observable, which becomes still more and more narrowed, and presently the one individual severed into two. Ehrenberg witnessed some peculiar changes in the interior part of the Polygastric Infusoria; he saw what he denominates the testis apparently dividing preparatory to the general fission; and if a single organ be retained in one part, *e.g.* the contractile vesicle, then another is developed for the other moiety, and thus two contractile vessels established prior to the separation. This nucleus would seem to be the part from which the organic processes radiate, which terminate in the perfecting of the individual. With regard to the signification of that act, Ehrenberg has not attached to it all its importance; he interprets it,—that the testis must be divided in order that each individual may possess a male organ; but it has a wider bearing.

Gemmation (as in the Vorticella) takes place in the same way as in the hydra, viz., a bud is pushed out from the base of the stem; only that there is a kind of metamorphosis connected with it,—a little circle of cilia is developed from the apex as well as the base of the bell, so that when it is detached from the parent stem it has a double locomotive power to carry it from the parent. It would be curious to watch what becomes of the free gemmiparous offspring of the Vorticella, and this is a link in the chain of facts connected with the probably alternate generation of this family which is very much wanted. In the Vorticelline group of Infusoria we have either a complete division or a partial one, and in the latter case, you will have a compound animal. In the plates of Ehrenberg, beautiful figures are given, showing that where generation is performed by longitudinal fission, but incomplete, there a compound group is the result; this phenomenon is produced by the spontaneous fission being checked. When food abounds, the interstitial, usually coloured germ-cells, multiply, and distend the body. With the stretching of the outer integument in the monads there often takes place a rupture of that integument; and it is eminently suggestive of the true nature of such apparently compound individuals. Ehrenberg has interpreted this phenomenon as analogous to the act of oviposition in higher animals. He says, the pulsatile sacs are sperm reservoirs, and disperse the fertilizing fluid over the germs,—that the smallest class of cells being the germ cells, provide for the multiplication of the species in the localities suited to their existence. Suppose a colony of Infusoria in a pool of water; that pool may be completely dried up in summer. Now, what has been observed is, that as their little ocean evaporates, the last act of the monad is to burst, and let out these germ cells, and thus when the pool has dried up, a liberation of all the cells they contain has taken place. Now, if we admit Ehrenberg's interpretation, considering the power of revival in torpid Infusoria, *à fortiori*, we must allow the power of maintaining latent life to the germs of the fixed localised species, and thus the first blast that raises the dust from the bottom of a dried up pool, will waft into the atmosphere millions of the impregnated eggs of these microscopic animals. Ehrenberg gives this explanation in opposition to the theory of spontaneous generation. No one, however, has yet witnessed the development of the germ-cell into the Polygastrian; but this negative fact seems to me to have undue weight given to it when it is made to preponderate against the analogies which have led the masterly micrographer to his conclusions. The germ-cells, which in well-fed Polygastria occupy the interspaces of the digestive sacs, the rythmical pulsatile sacs and the nucleus, are too regular in their cell-form, and for the most part too much alike, to allow of our dismissing them as of no functional significance under the name of "sarcode." M. Dujardin would seem also not to have comprehended the essentials of an ovum and of development from such, in the lowest forms of animals, when he objects to Ehrenberg's interpretation of the cells in question, "pour être fixé définitivement sur leur nature il faudrait avoir vu au moins des coques vides après l'éclosion." Such an objection would have force only were a shell or chorion the essential part of an ovum. But this essentiality being the impregnated germ-cell, which alone represents the ovum in the Polygastria, it may be developed into the embryo, without the phenomenon of exclusion, as in the case of the monadiform embryo of the Medusa, and as Steenstrup describes to be the development of the gregariniform larvæ of the *Distoma tarda*. This is the course of development which might be anticipated in the representative of an ovum in a microscopic monad which itself represents an animated cell or ovum. The relation, however, of those minutest forms of Polygastria, *e.g.*, *Chlamydomonas pulvisculus*, to the larger and more complex forms has still to be determined. If they should prove to be embryonic forms, the significance of their close repetition of the first stages in the formation of a germ-mass in the ova of higher animals by undergoing their spontaneous fission within a common covering would be intelligible.

Dujardin and Siebold have also objected, that as

these cells had no chorion, therefore they must not be taken to be ova: but no chorion has been detected in the ovum of the medusæ, and it is an accessory, not an essential part of the ovum. We come now to the interpretation of Ehrenberg in respect to the male organs. And first as to the pulsatile sac: there is no trace of spermatozoa in these cavities; they dilate and contract rythmically; and if we find a part circulating a clear fluid, the common analogy teaches us, that it is a kind of heart propelling the nutritious fluid, and so preventing its stagnation.

I have said, that the act of spontaneous fission is preceded by the division of the part which Siebold has called the nucleus. Ehrenberg calls this nucleus of the Polygastria the 'testicle,' and views its division simply in the relation of the necessity of each individual resulting from the general fission having such an organ: meaning that each monad developed by spontaneous fission is perfected, as regards its so-called testis, by the spontaneous division of the previous testis, and not by the formation of a new one. But this is not the mode in which the eye, or the circle of the teeth, or the pulsating sac, is gained by the second individual from the fission: the division usually takes place so as to include the original organ in one or in the other moiety; and that in which it may be wanting gets the organ by a special and independent development of it. The constancy of the preliminary fission of the nucleus would therefore show that it related rather to the totality of the act itself than to the partial completion of the individual in respect to its being provided with a particular male organ of generation. How, then, we may inquire, does the division of the nucleus relate to the performance of the general act of spontaneous fission? Our hope of any insight into this mysterious relationship would be from some light to be derived by analogous phenomena. But with what phenomena is the one in question analogous? Obviously, most closely with those which have been observed in the successive fissions of the impregnated germ-cell of these ova, such *e. g.* as the ova of the *strongylus*, adapted to give a view of the fission analogous to those which the perseverance of Ehrenberg enabled him to trace in the spontaneous fission of the monad.

If this preliminary division of the germ-cell to the spontaneous fission of the germ-yolk has not been seen in the ova of other animals, it is because, hitherto, only the coarser phenomena of such division of the germinal body in medusæ, mollusca, fishes, frogs, &c., have been noticed. In Dr. Barry's observations, however, on the development of the germ-mass in the pellucid ova of the rabbit, phenomena closely analogous to those described by Siebold and Bagge in the ovum of the entozooon were detected.—"Lectures on Invertebrata," p. 24, 1843.

When I reflect on the phenomena in the monad and the ovum—that a central something is first established, and the consequence of that—I draw the same conclusion with respect to both phenomena, and regard the establishment of the special centre as the cause of the confluence of the parts around it; and I call it "a centre of attractive and assimilative force." Since the pellucid centre of the germinal body has not divided from the necessity of endowing the moiety to be separated by the subsequent fission with a particular organ required for its individual completeness, I infer that the same preliminary act in the monad was not solely for the purpose of providing its separated moieties with their respective testes, but that it had a higher significance.

As the pellucid centre in the ovum is the result of impregnation or the reception of the matter of the spermatozoon, so it may be concluded that the nucleus of the monad is of a nature similar to, if not identical with, that of the spermatozoon. It was doubtless a gross view of its nature and analogies to regard it as the homologue of the whole preparatory organ of the spermatic fluid, such as is required in the higher animals; because as the germ-cells exist in the body of the Polygastria without the organ called ovarium, so we ought to expect that the essential matter of the sperm would likewise exist, without a special testicular envelope.

The objection to Ehrenberg's determination of the nucleus as the "testis," that it has never been observed to produce spermatozoa, is akin to that which has been opposed to his determination of the ova, viz., that the young have never been seen to quit them and leave the shell behind. Neither of these objections will apply to the view of the nucleus as the essential matter of the sperm, and to the germ-cells as the essential elements of ova.

A spermatozoon is a very general form of the essential matter of the sperm: but in tracing the modifications of the spermatozoa from mammalia down to the scale of animal life, we find them gradually reduced to the head or nuclear part, and discern in the vibratile caudal appendage an accessory relating to the passage of the fertilizing principle to the germ-cell, rather than to its essential operations when arrived there.

The best microscopical examinations of the spermatozoa show, that the spermatozoa are everywhere void of a special organization, and consist of an uniform homogeneous substance which exhibits a yellow amber-like glitter. The nucleus of the Polygastrian offers the closest resemblance to this character of this tissue. And perhaps it may not be out of place here to notice the close analogy of the modification of form which the nucleus of some of the larger Polygastria, *Stento Roeselii e. g.*, presents to the spirally disposed elongated head of the spermatozoon in the Torpedo, Pelobates, and the Passerine birds.

The reception of the matter of the spermatozoon by the germ-cell is the essential preliminary to the primary processes of its spontaneous fissions: and when we see these fissions governed in the germ-cell of the *Ascaris* by the act of impregnation, followed by the appearance of a pellucid nucleus in the centre of the opaque and altered germ-cell, and when we further see its successive fissions governed by the preliminary division of the pellucid centre, are we not naturally led to infer that that centre is the seat or the chief seat of the spermatic principle which the germ-cell has received? The mind must either be a mere passive recipient of these phenomena, or we must reason upon them and ask ourselves their meaning. The most probable signification of the appearance of the pellucid centre and of the initiative which it takes in the subsequent changes may be that which I have just explained: but this is certain, that the analogy between these phenomena in the multiplication of the parts of the germ-mass and those of the nucleus in the multiplication of the monads is so close, that one cannot reasonably suppose that the nature and properties of the nucleus of the impregnated germ-cell and that of the monad can be different.

Therefore, I infer that the nucleus of the Polygastric Animalcules is the seat of the spermatic force: it can only be called "testis" figuratively: it is the essence of the testis. It is the force which governs the act of propagation by spontaneous fission: and if Ehrenberg be correct in viewing the interstitial cell-corpuscles (kornchen) as germ-cells, these essential parts of ova may receive the essential matter of the sperm from the nucleus which is discharged along with them in the breaking up of the monad, which Ehrenberg regards as equivalent to an act of oviposition; and impregnated germ-cells may thus be prepared to diffuse through space and carry the species of Polygastric Animalcules to a distance from the scene of life of the parent animalcules.

In reference to that alternative which, if we reject Ehrenberg's view of the relation of the germ-cells to the diffusion of the species, we are compelled to adopt, namely, the theory of spontaneous generation, I may here point out one of the best experiments which have been made, to show that when due caution is observed, the appearance of Infusoria in artificial infusions does not take place. Professor Schulze filled a glass half-full of distilled water, in which were mixed animal and vegetable substances; he then closed it with a good cork, through which were passed two glass tubes, the whole being air-tight; the infusion was then subjected to boiling heat. While the steam was escaping from the bent tubes, the Professor fastened at one end a vessel filled with sulphuric acid, and at the other a vessel filled with a solution of potass. (The form of the apparatus was illustrated by a diagram). By the act of boiling, it was presumed that every animalcule and germ of living thing in the flask were destroyed; whilst all access was cut off by the sulphuric acid on the one side, and by the potash on the other. The apparatus was then exposed to the influence of summer light and heat; at the same time there was placed near it an open vessel, with the same substances that had been introduced into the flask, and also after having subjected them to a boiling temperature. In order to renew constantly the air within the flask, the experimentor sucked with his mouth, several times a day, the open end of the apparatus filled with the solution of potash, by which process the air entered his mouth from the flask through the caustic liquid, and the atmospheric air from without entered the flask through the sulphuric acid. The air was, of course, not at all altered in its composition by passing through the sulphuric acid in the flask; but all the portions of living matter, or of matter capable of becoming animated, were taken up by the sulphuric acid and destroyed. From the 28th of May until the beginning of August, Professor Schulze continued uninterruptedly the renewal of the air in the flask, without being able, by the aid of the microscope, to discover any living animal or vegetable substance; although, during the whole of the time, observations were made almost daily on the edge of the liquid; and when, at last, the Professor separated the different parts of the apparatus, he could not find in the whole liquid the slightest trace of Infusoria or Confervæ, or of mould; but all three presented themselves in great abundance a few days after he had left the flask standing open. The vessel which he placed near the apparatus contained on the following day Vibriones and Monads, to which were soon added larger Polygastric Infusoria, and afterwards Rotifera.

I will now point out the developement of Infusoria of a higher grade of structure, viz., the Rotifera. These belong to a class much higher than the ordinary Polygastria,—having distinct jaws, teeth, a single stomach, a liver, and an intestinal canal. The generative organs Ehrenberg has described as consisting of a blind tube which commences at the cloaca; sometimes single, and sometimes double. In that tube, in the Rotifera, the ova are developed; then there are two other blind tubes, but longer and more slender, connected with the cloaca also, with which termination of the two tubes is connected a pulsatile sac. In the first place, Siebold has shown, that in the development of the Rotifera, you find the long and slender tubes appearing in the ratio of the growth of the intestinal organs and before the ovaria; secondly, they contain nothing but clear liquid; third, the true nature of the pulsatile sac being determined in the polygastria, we may infer that it has to do with the circulating and respiratory process; and lastly, neither the pulsatile sac nor the slender tubes ever contain spermatozoa. So that considerable doubt, to say the least, must attach to the nature of the parts which Ehrenberg supposed to be the male organs. At this stage of knowledge of the nature of the generation of Rotifera, the following observations have been very timely and of great interest. A correspondent of mine, Mr. Brightwell, who has paid much attention to the Infusoria, and has published a work on those found in the county of Norfolk, has figured some small individuals of a species of *Notommata*, so different in character to the ordinary large female ones, to which they were often attached, as to give him the impression that they were the male individuals; and in a letter which I have received from him he says: "I have lately repeatedly seen the male in connexion with the female; and it remains so for about 70 seconds." In these small individuals Mr. Dalrymple has discovered organs with abundant spermatozoa; but the rest of their structure is much more simple than that of the female: *e. g.* they have no intestine nor anus. At first sight one might doubt this, as being apparently contrary to all analogy; but I think that it may turn out to be a more common condition of the male than has been

supposed. Nordmann discovered the male of the Lernæa to be a minute parasite upon the vulva of the female. And the worm which Cuvier described under the name of the *Hectocotylus*, as the parasite of the Argonaut, is according to the accurate Kolliker, the male of that species. The developement of the Rotifera has been very well followed by Ehrenberg.

Ehrenberg states, that in the ovum of the *Hydatina*, three hours after its exclusion, the clear spot (germinal vesicle) has disappeared, and the egg is occupied by the yolk, which is granular at one end and clear at the other. A dark spot then appeared in the middle of the ovum, which, *six* hours after exclusion, could be distinguished as the head with the rudimental dental apparatus of the embryo. At the *eleventh* hour the wheel-like ciliated organs began to play, and the fœtus to move in the egg. At the *twelfth* hour the body was completely formed, and bent somewhat spirally, the bifurcated anal appendage being doubled backwards towards the head. The revolutions of the young Rotifer are now so powerful as to threaten every instant to burst the egg-shell, but they often continue two hours.

The average period of development of a young *Hydatina* under favourable circumstances is twenty-four hours; twelve within and twelve without the parent's body. When it proceeds more slowly, Ehrenberg recommends the liberal supply of the green monads, (*Chlamydomonas pulvisculus*, and *Euglena viridis*).

Ova deposited in the cold early days of winter remain undeveloped until spring, and are protected by their dense double shell. Ehrenberg watched during eighteen days successively an individual *Hydatina senta*, which was full-grown when singled out, and did not die of old age, which proves this species to live more than twenty days. Such an individual is capable of a four-fold propagation every twenty-four or thirty hours, bringing forth in this time four ova, which grow from the embryo to maturity, and exclude their fertile ova in the same period. The same individual, producing in ten days forty eggs, developed with the rapidity above cited, this rate, raised to the tenth power, gives one million of individuals from one parent, on the eleventh day four millions, and on the twelfth day sixteen millions, and so on.

Although this rate of production from fertile ova is the greatest hitherto observed, far exceeding that in the class of insects, it is much inferior to the propagative power in the *Polygastria*. We saw that in the *Paramœcium aurelia*, which lives several days, a transverse fissure took place, the individual becoming two every twenty-four hours. It also propagates by ova, which are excluded, not singly, but in masses; which ova rapidly develope and repeat the acts of propagation; so that the possible increase in forty-eight hours is quite incalculable. Who can wonder that infusions should, with the brood of two or three days only, swarm with these animalcules.

Now as to the vital part these Infusoria play in organised nature. If, when a plant or animal is dead and becoming decomposed, the particles were to go on in decomposition to their ultimate elements, there would be so much organic matter lost: but animals cannot subsist without organic matter; and thus, if the destroying power were to go on, there would soon be a gradual decrease in organic life; this decomposition mostly takes place in water, and here it is that we find the largest number of these animalcules, ready to convert the decomposed matter into their own tissues. For when the dead organic matter is dissolved or suspended in water, in that state of comminution and decay which immediately precedes its final decomposition into the elementary gases, and its consequent return from the organic to the inorganic world, these wakeful members of Nature's invisible police are everywhere ready to arrest the fugitive organic particles, and bring them back into the ascending stream of animal life. Having converted the dead particles into their own living tissues, the *Polygastria* become the food of the *Rotifera*, these of the small *Vermes* and *Crustacea* which in their turn fall a prey to fishes, and thus a pabulum fit for man himself is brought back by a short route from the extreme bounds of the organised realm. There is no primordial self-subsistent organic matter, as Buffon taught. The inorganic elements are organically combined, and fitted for the sustenance of animals, by the operation of the vegetable kingdom, which thus stands, as it were, in the breach between animal matter and its ultimate destruction. But in this important office plants are assisted by the Polygastric Infusoria. And these minute animalcules, like true beneficence, work their good unobtrusively and unseen.

I have already, at the commencement of this Lecture, alluded to the important functions, apparently so disproportionate to their size and powers, which the *Polygastria* perform in relation to the conservation of organic matter and of the purity of the atmosphere. They likewise take their share in modifying the crust of the earth. It has been shown that some *Polygastria* are naked, others loricated or defended by silicious shells, of definite and easily recognisable forms and patterns in different species. Professor Ehrenberg had not long made these observations before he discovered that a certain kind of silicious stone, called Tripoli or Polierschiefer, was entirely composed of such cases; was, in fact, the *débris* of Polygastric animalcules, chiefly of an extinct species, called *Gaillonella distans*. The substance alluded to has long been well known in the arts, being used in the form of powder for polishing stones and metals. At Bilin, in Bohemia, there is a single stratum of this substance, not less than fourteen feet thick, forming the upper layer of a Tripoli hill, in every cubic inch of which layer Ehrenberg estimates that there are forty-one thousand millions of individuals of the *Gaillonella distans*. It likewise contains the shells of *Naviculæ*, *Bacillaria*, *Actinocyclus*, and other silicious animalcules. The lower part of the stratum consists of the skeletons of these animalcules, united together without any visible cement; in the upper and more compact masses the infusory shells are cemented together, and filled by amorphous silicious matter, formed out of dissolved cases. Corresponding deposits of the silicious cases of these animalcules have since been discovered in many other parts of the world, some including fresh water, others marine species of Infusoria. A quantity of a pulverulent matter is deposited upon the shores of the lake near Uranea in Sweden, and which from its extreme fineness resembles flour. This has long been known to the poorer inhabitants under the name of *Berg mehl*, or mountain meal, and is used by them mixed up with flour as an article of food: it consists almost entirely of the silicious shells of pulverised *Polygastria*. Most of the infusorial formations, as the polishing slates of Cassel, Planitz, and Bilin, are, in fact, extraordinary monuments, which have handed down to us the record of the existence of Polygastric Infusoria at remote periods of the history of this planet. Their minute size, elementary structure, tenacity of life, and extraordinary powers of reproduction, have enabled them to survive, as species, those destroying causes which have exterminated all the higher forms of animals. Several species, for example, still exist, which were in being at the period of the deposition of the chalk, and which contributed their silicious remains to the flinty masses which are always more or less intermixed with cretaceous matter. Existing species of Polygastria have even been detected as low down as the Oolite. Before this discovery no remains of higher-organized animals at present in existence had been detected, with the same degree of certainty, even in the cretacious formation. A few existing zoophytes and testacea first make their appearance in the tertiary beds immediately above the chalk; hence called, by Mr. Lyell, Eöcene, from ἠος, the dawn, as indicating the first dawn of the creation of existing species. The number of existing species of shells increases in the Miocene, and is still greater in the Pliocene tertiary strata; but the higher animals, as the *Anoplotheria*, *Palæotheria*, *Mastodons*, *Mammoths*, and other mammalian contemporaries of the Eöcene, Miocene, or Pliocene testacea, have utterly perished. The discovery, therefore, by Ehrenberg, of several, at least twenty, species, of silicious-shelled Infusoria, fossil, in the chalk and chalk marls, which are perfectly identical with those from the sands of the Baltic and North Sea, is a most interesting addition to the obscure history of the introduction of the successive species of animals on this planet, and must add greatly to the interest of this Infusorial class in the eyes of the naturalist and geologist. "For these animalcules," says Ehrenberg, "constitute a chain, which, though in the individual it be microscopic, yet in the mass is a mighty one, connecting the organic life of distant ages of the earth, and proving that the dawn of the organic nature co existent with us reaches further back in the history of the earth than had hitherto been suspected."

The still existing species are by no means rare or isolated, but fill in incalculable numbers the seas of Northern Europe, and are not wanting on the tropical coasts of the globe. With reference to the operations of the invisible *Polygastria* at the present day on these and other coasts, I have only time to refer you to a paper by the indefatigable Berlin Professor, entitled "Observations upon the important Part which Microscopic Organisms play in the choking up of the Harbours of Wismar and Pillau; also, in the Formation of the Mud which is deposited in the Bed of the Elbe at Cuxhaven, and upon the Agency of similar Phenomena in the Formation of the Bed of the Nile, at Dongolar, in Nubia, and in the Delta of Egypt. "Truly, indeed," says Ehrenberg, "the microscopic organisms are very inferior in individual energy to lions and elephants, but in their united influences they are far more important than all these animals."

THE GULSTONIAN LECTURES.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS.

By W. W. GULL, M.D.,

Fellow of the College, and Fullerian Professor of Physiology at the Royal Institution of Great Britain, &c.

[Reported expressly for the "Medical Times," and revised by the Lecturer.]

Lecture III.

CERVICAL PARAPLEGIA.—HEMIPLEGIA.

In the former lecture three forms of paraplegia were enumerated, in each of which there exists a characteristic condition of the sensation; and cases were given which seemed to show, that when anæsthesia prevails over loss of power, we must not expect to find a local and circumscribed lesion of the cord, but that we should refer such cases to peripheral affections of the nervous expansion in the tissues, or to a general though often inappreciable change of structure of the myelencephalon. Before leaving the subject of the former lecture, it seems necessary to call attention to a form of paraplegia particularly affecting the upper extremities. Five cases of this particular form of paraplegia have fallen under my observation, and several others are on record. The legs are sometimes not in any degree affected; in all, they are much less so than the arms. The muscles of the shoulder and upper arm are first implicated, and often alone affected. The disease may begin in both extremities at the same time; or, having begun on one side, may gradually pass across and affect the other.

At the onset there may be pain and soreness of the muscles, but after the disease has existed for some time, there is no obvious modification of the sensation. The following examples will illustrate this affection.

In the year 1830, Dr. Darvall recorded cases which he designated "a peculiar species of paralysis," and which, from the absence of any more distinctive term, and the relation to paraplegia, may be classified under cervical paraplegia.

The following is an abstract of Dr. Darvall's cases, after which I will add others:—

"A washerwoman, who had been accustomed to carry heavy weights upon her arms, had paralysis, which was confined to the muscles which raise the os humeri; there was great emaciation of the deltoid; she could move the limb only a few inches from the trunk, and this with great difficul-

Nevertheless she could bend the forearm upon the arm, and, to use her own expression, *could do anything under the elbow.* The hand had its full power. There was not the slightest symptom of affection of the head, nor, indeed, excepting this paralysis, did the patient appear to have the slightest ailment. The treatment instituted did no good, and she gradually lost the whole power of the upper extremities."

"A porter in a cornfactor's warehouse, accustomed to move large bags of oats, &c. Incapacity limited to muscles which raise the arm, gradually invading the whole limb, and ending in total paralysis of both extremities. No pain was experienced in either of these cases. The state of the sensation is not mentioned."

"A man accustomed to carry heavy weights complained of *severe pain in the left deltoid*, and afterwards great weakness, in which the muscle was much wasted. Considering the pain to be rheumatic, acupuncture was tried, by the insertion of three needles into different parts of the deltoid. The result was most satisfactory; the pain disappeared, and the muscle recovered its bulk."

"A locksmith had been suffering from severe pain in the right shoulder for some time, which was relieved by colchicum, but the deltoid remained exceedingly flabby. Electricity soon restored the power."

"Female. Left arm only affected. Loss of power beginning in the muscles of the shoulder, and gradually extending downwards for four months; but *she can do anything under the elbow.* Slight pain in the deltoid on pressure, or on moving the shoulder. Muscles of the arm much emaciated."

Fanny Jones, aged 28; admitted under Dr. Addison, Feb. 9, 1848; a milliner, of delicate frame, fair complexion, regular habits; has not been overworked; catamenia regular; health good, with the exception of occasional headaches, with considerable intervals of entire freedom. Five months ago she had one of her usual attacks, which continued two days, and after a week she had a general heaviness and weight in the head, with dizziness and giddiness. This was followed by rheumatic fever. The right arm soon became paralytic, then quickly afterwards the left, and lastly, there was weakness in the leg of the left side. *She entirely lost the use of the upper extremities;* they were not swollen nor very painful. After a short time her general symptoms of fever disappeared, with a great improvement in the affected leg, and some in the corresponding arm. The right arm remained perfectly motionless from the shoulder to the wrist; there was some power in flexing the fingers. Her head is quite clear; no affection of the muscles of the face nor of the nerves of special sense. The paralysed parts are bathed in profuse perspiration, and the right elbow is highly swollen.

Tongue clean; pulse 76; bowels regular.

During the time she was in the house, the leg considerably improved, but still remained to a certain degree weak. The arms were very powerless, especially the right; but the contrast between the muscles of the forearm and those of the shoulder was striking, she experienced now and then shooting pains in the arms, especially the left.

During the whole course of her case, she complained of pain about the head; but this was peculiar, and seemed to originate in the upper part of the neck. There were several opinions as to the cause of this peculiar paralysis, some regarding it as the result of cerebral exhaustion, others thinking it was apoplectic. Dr. Addison, under whose care she was, considered it spinal, and the test of galvanism, from fifty pairs of plates, showed great excitability of the muscles of the least affected arm.

George Robinson, aged 32; admitted into Guy's under the care of Dr. Babington, for paralytic weakness and great wasting of the muscles of both arms, especially of the deltoid, supra and infra spinatus, biceps, and triceps. He says, that six weeks ago he began to feel pain and aching in the shoulders, the right being first affected. He had considerable pain between the shoulders, and in the left breast. Quickly following these symptoms there was considerable *wasting of the muscles, with accompanying soreness of them.* For a short time after his admission, the legs were weak, but this lasted for a few days only. There is now no obvious affection of sensation, but he has had a slight and almost inappreciable sensation of numbness in one side of the face and about the soles of the feet, which has passed away. The muscles of forearm are much stronger than those of the shoulder; the latter are greatly wasted. There are no cerebral symptoms. No history of rheumatism, nor any obvious cause to account for the affection. He walks about with his arms hanging uselessly by his side.

(This man, since the above report was made, has been on alternate days galvanised through the affected muscles, and is now rapidly improving.)

Frederick Sale, aged 27, was admitted under Dr. Babington into Guy's in the year 1847. His present affection, which is peculiar, began to show itself very gradually four years ago. He is of middle stature, and has been moderately robust, but now presents a *remarkable atrophy of all the muscles supplied by the branchial plexuses of both sides, and of the muscles of the back at the upper part.* His legs are unaffected, and so are the muscles of expression and deglutition. He is by trade a dyer of silks, and much exposed to vicissitudes of temperature, the arms in his occupation being uncovered, and alternately immersed in hot and cold liquors. The substances employed by him as dyer are chiefly iron and vegetable astringents. They do not seem to have affected his general health. There is no affection of sensation; no tenderness of the spine, nor any in the course of the nerves; no affection of the brain.

Digestion, secretion, and circulation normal. It is obvious, in this case, that the great inability to move the arms may be explained by their atrophied condition, and the disease is strictly a form of muscular atrophy and consequent weakness.

Dr. Bright, in his Reports, gives the following case of "Paraplegia connected with rheumatic gout":—

Daniel Maccarthy, aged 45, a very large and athletic man; a coal-shipper by occupation, and, therefore, greatly exposed to the vicissitudes of the weather. His general affection *is entirely confined to his hands and arms*, which are almost completely paralyzed; his hands lie nearly powerless on his lap, and he has just power enough to raise his hands to his mouth, assisting himself by a kind of swinging motion of the body. No pain is experienced by rotation or nodding of the head, except a slight uneasiness low *down in the neck.* He has *rheumatic* pains in the feet. The affection of the hands and arms has been coming on gradually for eight months, and he says he was affected in a similar way three years before, but, after six months, recovered so much as to be able to return to his laborious employment. The back of the neck was blistered, and a few leeches applied daily to that part. He was ordered ant. and opiate pill, with two grains of calomel, twice a-day, and occasional purgatives of colchicum wine and infusion of senna. However, very little improvement followed, and he continued the calomel until ptyalism was produced. Afterwards, a fair trial was given to nux vomica, without any decidedly advantageous change. Still he seemed to gain ground, and expressed himself as being better. At length, he became the subject of a most severe attack of acute rheumatism in the right arm and both the feet, which was treated by calomel, antimony, and opium. In a few weeks he left the house, free from all traces of his last attack, and so greatly relieved from his paralytic ailments, as to intend returning to his laborious occupation.

The paralytic affection illustrated by these cases is peculiar. The muscles of the shoulder and elbow are much more affected than those of the fore-arm. The paralysis may be limited to the deltoid for a long time, and subsequently implicate other contiguous muscles. An arm, powerless in this particular affection, presents a remarkable contrast to the arm paralysed from apoplexy. In the former the fore-arm and the fingers are less affected than the parts above, whilst, in the latter, the reverse obtains. We have already seen that paralysis may arise from the centres, or from the nerves; but many of these cases here described show *a primary affection of the muscle;* others *both of the muscle and the nerve distributed to it*,—in either case it is probable that the neurilemma forms the medium through which the diseased action travels to affect adjacent muscles. A man, aged 56, came under my notice for a wasting and weakness of the muscles which elevate the humerus; the muscles of the fore-arm were of their normal size and strength. The account he gave was that, thirteen months previous, he had fallen and struck his shoulder, but the blow gave him no anxiety, and its immediate effects soon disappeared; but, after a month, there came on very gradually weakness of the deltoid and of the muscles about the shoulder, supra spinatus, &c. After eight months the opposite side began to be similarly affected; *below the elbow the arms were quite healthy.* There were no spinal or cerebral symptoms. The head was clear, the legs strong. Dr. Darwall's cases are of a similar kind, and probably arose from the injury to the muscle by carrying heavy weights on the shoulder. We have also given above examples of this muscular atrophy arising from cold and rheumatism, and one in which there was no obvious cause. Although I cannot venture to give an account of its exact pathology, yet may I express my belief that the muscular tissue is the primary seat of this disease. I have now a case under my care in which I have been able to trace a continuous extension of the disease through the deltoid, beginning at its posterior edge. Soreness of the affected muscles is an early symptom; this, however, varies much, and is sometimes absent. The results of treatment also favour the same view. If taken early they seem very amenable to treatment, and especially to electricity. Darwall found acupuncture of the muscle arrest the disease. That paralysis may arise from primary affection of the motor organ, or muscle, there seems no reason to deny; and it is more than probable that, in considering the causes of paralysis, such a source has been often overlooked. Muscle, even during rest, is, to a certain extent, active; and its due nutrition and susceptibility to excitement are, to a great extent, dependent upon this action, which is kept up by the connexion of the muscle with the centre through the nerve supplied to it. Muscles rapidly waste when the nervous trunk which runs to them is diseased, and irreparable atrophy of muscle may result from causes of a temporary kind acting upon the nerve; hence the importance, in all cases where the muscular tone is interfered with, of supplying the stimulus of electricity to prevent the wasting which would otherwise follow upon the paralysis; for, if we do not employ this means, we may find, to our dismay, that, although the nerve may be restored to its functions, it may have no fibre to excite. Some time since I met with an excellent illustration of this principle in the case of a woman admitted under the care of Dr. Addison. She had had paralysis of the seventh nerve for many years; the eye of the same side was permanently open, and the cheek flabby and fallen. She never had paralysis of any other part; had been subject to face-ache from bad teeth, and attributed the paralysis to this. There had never been any discharge from the ear, nor any obvious cause of injury to the nerve. She died from affection of the chest, for which she was admitted.

Post mortem.—The medulla oblongata and cerebellum were removed with care, but no disease of either could be detected. The seventh nerve of the affected side was traced from its origin to its distribution, through the whole of its osseous course. It was not apparently wasted, and when examined by the microscope its tubules presented the usual appearance, and could be traced continuously. The muscles of the cheek were not distinguishable, so muscular fibre could be detected therein.

HEMIPLEGIA.

In my first lecture I spoke of the extent of the decussating influence of the hemispheres on the spinal cord, and mentioned what has been also remarked upon by others, that as the same law obtained equally for motion as for sensation, and as

the number of fibres actually decussating was very small in comparison with the whole spinal fibres, we must regard those which did cross as commissural between brain and the segments of the cord, rather than as continuations of the nerves themselves. In applying this to the explanation of hemiplegia, it may be stated, (although there are exceptions, not yet accounted for,) that if there be disorganisation of the hemisphere, whether affecting the anterior or posterior lobe, and implicating the optic thalmus or corpus striatum, singly or equally, if the lesion be of such an extent as to produce hemiplegia, *there will be a greater affection of the upper than of the lower extremity, and a greater loss of motion than of sensation*, if the lesion has been sudden, and both the upper and lower extremities are completely paralysed, the leg will begin to improve before the arm, and the muscles nearest the trunk will regain their power first, that is the deltoid and flexors of the elbow before the muscles which move the fingers. This is so obvious and so constant that it may, I think you will grant, Mr. President, be laid down as the law of hemiplegic paralysis having the encephalic origin I have spoken of. As regards sensation, it is sometimes abolished, as the intelligence also is for a few days following the attack, if the lesion has been sudden, but is soon recovered from. The mode of its restoration being, like the recovery of muscular power, *first in parts nearest the trunk*, and first in the leg.

The seventh nerve is, in the class of simple cases, less affected than any nerve of the hemiplegic side; still it is generally to a slight degree paralysed, and the affection shows that it is subject to the law of crossed action; and the same may be said of the lingual nerve.

I mentioned, in my first lecture, that the third nerve was an exception, and probably the only exception to the law of decussating effects, and an attempt was made to show why this was, and how the exception seemed to point out the use of a decussation. I must now trouble you with some facts in proof of my position.

In hemiplegia depending upon lesion of the hemisphere affecting the corpus striata and thalamus opticus, the third nerve frequently does not suffer at all, the movements of the eye being unaffected, and the pupils acting equally. In looking over the reports of a great number of hemiplegic cases, one is struck with the slight affection of the third nerve, so that it requires a great extent of research and observation to find examples illustrative of the point in question.

It is now well established, that the contractile power of the iris depends upon the third nerve, and equally certain that the act of contraction is excito motor, and therefore in part governed by the state of the optic nerves. In studying the condition of the third nerve, therefore, it is necessary to have regard to the susceptibility of the retina. The following cases are given to show, that the third nerve is affected on the side on which the cerebral lesion exists:—

Richard Kean, aged 66; sanguineous apoplexy ingravescent; comatose; breathing, 26; pulse, 64; entire paralytic resolution of left side; pupil dilated on the side opposite to the paralysis, that is on side of the cerebral lesion.

A.B., aged 67; November 29, 1846; symptoms of ingravescent apoplexy. On my first seeing him his right pupil was very much dilated, left small, as in sleep; breathing 32, pulse 74; complete insensibility. It was difficult, from the condition of the muscles, to tell which side was most affected.

Post Mortem.—Very large effusion into right hemisphere, probably beginning near substantia perforata lateralis.

Paraplexia.—Cath. Fowler, aged 56; paralysis of left side, coming on in the course of two days, without loss of consciousness; entire paralysis of arm and leg, and falling of the features on the same side. The opposite pupil (right) slightly the largest. She turns the eyes with greatest readiness to right side.

Hemiplegia, with Symptoms of Ramollissement.—Female, aged 56; pupils equal, and act on the stimulus of light; complete resolution of left side; eyes directed to right.

Acute Hydrencephaloid Affection.—D. W., aged 19; partial consciouness; breathing rather stertorous, 20; pulse, 120; left side of body appears paralysed; eyes directed to the right; jactitating motion of this side; right pupil largest; vision lost.

Hemiplegic Weakness coming on during Sleep.—Margt. N., aged 28; partial paralysis of left side, most affecting the arm; the sight of left eye impaired, and the pupil of this eye rather the largest; the motions of the eye are nearly perfect; *slight ptosis of right eyelid.* In this case the state of the pupil is the reverse of that in the apoplectic cases, depending upon the condition of the retina; but the partial ptosis in the side opposite the hemiplegia proves the law.

Hemiplegia, 10 months standing, attack sudden.—Richard Lamb; Hemiplegia of right side; gradual improvement; turns his eyes most readily to left.

Chronic Brain Disease.—W. M., aged 27; hemiplegia; weakness of right side, with some anæsthesia; pupils both dilated; left least active.

These cases, which I might add to, will be sufficient to prove the rule I wish to establish. The investigation is difficult from the re-action, as I have before said, of the retina and the iris, and the uncomplicated examples are not common. The facts may, so far as I have observed, be reduced to—

1st. Pupil largest on side of disease, vision being lost.

2nd. Eyes turned from paralysed side.

3rd. Ptosis on side opposite to paralysis of extremities and face.

4th. Though no obvious affection of iris or recti, yet a patient may turn his eyes most readily from the affected side, and open the eye widest on the side of the paralysis.

I must take leave to remark, Mr. President, that it has seemed to me of the greatest importance to lay down, with all possible precision, the law of hemiplegia, inasmuch as being thus a starting point, we can reduce the apparently anomalous cases to their proper laws. Nor do I think we should have remained so long in a state of uncertainty upon the diagnosis of nervous affections, if we had not taken it for granted, that their whole nature was to be anomalous. There must be as invariable a law for nervous action, as for any other physical phenomena; and, if anomalous, it must be because our law has not been fairly deduced.

Whilst I have been thus attempting to prove the certainty and definite nature of the law of common hemiplegia, a host of cases must have occurred to every one, which seem to be exceptions to the rule. My next attempt must, therefore, be to show, that they belong to quite another law:—

1st. The leg is often more affected than the arm.

2nd. The seventh may be alone paralyzed.

3rd. The third nerve is often alone, or to an extreme degree, affected, and on the same side as the seventh.

4th. The loss of sensation is often very much greater than the loss of motion.

ORIGINAL CONTRIBUTIONS.

CASE OF POISONING BY THE ARSENITE OF COPPER, OR SCHEELE'S GREEN, CONTAINED IN A CONFECTIONERY ORNAMENT.

By F. A. BULLEY, Esq., F.R.C.S., Reading.

In the afternoon of Tuesday, the 10th instant, I was requested to visit two children, one a girl about four years old, the other a little boy aged about two years and three quarters, who, having both been just before in the most perfect health, had in the morning been suddenly seized with violent sickness and vomiting. They were attacked within a few minutes of each other, while playing in good spirits on their mother's bed. The matter voided was of a light green colour, resembling bile diluted in water. The second time they vomited, the mother observed among the ejected fluid, several small particles of a hard substance of a light green colour, which she took very little notice of at that time; afterwards, however, recollecting that she had given one of the children a little green ornament from a twelfth-cake to play with, which the nurse had observed them eating in the morning, and had thrown about half of it unconsumed in the fire. It did not occur to either the mother or the nurse, that this might have been the cause of their sudden indisposition. They both continued vomiting, or rather pumping up the same green fluid every ten minutes or quarter of an hour during the day, until what they brought up appeared to be clear bile, mixed with the copious draughts of water which they had taken in consequence of their intense thirst, as during the whole time they were constantly entreating the nurse to give them something to drink. About the middle of the day they complained of pains in their bowels, followed by copious but natural motions, after which the pains seemed to be abated. About four o'clock they each had a dose of castor oil, which was almost immediately rejected. At five o'clock, Dr. Woodhouse was called in consultation, and then for the first time the nurse informed us of the children having eaten a part of a green ornament, precisely similar in every respect to one which the mother now produced and showed us; she had given one of these ornaments to the children, with strict injunctions not to eat it, the other she had replaced in the basket from which she had taken them.

Ten grains of powdered ipecacuanha were now ordered for the elder child, and eight grains for the younger one, to be assisted by copious draughts of tepid water. The result of these means was, that the vomiting was increased for a time, the same bilious fluid being ejected more plentifully than before. As soon as the sickness had a little subsided, which it shortly did, a teaspoonful of the hydrated peroxyde of iron was administered to each of them, after which the elder child was sick two or three times, and at last brought up the greater part of the iron, but the younger one did not appear to have ejected the remedy, although he was sick two or three times after taking it. For some time prior to this period, it was observed that the feet and legs of both of them had been gradually becoming cold, and the pulse faltering at the wrists, with their faces deadly pale, more especially in the elder child, whose constitution was naturally more delicate than the other.

Hot-water bottles were applied to the feet of the little girl, and both children wrapped up warmly in blankets, shortly after which they sank into a quiet and easy sleep, the vomiting having entirely ceased, and although they had been sick about every quarter of an hour during the day, it did not again return. It was observed, that they suffered considerably from thirst during the following night, with slight flushings in the face, but the next morning they appeared to be quite recovered from the poisoning, except that the little girl complained of a headache, and the little boy was affected with a trifling re-active fever, which soon subsided, the result perhaps of the greater natural vigour of his circulating functions.

The mother having given me the ornament, corresponding with the one which the children had partially eaten, I sent it to Mr. Collier, a practical chemist in the town, who returned me the following account of its poisonous composition:—

"20, Broad-street, Reading, April 11, 1849.

"Dear Sir,—The ornament you sent me for analysis weighed 18·73 grains, 10 grains of which gave, by careful analysis, 2·41 grains of arsenite of copper (Scheele's green) of a very pure kind, more so than I ever remember to have met with, sold commercially as a pigment, with sulphate of lime, flour, and sugar. The sulphate of lime was in the proportion of 2·07 grains. The flour and sugar I have not taken the trouble to determine quantitatively, being quite unimportant.

"Yours very truly,

"W. Lindsey Collier."

Remarks.—Mr. Taylor, in his recent work on Poisons, relates several instances of the injurious effects arising from children having eaten confe

tionary ornaments coloured by this pigment. He states, that Dr. Geoghan informed him that an accident occurred in Dublin, by which fourteen children suffered from symptoms of poisoning in consequence of their having eaten some confectionary ornaments coloured with Scheele's green. In two of these cases jaundice followed. Mr. Taylor observes, that "the dangerous practice of using this powerful poison to give a colour to confectionary is very prevalent, and accidents often arise from this cause." An instance was communicated to him, in which three lives were nearly sacrificed at a school near Manchester, owing to the boys having eaten some ornamental confectionary, which owed its green colour to arsenite of copper; they suffered from violent vomiting, severe pains in the stomach and bowels, and spasms of the extremities. Three animals, which had eaten of the vomited matter, were attacked by similar symptoms.

It will be observed, that, in many respects, the symptoms perceived in the cases I have related, resembled those mentioned by Mr. Taylor, the only difference arising, perhaps, from the quantity of the poison taken.

The relation of them will, I hope, be useful in showing how comparatively small a quantity of this poison, when used in confectionary ornaments, and eaten, is sufficient to produce harrassing and even dangerous symptoms, and I should also hope would operate as a warning to parents to prevent their children eating, or even sucking, ornaments coloured by this pigment, especially as, within the last few years, there have been several cases recorded in the public newspapers of its fatal results, and I have little doubt that many children have perished from obscure gastric affections, where the undetected cause might, in reality, have been due to this source.

In respect to the efficacy of the hydrated peroxyde of iron as an antidote, I can only say that, in the cases which I have detailed, I watched its operation most carefully, and have little doubt that, small as the quantity was which the children took, it exerted a considerable influence in at least modifying the effects of the poison, although, doubtless, the copious drinking of warm water, to which they were simultaneously subjected, assisted not a little in allaying the irritation of the stomach, which, from the first, seemed to be the principal symptom of their ailments.

OBSERVATIONS ON STRICTURE OF THE URETHRA, AND ITS APPROPRIATE TREATMENT.

By BARNARD HOLT, F.R.C.S., and Assistant-Surgeon to the Westminster Hospital.

(Continued from page 490.)

The seat of stricture (except in cases of injury, tumors, abscesses, &c.) will depend, as far as the implicated structure is concerned, upon the amount of inflammatory action preceding, and producing it. In the incipient form of the disease, the mucous lining is chiefly affected; it is congested and thickened, but not ulcerated; its functions are interfered with, but not permanently impaired; it offers an impediment more from irritability and sympathetic contraction of the immediate muscular structures, than from any alteration of importance in the diameter of the canal; should this, however, not be attended to, a more serious train of symptoms supervene; the inflammation proceeds to ulceration at one or more points, blood, or lymph, is effused into the submucous areolar tissue, which becomes organized, and, although the solution of continuity may be restored, the new membrane does not enjoy the same degree of elasticity as formerly. It very much resembles the formation of new skin after a burn, and has an invariable tendency to contract; this is well exemplified in those cases of deformity which have been subjected to a surgical operation, where, however much the contraction may have apparently been removed, it almost invariably returns, although at a lengthened period. Thus, I would infer that, in the incipient form, the mucous membrane becomes slightly altered, but that the submucous and other tissues remain in their natural condition; whereas, in the second, or that where there is a permanent alteration in the diameter of the canal, the submucous tissue is the recipient of organized lymph, the mucous membrane is altered in structure, and its elasticity destroyed, but not gathered into the puckered form before spoken of, the result of laceration. The mucous membrane in very old strictures becomes like parchment, its secreting properties are destroyed, and, with the cellular membrane, presents all the appearance of cartilage; giving to the introduction of a sound, the sensation of passing through a dry thickened inelastic membrane, and which appears to take all the oil off the instrument. This will be better explained when the several peculiarities are entered upon. There are frequently two, sometimes three, and occasionally four, contracted parts in the urethra of a person who has been long the subject of stricture, varying in diameter, the posterior one being ordinarily the most contracted; this however is not invariably the case, the one situated anteriorly occasionally being of such small calibre, as to require division with a scalpel previous to the introduction of the bougie. The portion of urethra in which these obstructions are most frequently met with, is at the junction of the membranous part with the bulb, and again at about three inches from the orifice. Mr. Vincent says—"There is a reciprocity of excitement appearing to take place between the urethra at the membranous portion, and about four inches from the meatus, illustrated by a patient having some irritation in the urethra, for which a bougie is passed, and meets with a slight obstacle at the membranous portion, but almost immediately passes on into the bladder; if this examination be repeated two or three times, it is frequently found that the obstruction is met with at about four inches from the meatus, and, having been overcome, passes without difficulty into the bladder." I entirely agree with Mr. Vincent as to the reciprocity of excitement existing between the membranous portion and neck of the bladder, and the anterior part of the urethra. In many of the cases of lithotrity, I have had an opportunity of treating where the stone has been large, and considerable difficulty experienced in getting rid of the fragments, although at the first or second operation the urethra might have been sufficiently capacious to admit the largest sized lithotrite without inconvenience, yet, after three or four repetitions, the meatus, and about an inch down the urethra, frequently became so contracted that it was necessary to divide the strictured portion, previous to the reemployment of the instrument, which, however, having once entered, passed with facility into the bladder; these cases, in a great measure, confirm the view Mr. Vincent has taken. That there is a very strong and evident sympathy existing between the neck of the bladder and end of the penis, is every day exemplified in cases of stone. The lacunæ in the different portions of the urethra may become obstructed, the fluid they normally exhale being confined in their tubes, becoming condensed, and forming little hard bodies, which project into the urethra, and cause obstruction. They are similar to the obstructed follicles in the skin, which, when filled with sebaceous matter, became, in a somewhat similar manner, prominent. The verumontanum and prostatic ducts may become inflamed and altered in character, and, lastly, the neck and uvea of the bladder.

The symptoms of stricture will entirely depend upon the duration and amount of disease existing in the urethra, thus in the incipient form, or that resulting from the first changes of low inflammatory action, the patient will complain of listlessness, disinclination for extra exertion, a feeling of being tired after walking; frequent drowsiness, &c.; and, upon inquiry, you will generally learn there is experienced a sense of weight in the perinæum, a more frequent desire to make water, which is accomplished with slight hesitation, and occupies a longer period in evacuation, and that, after the bladder is emptied, and the patient has restored himself to his usual comfort, a few drops of urine will escape. These are generally the first appreciable symptoms of urethral disease; should they be neglected, in a greater or less length of time, in some progressing but slowly for many months, in others all the symptoms becoming aggravated in a much shorter period, they merge into the second or permanent form of disease; the urine will now be made with greater difficulty, some straining becoming necessary for its evacuation; the stream will be smaller in calibre; it may be either flat, forked, or spiral; there will be the commencement of discharge, and nocturnal emissions; the pain in the perinæum will not probably be so great as formerly, but the desire to make water considerably increased: the bladder, sympathising with the diseased urethra, becomes irritable at the presence of a small quantity of urine, causing the frequent micturition already alluded to; the rest will be disturbed, and the patient's general health materially interfered with. Occasionally patients will be found who, from timidity, feelings of delicacy, &c., yet avoid seeking the only remedies that can possibly afford relief, and the disease slowly but certainly proceeds. The urine can now only be passed in the smallest possible thread-like stream, or frequently in drops; it is loaded with mucous, and occasionally pus. The desire to make water becomes so frequent, as to require relief every half hour or hour; it is accomplished with great straining, the efforts necessary for its expulsion occasionally producing hernia. The bladder never being emptied, and more generally remaining half-full, the unhealthy parts of the urine are deposited and absorbed, and, should relief not be obtained, the patient either creeps on, the overflowings of the bladder distilling through the contracted portion of the urethra, he becomes comatose, and, in a very short period, death puts an end to his sufferings; or, by the extraordinary efforts at relief, the diseased urethra gives way, the urine becoming infiltrated into the surrounding cellular membrane. Even the bladder has been known to burst, but that which most frequently occurs, is retention; here the patient's sufferings are aggravated in a tenfold degree; the bladder, which has become distended to its utmost limits, loses its contractile power; its muscular coat becomes paralyzed, and is acted upon only by the ineffectual contractions of the abdominal walls; the straining is increased; the involuntary efforts for relief expel the contents of the rectum, and frequently cause prolapsus of the bowel, but only a few drops of urine can be made; the tongue becomes white and furred, and the mouth parched; the pulse is much accelerated; the countenance expresses the most extreme distress; while large drops of perspiration stand upon the brow,—a further evidence of the agony the patient is suffering. The condition I have just alluded to is beautifully described by Sir Benjamin Brodie in the following extract:—"The symptoms of retention of urine are sufficiently formidable, and not the less so as they attack the patient suddenly. He is, perhaps, sitting with his friends after dinner, and feels an inclination to make water; in attempting to do so, however, he is disappointed; a second and third attempt are made after some time, and all without success. Now the case assumes a more serious aspect; an indescribable uneasiness is felt in the region of the bladder; the efforts to void the urine are no longer voluntary; the patient is compelled to strain, and the whole of the abdominal muscles are in convulsive action, instinctively endeavouring to relieve the bladder of its contents; but still to no purpose. The bladder may be felt hard and enlarged above the pubis; the heart sympathises with the local irritation, the pulse is hard and frequent, the face flushed, the skin hot, and the tongue is covered with a white fur. The violent efforts of the patient force out a few drops of urine, which gives some relief, but the kidneys go on secreting, and the relief is only temporary. In the great majority of cases the spasm is spontaneously or artificially relieved, but there are nevertheless numerous examples to the contrary, in which the retention terminates in death." In the next page will be found the following:—"Conceive a distended bladder and the spasmodic action of the abdominal muscles and diaphragm of a powerful

man, acting like a syringe, and forcing the urine through the lacerated urethra into the cellular membrane; in fact, the scrotum, the penis, the perinæum, sometimes even the groins, are enormously distended with urine."

Other effects, equally appalling, will inevitably ensue, where cases of severe obstruction have been neglected. The urethra behind the stricture becomes dilated, occasionally forming a projecting pouch, capable of holding a considerable quantity of urine, or the urethra ulcerates, and a small quantity of urine becomes infiltrated into the adjoining textures, producing either death of the implicated cellular membrane, or circumscribed inflammation, ending in abscess and fistulous openings; these may be immediately behind the stricture, or burrow in different directions, opening by one or more apertures, sometimes through the scrotum, perinæum, side of the rectum, or buttocks, causing the greatest inconvenience to the patient, but relieving the immediate symptoms. The prostate gland, in almost every case of long standing, becomes implicated, either by frequent attacks of acute inflammation, causing the utmost agony and distress during its violence, by slow chronic induration and hyperthrophy, or the formation of matter in one or more of its lobes. It is almost impossible for a bad stricture to exist without the bladder suffering in some way or other,—it is true this organ will bear much more than is ordinarily imagined, and frequently recovers itself in an extraordinary degree. This is well exemplified in cases of lithotrity, where its mucous surface is constantly subjected to the irritation of sharp, rough, angular fragments, the result of a lithotriptic operation, an abundant quantity of ropy, thick, tenaceous mucous is secreted, which, by its adherent properties, form a protective wall, against which these irritating particles are projected comparatively harmless. The mucous membrane is, however, found in all conditions, from simple inflammation to an almost gangrenous condition, its mucous characters being entirely destroyed, and presenting a dark, almost blackened, ulcerated character. The muscular coat is frequently thickened, forming projecting columns, the result of the patient's efforts to rid himself of its contents, and the bladder so contracted, as not to be capable of holding more than a very limited quantity of urine; or from frequent distension, and attacks of retention, the mucous lining becomes protruded between the muscular fasciculi forming pouches or cysts, which are occasionally sufficiently large to hold four or five ounces of urine. The effects of the disease will not, however, stop here. *Post-mortem* examinations have revealed the ureters in different phases of disease, but mostly enormously enlarged, their coats attenuated, and presenting an appearance somewhat similar to a small intestine; the pelvis of the kidney may be also considerably dilated, a further proof of the efforts of nature to provide a receptacle for the fluid. The secreting process still proceeds, but in a limited degree, until, from the constant impediment offered to its evacuation, the kidney or kidneys become diseased, the elimination of the necessary fluid, and its removal from the body are interfered with, its noxious properties are absorbed, which, becoming a circulating poison, the unhappy patient, if not surgically relieved, merges into a comatose state, and dies unconscious of everything about him. There can be little doubt that persons in whom the lithic acid diathesis is peculiar, frequently become the subjects of stone, the urine, from its longer detention and earthy particles not being so perfectly held in solution, offering a facility for these properties becoming deposited, and eventually amalgamated into a calcareous product.

5, Parliament-street.

[To be Continued.]

PRACTICE OF PHYSIC IN THE EAST.

By JAMES M'CRAITH, M.D.

SCIENTIFIC MIDWIVES AT SMYRNA.

Passing a few months of the summer (1846), in the village of Bondja, I was there called one evening to see a woman in labour. Upon arriving, I found a midwife (a wise woman, as the French call them, and this was as *wise* a specimen as could well be found) pulling away at the feet and body of a child, the shoulders and head being yet unborn. As usual, she was pulling in the wrong direction, and the poor child was running no small risk of coming eventually into the world "minus its head." By proper management, however, this latter misfortune was avoided, and the child was brought into the world in a state of asphyxia, as all children so born are, and too often irrecoverably so. I mention this case in order to notice the very curious popular treatment usually had recourse to in this country for such a state of things. I, of course, proceeded to inflate the lungs, and produce artificial respiration, gently sprinkling cold water on the face and chest, &c., while the friends and midwife took down a cock from his roost, and gently insinuated his beak up to the nostrils in the child's rectum! The cock, of course, soon gasped for breath, opening his beak wide, and taking in some air, which he was obliged, in expiration to administer as an enema to the child. As I was only occupied with the *upper* part of the child's body, and my friends with the *lower*, we did not interfere with each other, and so both treatments went on amicably together. A warm bath in the meantime was being prepared by my directions. After a few artificial respirations, however, to say nothing of the cock's share in the matter, the child gasped two or three times, and respiration was gradually but effectually established. The cock, however, was not released for some time, so I had full opportunity of witnessing his part of the performance, which was as already stated. An occasional gasp, with the beak opened wide, and, as I suppose, the air in expiration was passed into the child's rectum. This is the universal practice in such cases in this country. I do not know whence this curious proceeding could have originated; some superstition most likely of the ancient Ionians. Upon examining my patient, I found a second child, which, in about four hours after, was born, the head presenting. The second child was born asphyxiated also; but in this case our united efforts, the cock's and mine, failed in establishing respiration. There was only one placenta, both cords inserted into it nearly centrally. The second child born was the larger and stronger of the two; both males. The midwife said that a foot and breech were the parts she found presenting; that she pushed up the breech and brought down the foot. Now, in this case, I think it likely that it was the head of No. 2 and the foot of No. 1 that really presented, and that had she pushed up the foot, and allowed the head to descend, it would have been better.

What makes me suspect that such really was the case is, that she insisted, to the last moment, that it was the breech which was presenting in No. 2, and not the head; and also that No. 2, as being the bigger child, should have been the first born, as is usual in such cases. This is, however, but a surmise, though I think a probable one.

RUPTURE OF THE UTERUS.

Smyrna, Jan. 14, 1847.—At two o'clock, p.m., was called to a consultation with Drs. Masganna and Bargigli on a midwifery case. The following was the history given by Dr. Bargigli, whose patient she was, which was confirmed by Masganna as to her then state. I had not yet seen our patient; Masganna had seen her before my arrival:—

Mrs. A., aged 28 or 30, of rather short stature, stout and fat, the mother of four or five living children. Last labour a difficult one; child lost. Some operation or other had been performed, I understood. All her labours rather difficult. Dr. Bargigli was called early in the morning, and found the pains regular and strong, the head presenting, which, he said, he easily touched. He did not say to what extent the os uteri was dilated. He left his patient, seeing things going on so favourably, and went to see other patients, a midwife being in attendance. During his absence the midwife put the unfortunate woman on a species of stool, called "scamnée" in this country, telling her to make the strongest expulsive efforts she could: during one of those efforts the poor patient suddenly felt a very violent pain, and then all labour-pains ceased. This "scamnée" is a sort of stool, with an opening in the bottom, chaise perçée, very generally used in this country for women to be delivered sitting thereon. Dr. Bargigli, on his arrival, found the patient in a state of great anxiety, with small quick pulse and cold extremities; all labour-pain ceased. He, immediately supposing rupture of the uterus to have taken place, called in consultation Masganna. The latter said, he had no doubt of rupture having taken place; that he felt the child through the abdominal parietes. Dr. Bargigli said, that, in case I confirmed their diagnosis, they had resolved on the "Cæsarian section," giving various reasons therefore. To this I could not object, not having yet seen or examined the patient, (she was, for the moment, engaged in her religious duties;) but I said, that with *us* such a proceeding was always a *dernier resort;* that the chief argument in its favour was wanting, viz., the saving the child, which in this case could not be hoped for, as the accident had happened already several hours since; that *our* practice was, if possible, to deliver *per vias naturales;* if that was impossible, why then all that was left was the Cæsarian section,—in a word, that the mother's safety was the first consideration. Upon considering the matter, this was the view agreed upon; but all depended upon the state of the uterus, the nature and extent of the rupture, &c. No examination *per vaginam* had been made since the accident; some time was lost in sending for, and bringing us, the consulting physicians; and no examination had yet been made since the accident, except in feeling the abdomen externally. The actual state of the uterus was not yet known, or whether the introduction of the hand and "turning" was possible or not.

Upon being introduced to the patient, I found her lying on her back on a sofa, the head and shoulders somewhat raised; the extremities cold, pulse small and quick, the abdomen distended and tympanitic; the child could be felt easily through the parietes, and apparently only covered by the latter; lying transversely; upper extremities (as I conceived them to be) lying towards the left iliac fossa, the lower towards the right hypochondrium. Expression of much anxiety; the external parts much swollen, but not hot, or red, or painful; no hæmorrhage; no labour pains. Being requested to decide upon the question of rupture, I passed my hand, previously well oiled and warmed, without any difficulty, per vaginam, into the uterus, (the parts were fully dilated); found a large rent in th uterus, from whence the fœtus had passed into the abdominal cavity, the head lying at the rent, but external to it. The fœtus had completely escaped into the abdominal cavity. I explained to my colleagues what I found as I proceeded. Upon feeling the extent of the rent, I found I could, without any difficulty, pass my hand through it; in fact, the uterus *had not contracted*, apparently, since the accident, nor did it seem disposed to do so. Upon saying that I could most likely, if my colleagues would consent, pass my hand along the body of the fœtus, and reach the feet and turn the child, so as to deliver, by the feet—upon explaining this, Mr. Bargigli opposed my doing so, saying, "it was he who should do this; that I was only called upon to decide if rupture existed or not;" in fact, he appeared alarmed lest I should do so without his consenting. I assured him I would not do anything without *their* consent, and I appealed to Mr. Masganna, explaining the advantage I then had; that if I withdrew my hand, the uterus might contract, and another might find it impossible to pass his hand, or do what was then most likely in my power to do. Mr. Masganna decided, that, as it was his (Bargigli's) case, it was better to allow him to operate. I then, of course, withdrew my hand. It is, perhaps, as well to remark, that the patient did not understand the language in which we conversed, viz., French. Mr. Bargigli then passed his hand, and, after a long time endeavouring to reach or find the feet, said he could not. I told him not to withdraw his hand, to search patiently and that he must

find a foot; to act coolly; to try and distinguish some part of the body of the child, which would, of course, guide him to where he may find a foot. After a long and fruitless endeavour, he withdrew his hand, saying, that "whoever could may find the feet, that he could not." Upon this, I begged Masganna to deliver the woman, that he was the senior, and was most likely to succeed, being an accoucheur of considerable practice here; but he declined; told me to do so, as I had said I most probably could do so when my hand was passed before; that he had not made any examination at all as yet. In fact, seeing that he really wished me to act, I passed my hand a second time into the uterus *without any difficulty*, but in place of passing it through the rent as before, I reached the "fundus," and was rather surprised for a moment in not finding the child as I found it before; the position of parts was changed; but I quickly found the rent, passed my hand through, without the slightest difficulty, carried it along the body of the child, felt the thighs, and quickly got hold of a foot; think I felt the liver of my patient; Bargigli said he had felt it; brought down the foot to the vulva; could not bring it any further. My hand was completely fatigued from the very firm grasp I was obliged to keep of the very slippery object I was drawing gradually down (by the foot). Finding I could make no further progress, I gave the foot to one of my colleagues, got a very strong tape, made a sailor's noose, and passed it round the foot I had brought down. I would recommend any one performing similar operations, when the hand is fatigued, to change his manner of grasping, and, in place of *folding the thumb on* the fingers, as is the ordinary manner, *to close the fingers* ON the *thumb*; he will find he can hold on a slippery object, such as a child's foot, very effectually in this way. Mr. Bargigli brought down the second foot, and finished the delivery; in so doing, he did not make the turn so as to bring the child's face into the hollow of the sacrum, but the reverse; he brought the face to the "pubis." This caused some delay and difficulty, which Masganna remedied by passing a finger into the mouth, and depressing the lower jaw. The child was, of course, dead. The placenta followed immediately; it had, I believe, been detached before the child was born, as I could feel the uterus large as a child's head, above the symphysis pubis, before the child's head was born. It felt firm like another child's head. There was no hæmorrhage; our poor patient still had all her senses; a quick fluttering pulse at the wrist; extremities cold; great exhaustion. I recommended hot wine and water, or brandy and water, with large doses of laudanum.

I shall quote the after-treatment and result of this case from the *Revue Medicale* for April, 1847, in which Mr. Bargigli has published his history of it; and finish with some remarks on the case as published therein. This is necessary, as there will be found some discrepancies between the French and English details of the case. Mr. Bargigli says, *Revue Medicale, April*, 1847, page 547:—

"In the evening was uneasy, pulse frequent and small; at midnight slept two hours, during which she perspired freely; on awaking, she passed urine freely, and was much better. Passed the following morning well: made water; the belly somewhat painful; mercurial frictions over the abdomen and thighs every three hours. Pulse better, expression calm, tongue moist, skin soft and moist, lochia flow sparingly. Midday.—Still better. Asks for something to eat; salep (a sort of arrow-root) still allowed her; decoction of violets as drink, and occasionally a little mineral acid lemonade. Until 4 o'clock p.m., no change in her condition, which appeared satisfactory; all at once a severe rigor, followed by intolerable pain in the abdomen, and constant vomiting. Dr. Masganna, seeing the patient, was of opinion with me (Dr. Bargigli) that perhaps this incontrolable vomiting may be caused by the constriction of a fold of intestine, which may have got implicated in the rupture. Dr. Masganna, having a particularly small hand, passed his hand into the uterus, but found nothing; half an hour after our patient expired.

"*Autopsia.*—Intestines, especially the small, much injected—injection of a blackish colour in some parts, of a beautiful red in others. Uterus of about the size of a bladder capable of containing three pounds of water. Found on its posterior surface a vertical rent, five inches long, implicating the neck; this rent, at the moment of the accident, must have been fifteen inches in length. The substance of the uterus, divided in various parts, was whitish, and perfectly healthy; the mucous surface, smooth and pale in some parts, was ecchymosed in others; at the fundus it appeared rough, where the placenta was attached. All the other abdominal organs healthy."—*Revue Medicale*, April, 1847, p. 547.

Mr. Bargigli says, page 546, line 12, *et sequest*, he was "obliged to withdraw his hand, as it was paralysed by the strong contractions of the uterus." *I felt no contractions*; nor can I reconcile such assertion with the results which the "autopsia" afforded. How could a uterus, rent almost from its fundus through its neck, and implicating the upper part of the vagina slightly,—how could it contract *on the hand?* In fact, any one slightly acquainted with the physiology of parturition reading such details, and comparing them with the *post mortem* appearances, would be led to infer that the "rent" was made by the Doctor!! How could a uterus contract on the hand, so as to almost paralyse it, when nearly all the circular fibres, from its fundus to its mouth included, were torn through? It is said there are as many false facts as false theories in physic; both are rife enough in our periodical literature. Longer memories, however, (very necessary to such reporters), with more logical physiology, are usually shown on such occasions. The "*suppressio veri*" and "*suggestio falsi*" are managed to suit the symptoms and treatment and *post mortem* appearances; and a case in fact, is made out in itself, "*totus teres atque rotundus;*" perhaps equally instructive to the reader as one given with exact truth from nature. Perhaps our editors, being usually medical men of ability and experience, save us from many bungling reports, *by not giving them;* reports made to suit the Doctor, or save his credit, and not in the interests of science or the advancement of an honourable Profession. The report, as given in the *Revue Medicale*, seems to have missed even all and each of those objects. I notice the French report, that, as my name is therein introduced, I may be acquitted of its bad physiology, and, as I was the first to pass my hand and detect the *rupture* (a fact not stated), lest I may be suspected of having *made it!* a suspicion which certainly arises, upon comparing the facts stated with the *post mortem* appearances.

In my notes of the case, I find it stated that the edges of the rupture were sloughy and mortified.

OUTBREAK OF CHOLERA AT LIMERICK.

By Dr. KIDD.

Introducing the origin of the recent outbreak, I think it was quite obvious, that two causes were busily at work; one of a general epidemic character, possibly of *electric* origin,—Nature seldom goes out of her way to bring about even the most formidable results; the other of a purely local nature, owing to a want of proper sanitary arrangements; the latter may be looked upon as a merely predisposing cause; to my mind it is more. I have seen single houses, wretched tumble-down concerns, go on generating the disease day after day, while all about were healthy; and yet it was not contagion, rather a "dropping fire" of cases, that went to show that something was aiding and assisting the great universal principle at work abroad. The first cases, too, as I mentioned already, occurred all in one specific locality; here the epidemic principle was not yet in full force, while the local sporadic influence was hard at work, and wanting but the faintest breath of the other great principle to bring the disease into existence. It is of great moment to separate these two causes in our study of this almost inscrutable disease, as one or other preponderating will explain many of the phenomena exclusively ascribed to it by contagionists and non-contagionists. "What is the use of your sanitary precautions," cries one, "if the disease is simply epidemic, and will pass away?" What the object of your quarantine restrictions, if the thing is already in process of growth on shore, and epidemic; to my mind it is both, and it is only by taking into account each together we can arrive at any satisfactory explanation of all the phenomena.

Many predisposing causes of course come to complicate the results; the most common of these have been, I think, intemperance, neglected diarrhœa, and general inanition from want of food. It has been quite remarkable the few cases that have occurred either in our gaols or workhouses, where the crowding together of the inmates is perfectly fearful; the only way of accounting for which seems, I think, to be that the utmost order and regularity in diet is observed in these institutions; that the local sporadic influence is actually null; that proper ventilation is observed, and temperance rigidly carried out. Persons with old organic disease of any of the abdominal viscera have much to contend with also in an attack of cholera, and persons of a peculiar nervous temperament not unallied, I think, to delirium tremens.

In the matter of treatment, I have seen almost everything tried, but have gone back to camphor.

Ipecacuanha, Creasote, Opium, and Acetate of Lead.—These, I think, are the most useful arrows in the practical man's quiver. I am quite aware that I am leaving out mercury and the great tribe of stimulants; but I must confess myself entirely without faith in them. A good deal has been said and written about venesection and saline injection into the veins; to me they are too hazardous to be thought of. No doubt the latter often "works wonders," but it is still doubtful whether we are right in exposing our patient's life to such a chance. If we get the case early, the disease is not difficult to "knock down;" if in in collapse, our best plan is to leave a great deal to nature; if coagula have formed in the larger vessels, all is over.

OBSERVATIONS ON SOME STRUCTURES IN THE MOLE, (TALPA EUROPÆA,)

HITHERTO UNDESCRIBED BY WRITERS ON THE INSECTIVORA.

By J. W. MOSES, M.D., M.R.C.S., St. Asaph.

Immediately above the scapula, in the common mole, and hidden by the soft fur of this animal, is a quadrilateral orifice,—the opening of the external meatus auditorius, between the angles of which are slight projections, more apparent in the superior and inferior borders, where they may be compared to the tragus and antitragus in the human auricle. These projections are covered with white hairs, which are directed backwards and inwards. Connected with this opening is a cartilaginous tube about half an inch long, pyramidal in form, the base external, the apex towards the membrana tympani. It is formed of three spiral cartilaginous laminæ, sheathing one within the other, and admitting of extensive and free motion, which is effected by muscles inserted into the cartilages, and which muscles are supplied with nerves from the cervical. This tube can be shortened or elongated from the sliding motion which takes place between one lamina and the other; when it is elongated, the diameter of the tube is lessened; when shortened, the diameter is increased.

This peculiar tube may be looked upon as an auricle in every respect placed internally, and, no doubt, compensates for the deficiency of an auricle externally, which, in an animal almost exclusively subterranean in its habits, would impede its rapid progression through the earth, and would, of course, become clogged with dust and dirt.

There is another part connected with the habits of the mole which I will now advert to. The structure is a powerful cutaneous muscle, or *panniculus carnosus*, connected with the skin, and enve-

loping the whole body; and, on removing the skin from the animal, this structure is separated firmly adherent to it, the thickness of which it much contributes to. Indeed, the mole might not inappropriately be termed a "Pachyderm." However, the cutaneous muscle may easily be demonstrated, by cutting transversely through its fibres, when the leaden-blue appearance of the true dermis will be manifest.

This muscle is more powerfully or fully developed anteriorly and on the dorsal aspect, than posteriorly or inferiorly. It must be of great service to the animal in freeing itself from the earth when making its subterranean passages, and will assist it materially in the formation of its hillocks. The legs of the mole being so short and ill-adapted for scratching or cleansing itself, the necessity for such a structure becomes obvious in a creature whose life is spent almost entirely under ground, "in galleries which, it is said, are not large enough to allow it to turn round, and where it must often, therefore, be obliged to retreat backwards." Nor can I very well understand how the animal is to get along without such an apparatus, by which the whole skin of the creature can be shortened and corrugated, and then lengthened and relaxed, thus disengaging itself from the accumulating earth. Its weak hind legs and feet can be of but little service, excepting as a *point d'appui*.

Every observer must have been struck with the extreme cleanliness of the mole, notwithstanding its grovelling habits. I have examined numbers of them brought to me by the mole-catcher; some of them were cream-coloured, and others spotted with rich orange, with scarcely a mark of dirt or clay adhering to them. The peculiarity of its fur falling in every direction, and its transverse connexions, so minutely described by Mr. T. Bell, the eminent Professor of Zoology, will likewise contribute to the animal's immunity from dust and dirt.

PUERPERAL MANIA

FOLLOWED BY INSANITY.

By H. HASTINGS, Surgeon, Stokenchurch, Oxon.

On the 28th of January Mrs. L——, aged 28 years, of a nervous and irritable temperament, figure rather tall and slender, was put to bed of her second child. The former labour was premature, and the child was dead born. The latter child was born alive, and had arrived at the full period of utero-gestation. It was in the world half an hour before I arrived, and the nurse informed me that Mrs. L—— had only three pains until the child was born. Upon instituting an examination per vaginam, I found that the placenta was detached and lying in the vagina; the uterus was fully contracted and hard. I instantly removed the placenta. There was about the usual discharge of blood. The patient did not appear agitated in the least degree. She told me that she felt in the morning as comfortable as could be expected, and went to bed that night without experiencing any symptom indicative of immediate labour. She afterwards progressed most favourably, lochia perfectly natural, and the milk came copiously on the third day. In fact, I never saw a parturient woman progress more favourably, and on the sixth day after her confinement I left off visiting her.

On the 10th February, thirteen days after her confinement, I was summoned to visit her about twelve o'clock in the night. I found her in bed; the nurse had propped up her head and shoulders; she looked *very wild*, and remained perfectly quiet; was rather inclined to be sulky, and would only answer my questions occasionally, and even then only in a faint whisper, using that detestable monosyllable Yes, or No. Her tongue was moist and clean, bowels had been regularly relieved, evacuation rather scanty and dark, urine natural, pulse 120, skin very hot, breasts hard and painful, head very warm, lochia absent, milk copious up to this date. Upon inquiring more minutely into this case, the husband and nurse informed me that she went on very well after I left on the sixth day, after her confinement, until the evening of the eighth day, when she exhibited a great degree of excitement and performed some strange freaks, such as breaking favourite china tossing it into the fire, in fact, she had quite a propensity to throw everything which she could seize into this destructive element; she would occasionally pace the room in a hurried step, exclaiming, "God is greater than the devil!" "Bill," addressing her husband, "don't bother me about that parcel!" "Hush! hush! don't say a word about it." "What is the use of keeping me in bed until after the ninth day!" and many other similar strange expressions. Carefully considering these premonitory with the present symptoms, I determined to bleed her. She took not the slightest notice of either the incision or the flow of the blood. I bled her *ad uncias decem*, which, in a short time, reduced her pulse considerably; ordered vinegar and water to be applied to the head, breasts to be rubbed with oil, and arrowroot or gruel to be given for nourishment; prescribed a diaphoretic mixture, and calomel and opium pill, instantly.

Feb. 11th.—Mane; remained quiet during the night, took her medicine and also some nourishment; blood very much cupped and buffy, pulse upwards of 100, skin bedewed with a nice moisture, tongue presented a brown hue, eyes injected and staring most wildly, malar bones projecting much, cheeks shrunken, nose thin, and alæ contracted; no secretion from either bowels or kinneys since yesterday, head still very hot, took no notice of anything, and appeared perfectly insensible. I applied hirudines xij. to the temples; ice-cap to the head; the first application of it made her start a little and look up. Gave her pilul. aperient, No. ij., and haustus cathart.; continued diaphoretic mixture. Towards evening bowels were relieved, evacuation rather dark and hard, urine plentiful, skin moist, head cooler, consciousness returning, and at ten o'clock she spoke, and asked "What is all this bother about?"

Feb. 12th.—Much better; head still rather hot; applied a refrigerating lotion to it; pulse 96; tongue cleaner, and skin cool; countenance assuming quite a maniacal look; she now showed a great dislike towards her mother, and even ordered her husband not to come into the room. Breasts hard, but not painful; secretion of milk stopped; to-day there is a slight discharge from the vagina.

Feb. 13.—Still improving; had a tolerable night; mind at times rather wandering; asked for her child; hatred towards husband and mother giving way. From this period she continued to improve, and in the course of a few days she was able to leave her bed-room and walk in the orchard. Her countenance still retained the maniacal appearance, and her left leg was rather swollen. Up to this time, the treatment merely consisted in paying strict attention to the due performance of the several secretions, observing a proper diet and good nursing. During this period of convalescence, her milk flowed as usual; appetite good; and the child was again put to the breast. I made it my particular care to attend zealously to her mental faculties, as I felt convinced, that there was still a disorganization of the brain going on. But my efforts in this respect were wofully disappointed; the husband was so elated at his wife's recovery, that he indulged too freely in other exhilarating causes, which made him observe late hours; and when he came home, his naturally boisterous conduct thwarted all my endeavours towards his wife's mental tranquillity. I had relinquished attending her, as she was in tolerably good health; however, in ten days after my last visit, I was again requested to see her. On entering her apartment, I saw her sitting upon a chair, looking quite haughty and proud; her eyes were slightly injected; and she was so exceedingly nervous, that a loud word would make her jump and tremble. She said, that she could hear all manner of noises in her head; sometimes they resembled the sound of a blacksmith's hammer at work on the anvil, and at other times she thought there was a bee-hive in her head, as she continually heard the buzzing of the bees. The attendants informed me that she had been occasionally very boisterous, and at one time had thrown her infant from her, saying, that "it was none of her's." Her hatred towards her mother again returned; she spoke little, occasionally eat heartily, but had very little sleep.

The child was taken from her, and her milk again left her without causing any injury to her breasts; she was kept for some days to her room, constantly waited upon by a nurse; several remedies were had recourse to, but without much apparent benefit; she was never inclined to be violent; talked a great deal of nonsense; was often going to dine with the Queen, &c.; eat little, and never slept any unless when under the influence of morphia, which I found to agree with her admirably in grain doses. The disease still becoming more confirmed, I advised her friends to send her to an asylum, which they accordingly did, and she is now in the Headington Asylum, near Oxford, under the care of Dr. Wintle.

HOSPITAL REPORTS.

THE MEDICAL AND SURGICAL PRACTICE OF THE BELFAST GENERAL HOSPITAL.

In commencing a series of reports, illustrative of the practice of a provincial hospital, the reporter deems it necessary to premise a few observations.

The Belfast Hospital is under the medical care of four Physicians and four Surgeons, two of each being in constant attendance. A House Surgeon resides on the premises. Twenty-five pupils are enrolled for the present session, who receive four clinical lectures weekly, and besides are at liberty to attend a series of special lectures delivered every evening.

The accommodation comprises spacious wards for 200 patients, an operating and lecture theatre, a select medical library, a pathological museum, an inspection room and laboratory, and a suite of bath rooms and dressing rooms for extern patients, affected with any form of cutaneous injury or disease. The cases treated comprise fevers and the ordinary medical cases; accidents, and the usual surgical cases; cholera, and cutaneous diseases. A compounding department is attached, to which pupils have access on payment of the regular fee. The hospital fee is two guineas for attendance, and one guinea for the clinical lectures.

From this field of experience, the following reports are drawn:—The reporter is desirous to give these reports a therapeutic aspect, as he conceives the more practical their application, the better for the interests of the Profession. Should they subserve, even in a very minor degree, this important purpose, the object of the reporter will be fully realised.

The surgical cases have been drawn up by Mr. Washington Murphy, the Resident Surgeon, to whose ability and zeal the Institution is much indebted.

A. S. MALCOLM, M.D.
One of the Attending Physicians.

March 19, 1849.

MEDICAL REPORT.

I.—DISEASES OF THE LUNGS AND HEART

1. Eliza D., aged 36: married; greatly emaciated; disease lasted 9 months; died.
   Case.—*Phthisis pulmonalis;* cavities in apex of left lung; pleurisy, began as cold; had hæmoptysis; amenorrhœa, diarrhœa.
   Treatment.—Various counter irritants and tonics; cod liver oil disagreed.
2. Mary C., aged 15; mill-girl; greatly emaciated; duration, 4 months; died.
   Case.—*Phthisis pulmonalis;* acute form; vesicular bronchitis; left lung affected; amenorhœa; disseminated tubercles.
   Treatment.—Perpetual blister; iron and digitalis; prussic acid; morphine and antimonial pectorals.
3. Henry B., aged 34; labourer; duration, 32 days; discharged well.
   Case.—Old bronchitis; recent *pneumonia* base of left lung.
   Treatment.—Cupping; calomel, and James's powder to ptyalism; antimonial pectoral.
4. Margaret B., aged 35; duration, 7 weeks; discharged well.
   Case.—*Bronchitis* 1 year; fresh attack 6 weeks; nervous symptoms and debility during protracted convalescence.

Treatment.—Seen only in convalescence; iron and assafœtida; calumba, valerian, and soda.

5. William M'G., aged 20; railway labourer of moderate strength; duration, 24 days; died.

Case.—Acute pleurisy, pericarditis, and pneumonia; frottement and ægophony distinct; pericardial murmurs heard *only once;* much diarrhœa and tenesmus; great pericardial effusion; pneumonial base of left lung and *apex* of right.

Treatment.—Seen on seventh day; copious venæsection; calom., tart. emet., and digitalis; afterwards mercurial inunction, and repeated blisters and counterirritants; antimonial pectorals; occasional astringents and opiates.

6. Patrick S., aged 45; labourer; half-starved and emaciated creature; duration, several months; died.

Case.—Mitral disease; bronchitis and pneumonia with anasarca; great dyspnœa and lividity; pulse weak, 108-120; pneumonia observed at base of left lung.

Treatment.—Blisters; squill, ipec., and blue pill; squill, ether, and paregoric pectoral; purgatives, nourishment.

7. Mary A. M'G., aged 41; duration, 5 months; discharged quite relieved, after 23 days in hospital.

Case.—Mitral disease with anasarca; previously rheumatism for 1 year; palpitation 4 months; endocardial murmur still occasionally heard.

Treatment.—Cupping over cordal region; calom. digitalis; squill and ipec. to ptyalism, which occurred in 4 days; compound gentian infusion at close.

8. Arthur M'Q., aged 19; mechanic; emaciated; duration, 10 months; died.

Case.—Phthisis pulmonalis; cavities at apex of right lung; hœmoptysis, three months before cough; obstinate diarrhœa, and profuse perspirations.

Treatment.—Counter irritants; ung. tart. em.; opiates, with acet. plumbi; squill and digitalis pectoral; tonics, as cod liver oil.

9. Edward M'G., aged 40; gentleman's servant; duration 14 months; discharged quite relieved.

Case.—Disease of aortal semilunar; bronchitis; some anasarca; distinct "bruit," with second sound, and vibration along arteries; dyspnœa and palpitation; anasarca yielded completely under the ptyalism.

Treatment.—Vernæsection, Calom., opium., and ipec., to ptyalism, which was kept up for three weeks; murmur remained.

10. Daniel D., aged 48; labourer; duration 3 months; discharged quite relieved.

Case.—Disease of mitral valve; bronchitis; much dyspnœa; "bruit" very distinct, with first sound at apex of heart; symptoms all yielded kindly.

Treatment.—Cupping over region of heart; calom., scill, and opium to ptyalism; succeeded by iod. potass; murmur only heard after excitement of heart.

11. John L., aged 55, cabinetmaker; duration, 13 months; discharged quite relieved.

Case.—Disease of aortal semilunars; bronchitis; anasarca to great extent; pneumonia at base of left lung; dyspnœa 8 months; all symptoms gradually subsided; and he left hospital feeling quite well.

Treatment.—Calom., squill, digitalis, and ipec. to ptyalism; ung. hyd. rubbed in ether; squill, juniper, and acet. pot. pectorals; blisters; quinine at close; murmur remained.

[To be continued.] (a)

Remarks, (No. 5.)—Though this patient complained of his gums. Yet there was no fetor throughout the disease, and the action of the mercury seemed, notwithstanding the free use of the ung. hyd., to have been limited to the intestines. This I have observed in other cases, even after copious bleeding, when intense and extensive inflammation existed. I regret not having employed *local* depletion; but the thoracic symptoms yield so favourably to the bleeding practised, that I hesitated, more especially as his pulse became weak and soft. The pericardial murmur was heard only once—neither before nor afterwards was it detected, though he was anxiously examined for it, as, from the very first, I suspected pericarditis. The *post mortem* examination of this case was particularly interesting. Pleuritis in both sides, characterised by lymphy shreds and adhesions, and sero-purulent reddish effusion; pericarditis, by an immense quantity of sero-purulent fluid and the thickening of the sac, and irregular patches of lymph, rough, granular, and shreddy, with numerous incipient bands; and pneumonia at two points, viz., at the base of left lung and apex of right, where it remained undetected during life. In my opinion, the pericardial effusion had existed before admission.

(No. 6.)—On a *post mortem* examination of this case, the mitral valve was diseased, having yellow, hard deposit in the rim of valve. Pneumonia and bronchitis were also observed, the former at the base of left lung, in the second and third stages. It is evident that the disease here, was of considerable standing, though not recognized by the patient, who declared himself ill only nine weeks. Depletion was not employed, as his miserable appearance and general condition contra-indicated it. The case was evidently hopeless.

(a) The next series will comprise cases of *rheumatism.*

SURGICAL REPORTS.

I.—Fractures.

1. James Jennings, aged 50; clavicle, through centre, by fall on shoulder from scaffold; union in three weeks.
2. William Mills, aged 30; humerus, junction of upper and middle third; transverse union in four weeks
3. Matthew Bassbotham, aged 13; humerus, radius and ulna; under treatment.
4. Eliza Orr, aged 50; radius one inch above head; three weeks in hospital.
5. Ann Rainey, aged 52; femur through neck; dicharged, relieved to workhouse.
6. James Abernethy, aged 32; femur; junction of upper and middle third; transverse; five weeks.
7. Margaret Cuddy, aged 68; femur; through neck; within the capsular ligament; relieved.
8. William M'Kenon, aged 8; femur; junction of upper and middle third, from fall; four weeks.
9. John Woods, aged 42; patella, from fall; transverse; union complete in six weeks.
10. Robert Johnston, aged 26; tibia and fibula; compound and comminuted, from a railway-wagon passing over leg; much hæmorrhage and laceration of soft parts; amputated above the knee; double flap operation. Died on the seventeenth day from receipt of injury; *post mortem* showed abscess of right lung, of which he never complained.
11. Thomas Miskelly, aged 19; tibia; junction of middle and lower third; oblique; union complete in four weeks; discharged in fifth week.
12. William Cobden, aged 50; tibia; transverse; by direct violence; union complete in twenty-six days.
13. James M'Cann, aged 20; fibula; three inches above external malleolus; by fall from scaffold; discharged at end of third week.

Remarks, (No 1.)—A puffy crepitating swelling arose below clavicle shortly after receipt of injury, which extended as far as sternum; subsided in two days; no complaint of pain or uneasiness during respiration; no cough; fracture treated by a pad in axilla, and the arm supported across chest by rollers.

(No. 3.)—Millworker; when cleaning a large revolving wheel, surrounded by a band, the arm was entangled between the band and rim of the wheel; the body was carried round, at which time assistance came, and the machinery was stopped, and the boy's arm extricated; much swelling came on after admission, which subsided in four days by antiphlogistic treatment. The arm was kept in the straight position, supported by splints and the many-tailed bandage; matter formed underneath the fascia of the forearm; a few small spiculæ of bone came away, also a large quantity of healthy pus through two small openings. It is now two months since the accident happened; general health good, and, by means of a gutta percha case, the boy is enabled to move about every day without injury to arm.

Treated by a new apparatus, or, rather,—a modification of an old one,—consisting of two splints, one long, which is immoveable and lies on the outside of the limb, fastened at right angles to a stout board, in which there are two transverse cuts, and on which the limb is laid—the short splint is placed on the inside. To the lower edge of this splint two wedge-shaped pieces of wood are fastened, which run in the two grooves cut in the stout bottom board. Extension and counter-extension are made and kept up as recommended by Desault, four small pegs in the bottom board retaining the moveable splint in its position. The advantage which this apparatus possesses over Desault's "long splint" is, that the fractured ends of the bone are kept much better in apposition, and the limb is prevented from rolling to the outer side; a small splint (if required) can readily be placed on the anterior surface of the thigh.

(No. 9.)—Bandages applied above and below the patella, and edges of fracture kept together by straps and buckles at either side of leg; the limb kept steady by the use of Liston's fracture apparatus.

(No. 10.)—There was so much laceration of the soft parts, and the bones being so much broken, it was doubtful whether an operation should take place or not. A consultation was held, when, after much deliberation, it was resolved to give him a chance. On the second day suppuration and sloughing came on; matter also formed around the ankle, which communicated with the joint; towards his death he showed symptoms of purulent absorption.

W. M.

(To be Continued.) (a)

(a) The next series will consist of cases of *Diseases of the Joints.*

PROGRESS OF MEDICAL SCIENCE.

BELGIUM.

ACADEMY OF MEDICINE.

DISCUSSION ON CHOLERA.

M. Lombard read an account of the symptoms of cholera as they occurred during the late epidemic at Liege, with the treatment generally pursued by the medical men of that town. M. Didot presented some statistical details on the disease as occurring in the same place. From the 13th of December, 1848, to the 16th February, 1849, 652 cases occurred; of which number 180 recovered, 424 died, and 48 remained under treatment.

The population of Liege is 78,502. The mean annual mortality during ten years—1838 to 1847—has been 2,160 6-10.

The number of deaths from the 13th of December, 1848, to the 21st of February, 1849, was 937. But if, of these, we allow one-third to the six summer months, and two-thirds to the six winter months, we shall have 723 deaths for the first period, and 1,446 for the second, or, in winter, 8 daily.

During the prevalence of cholera, according to the data given, there were in all 937 deaths in seventy-one days, or thirteen daily.

Hence, during the disease, deaths were increased by five daily.

M. Spring gave an account of his investigations of the causes of cholera, by which he had arrived at the conclusion, that, although it was impossible to determine these causes by direct observation, he had adopted a plan which might lead to a result, if not absolutely conclusive, at least probable. He has carefully examined all the works published on the subject in the East Indies, Russia, France, Germany, and England, and, in the course of his reading, had taken notes of all the most striking facts relating to the rise and progress of the disease. He had attempted to apply to these facts the numerous hypotheses formed of the complaint, and, as it appeared to him that none of these, with the exception of one, were satisfactory. That one was the hypothesis of animate miasmata, which, whether of animals or plants, were disseminated in the form of ova through the atmosphere, and introduced into the human body.

The theory was contested by several members, more especially by M. Labeau, who regarded it as an ingenious but wild hypothesis, which led to no result.

A discussion was also incidentally introduced between the homœopathists, represented by M. Carlier, and the allopathists, whose cause was espoused by M. Lombard, who insisted, that if the Govern-

ment continued to sanction the doctrines of Hannemann it was bound to suppress the faculties of medicine in the Universities, and to put an end to examinations. He was surprised that the Academy did not insist upon the Government declaring whether there were or were not a recognised system of medicine in Belgium.

M. Carlier replied, that he desired nothing more than that homœopathy should be submitted to a jury of unprejudiced men. He maintained that it was established, and a truth; and he was about to enter into a demonstration of his assertion, when he was interrupted by the Chairman, who reminded the members that the subject for discussion was Cholera and not homœopathy.

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THE MEDICAL TIMES.

SATURDAY, APRIL 28, 1849.

OLD associations are mingled with the names of St. Bartholomew's and Guy's. Pott, Cline, Abernethy, Cooper, and a host as famous, have passed away; but the glory of their renown still hangs over the courts which, as pupils, they graced,—the Chairs that, in their maturer age, they honoured.

University College has no past reminiscences on which it can repose. Its unfurnished walls were reared but yesterday; its incorporation is an act of to-day. Doubtless, it can refer to men of everlasting name who have filled its chairs,—Bell, Turner, Conolly, and Carswell; but they were the offspring of other halls,—they were educated in the far North,—and Edinburgh can but exult when she remembers, that it was she who lent them to our proud capital, and rejoice in the thought that, ere one of the greatest of them had finished his distinguished career, she was able to summons him to fill a chair in that home which he might really call his own.

Unlike the older Medical Institutions, University College is not the growth of years; it sprang at once into life and maturity; it may be said to have been famous on the day of its birth. To maintain its position, to vindicate the *system* of its teaching, and to prove that students learn in its theatres something more than to reflect the ideas, however brilliant, of its Professors,—that they are taught, what ought to be one chief aim of all teaching, to be observers, to think and see for themselves, to pass the Rubicon which stays their progress beyond the dogmas of authority,—it is necessary for the College to produce men at least equal to those educated in Institutions, the foundations and the traditions of which are laid in ages past. Bound by the principle to seek for the most able man, wherever educated, to fill each chair as it becomes vacant, the Council of the College have, in the majority of cases, exercised this most important of their functions with judgment and impartiality, and have thus maintained a succession of teachers unsurpassed, if equalled, by any school in Europe, and are able to point to their Chairs, as at the present moment filled by men whose reputations at least rival those of their great predecessors.

There is a question, then, which naturally arises, we might say, forces itself on our attention,—and, only anxious for the interests of a College to which, in common with the whole Profession, we owe so much for the impetus it has given to Medical education, we may ask, without fear of the imputation of unworthy motives, How comes it that only one pupil of the College has ever filled a Chair within its walls? Has it failed to produce more than one able man? Or is it, that, anxious to shun Scylla, the Council have fallen into Charybdis? that, desirous to avoid showing favour to their own offspring, they have afforded another example of the truth of the saying, "A man has no honour in his own country"? We own that the answer, whichever it be, and we can suggest no third, must act injuriously to the interests of the Institution. Students and their guardians will seek for that school which *completely* developes the faculties, and which, at least, regards its scions with no harsh frown. A doubt if the school in Gower-street is the most fitted for their purpose, will be pressed on their consideration, if the future acts of the Council are such as to lead men to believe, that the posts of honour and emolument in University College are more eligible to Professors taught in the North, the East, or the West, than to those who have been educated within its walls.

Our attention has been called to this subject by the resignation of his Chair by the Professor of the Principles and Practice of Medicine, who has, during the last ten years, filled its duties with honour to himself and benefit to his class. Yet we cannot help thinking, that although his theories might have been less splendid, they would have been more sound; the temples of fancy which he erected less glittering, but more substantial; his own fame, if not so widely spread, more lasting, and the permanent benefit to his hearers greater, if he had followed more strictly the rules of Induction, and had less frequently "anticipated Nature."

Report has already assigned the vacant post to one who, from an early period of his career, has been associated with the College; and as no pupil of their own training, so far as we can scan the horizon, is to be seen, capable of discharging efficiently the duties of the Chair—for the Council must elevate a man able to reflect honour on the seat he occupies—we honestly believe, that if the gentleman to whom we refer be elected, the choice will be as advantageous to the Class of Medicine as it will be creditable to the Council.

We trust, however, that body will seriously reflect on the injury they must inflict on the College, if they continue to make the practical assertion that, since their theatres were opened—now more than twenty years—they have failed to educate, with a single great exception, a man able to fill a Chair in the Institution over the destiny of which they preside. So deeply impressed are we with the conviction of the importance of the practical answer they must give to our questions, that we confidently affirm, if they cannot find among their own scions men to fill worthily the Chairs which it seems during the next six months must become vacant, it may be written of University College, as it was of the mighty Babylonian Prince,—and the Council will have the satisfaction of reflecting that their own hand traced the decree that has gone out against it,—"MENE, MENE, TEKEL UPHARSIN;" THE DAYS OF THY RULE ARE NUMBERED. THOU ART WEIGHED IN THE BALANCE AND ART FOUND WANTING.

THE STANDING ARMY OF THE POOR.

THE Relief of the Poor is one of the most momentous social questions of the day. There are, in this country, a great number of persons who derive their entire support from the funds of the State; a still greater number receive, from the Poor-rates, occasional assistance. In prosperous times these latter persons manage, with difficulty, to obtain for themselves the mere necessaries of life; in adverse times, when trade is bad and provisions are dear, were it not for the national provision which is made for them, they would starve.

Not only these classes, but many individuals who receive no pecuniary assistance, almost invariably have recourse to national charity for Medical aid in times of sickness. The scanty income which barely feeds them, clothes them, and provides them shelter from the storms of heaven, is quite inadequate to pay for the cares of Science, and for the remedies which are necessary in disease.

To answer these various claims, and to supply food, clothing, and medical aid to those who are unable to procure them for themselves, every man in this kingdom, who is able to do so, contributes his share. Every contributor, therefore, has a direct interest in knowing how his money has been expended; and all are justified in demanding to be satisfied that it has been put to its proper purpose. But, apart from this commercial view of the case, can any citizen, can any Christian, consider this immense multitude,—this Standing Army of Poor, this unfortunate class who are born to poverty, and, for the most part, to life-long companionship with sorrow and want,—without feeling an earnest desire to know if everything is done for them which the State contemplated when, under the guidance of some of the greatest Statesmen we have ever seen, it first made provision for its poor? The nature of the late trial at the Old Bailey is well calculated to stimulate this desire, and to make the most inert among us doubt whether there is not some vital defect in the administration of our Poor-law.

A terrible disease, during the last two years, was steadily approaching our shores; its invasion was foreseen; Medical Science hastened to point out the human appliances which might best oppose it, and to inculcate a knowledge of the remediable symptoms which mark its onset; and yet, when a tragedy like that of Tooting occurs, we find that these instructions and these warnings have been totally neglected, and that the labours of Sanitary Commissioners and of Colleges of Physicians have shared the same fate as the truths which Wisdom cried aloud in the streets, and which no man regarded. And when, roused by the greatness of the sacrifice, the Nation seeks to punish the abettors of a frightful catastrophe, by which more than 100 lives have been sacrificed, it finds the responsibility shared by so many persons, that it knows not on whom to pour the vial of its wrath. Let the nation, then, consider how this arises; let it more attentively examine the machinery by which it seeks to administer to the wants of its poor; and let it determine whether the existing law stand not in need of immediate and effectual reformation.

Let us consider our Poor as a body of soldiers living on the State. We desire that this army shall be well attended to; that it shall be arranged in order and discipline; that its commissariat shall be supplied; its hospitals organised; its generals competent and alert; its subordinates zealous, interested, well-trained, and obedient. So the wants of every section and of every man will best receive prompt and sufficient attention, and with the smallest outlay of money and labour, the vast organisation will fulfil its object.

But our pauper multitude is a mob without order or array; its officers are like a household divided against itself. There is bitter feud between the Union Surgeons and the Guardians, —covert war between the Guardians and the Commissioners,—undying hatred between the men in the ranks and the officials who rule them. When disease and want, their fell antagonists, make a successful sally on this defenceless host, its outposts are found unguarded, its entrenchments leveled, and its discipline undermined by secret discontent. Then follow loud recriminations, and mutual accusations of incompetency; the Commissioners accuse the Guardians,—the Guardians the Surgeons,—the Surgeons retort on both,—until all parties agree to concentrate their fire on some such man as Drouet, whose fate it is to be made the expiating victim of the system. Meanwhile, the noise of the quarrel almost stifles the lamentations, which mount towards Heaven, from the maimed and the dying.

Is there no remedy for this? Are we ever to behold this struggling multitude suffering from evils which science can obviate, and dying from causes which have been amply proved to be removable? Are we still to see the men to whom the nation has delegated its authority, stand by and witness the slaughter, then bury their dead, and straightway forget that there are yet lives to be lost, and unsparing enemies in hot pursuit.

There are many sides to this question; for the present we will pursue the one which concerns us most nearly. Two things are aimed at by the Poor-laws,—relief of poverty, and relief of sickness. Between these two objects it is necessary to draw a broad distinction. There is no necessary connexion between them; there is no further relation than arises from the fact, that those who receive pecuniary aid from the parish are among those who require also the assistance of the parish Surgeon. Relief of poverty is, probably, best administered by the Local Boards, who collect the funds of the district, and who can best inquire into and relieve the cases of urgent distress. But the relief of sickness can be accomplished only through the medium of the Medical Profession; and it can be accomplished, even by them, only with the aid of infinitely better machinery than that under which they now serve. There never was a greater mistake than to suppose, that the persons who were best fitted for relieving poverty were also the best fitted for organising medical relief. The results to which it has led are familiar to all our readers.

If we might venture to indicate the best method of remedying this defect, we would speak to the Government in this wise:— "Abandon," we would say, "your system of making the Boards of Guardians the guardians of health; abolish that unnatural union which has placed the Doctors of the Poor under the control of worse than incompetent Boards, and which has given the life and health of the defenceless pauper into the hands of the lowest contractor. Combine into one compact phalanx your force for the relief of sickness; give to it no local leaders,—permit to it no private restraints,—but marshal it under the order of the State itself. Let the State determine each man's duties and adjust his remuneration. Give to your supreme Board ample powers of supervision and inspection. Endow it with authority to inquire into all points connected with the public health, and to make provision for every contingency. Seek to prevent sickness as well as to cure it; and that it may do this efficiently, let the most distinguished members of the Profession be called on for aid. And if you will abandon your system of compromise, by which the new is ever partially neutralised by the old, and forget that there are Guardians and Poor-rates in remembering that there are diseases and sufferers, you will be able ere long to shackle those foes which now empoison the poor man's life,—ill health and premature old age."

THE RIGHTS OF NAVAL ASSISTANT-SURGEONS.

We are this week particularly led again to notice the cause of the Assistant-Surgeons of the Navy, from having received a most able pamphlet on the subject, and also from a recent melancholy occurrence, the suicide of one of that injured class.

The title of the pamphlet to which we refer is: "An Exposition of the Case of the Assistant-Surgeons of the Royal Navy. By a Naval Medical Officer." Written in a most temperate yet convincing manner, and giving due consideration to the objections raised, it shows the absolute right Naval Assistant-Surgeons have to the privileges they demand, and at the same time exposes the futility of the arguments used by their opponents, and the strong tincturing of untruth with which those arguments have been garnished. Surely the talented and respected Writer of the pamphlet,—of whom we think we have some knowledge,—need not have flinched from appending his name to it for fear of the consequences, seeing that he is but engaged on the side of right, and in the cause of justice. Had he more reason to fear the indignation of the Lords of the Admiralty than the high and noble-spirited Colonel Wright, who has so recently, by his just rebuke of their conduct towards him, inflicted on them a wound under which they are still smarting? Certainly not. But, leaving the Author, we must now turn to his "Exposition," than which we cannot have a better and safer guide in our comments. That the condition of the Assistant-Surgeons in the Navy is radically bad; that it is generally felt to be derogatory to members of a learned Profession, and inimical to their comforts as individuals, cannot be more strikingly displayed than by the often-noticed fact, vouched for even by the Director-General, that there is a deficient supply of candidates for the Naval Medical Service. But this deficiency entails a far greater evil,—the inefficiency of the service itself; a circumstance which has long been felt, in different degrees, and, while its cause has been discerned, has been to the present unremoved.

The chief grievance affecting Naval Assistant-Surgeons is, the denial of ward-room privileges: it is this grievance that paralyzes the utility of the Naval Medical Service, and deprives it of its popularity. The removal of such a grievance has been imperative ever since the Admiralty perceived the necessity of securing the services of educated professional gentlemen to maintain the efficiency of the Medical Department of the Navy. So long as Assistant-Surgeons, or, as they used to be called, Surgeons' Mates, were recruited from the ranks of uneducated apothecaries' shopmen or sick-berth attendants, the question of rank and of ward-room privileges required not to be mooted. But when a superior order of Assistants was desired, when high qualifications for the office were rendered imperative, then those questions had need to be considered, in order to induce surgeons to join the service. Hence, in 1805, the Board of Admiralty resolved, "as an adoption of great advantage to His Majesty's Naval service, that the said Naval Medical Officers should have the same rank with the officers of the same class in His Majesty's land forces."

This "adoption of great advantage" to the Naval service, has, unfortunately, however, never been but partially carried out. Naval Medical Officers have, indeed, nominally acquired their rank, but are *actually* "a step *beneath* that of their brethren in the Army, and this, too, in what is called the 'Senior Service,' which confers upon its executives a step in rank *above* that of their Army brethren;" and what is still more revolting, Naval Assistant-Surgeons are left in the cockpit with the youthful midshipmen, clerks, &c., where their predecessors in office, the extinct Surgeons' Mates, used also to find their abode.

To depict the condition of the Assistant-Surgeons in the Navy, associated in the cock-

pit with boys just let loose from school, retaining all their wonted love of frolic; denied the use of a cabin for retirement and study; shut out from the ward-room, and the company of his equals by age and education; branded as an inferior by the anomalous rules of the Admiralty, even in cases where, by lawful rank, and still more by his status in society and education, he is a superior;—to draw a picture, we say, of such a state of things, is unnecessary, since so life-like a delineation has been given by Captain Basil Hall, in his "Fragments of Voyages."

To refer, however, to some of the anomalies of the station of the Assistant-Surgeon. If, perchance, an Army Assistant-Surgeon be on board, the ward-room and its advantages belong at once to him; or, "what is even still more bitterly absurd, a Naval Assistant-Surgeon, if ordered to do duty with the marines, and, *with them*, embark in a man-of-war, becomes entitled to the ward-room, if only of one day's standing in the service; while his brother officer, employed in the medical duties of the ship, can hope for nothing more than the cockpit, although he may have been twenty years in the service."

Again, the Naval Assistant-Surgeon is equal in rank to the first lieutenant, and superior to the second lieutenant of marines; yet the two latter officers get ward-room privileges, whilst the first is deprived of them.

To explain these anomalies we deem impossible; but we will endeavour to convey to our readers the objections of various representatives of the Admiralty and others to receiving the Assistant-Surgeons of the Navy into the ward-rooms, and at the same time to reply to them.

The first is, "Injury to the service by putting Assistant-Surgeons over the heads of the mates, who are said to be their superior officers." (?) What force this objection possesses will at once appear when we state, that, by Admiralty regulations, mates, like Assistant-Surgeons, rank with lieutenants in the Army; and that the rank of the latter was conferred between forty and fifty years before it was extended to the former. Again, mates are promoted from midshipmen after four years' instruction and service as such, and, "on an average, do not remain unpromoted more than two years; so that they leave the midshipmen's berth at the age of twenty-one, the very age at which the Assistant-Surgeon enters it, with little prospect of getting out of it before he is nearly, if not above, thirty years old," seeing that nine years and a half, on an average, elapse before he gets his promotion.

A second objection is, "want of room on shipboard, especially in small brigs, for the cabin of an Assistant-Surgeon." An objection which is at once met by the fact, that, long after the boon of a cabin had been sought after for the officer named, and refused from want of room, cabins were provided on the institution of those modern classes of officers, for naval instructors, engineers, and inspectors of machinery. Moreover, under Lord Haddington's management, an additional lieutenant was appointed to every ship of war; but, under the late Lord Auckland, this additional lieutenant was withdrawn, and thus a cabin became vacant. The writer of the pamphlet further shows, that the cabin of the captain's steward might, with actual advantage, be removed from its present position, and so leave a place for the Assistant-Surgeon.

The necessity for increase of pay, to defray the expenses attendant on messing in the ward-room, is an assertion which must be knowingly urged in spite of facts contradicting it; for the Assistant Surgeon has more pay than two of the Ward-room Officers, and an average of about the same as two others.

The last objection is, "that, besides Mates, half-a-dozen other officers would claim ward-room accommodation and privileges, in the event of their being granted to the Assistant-Surgeons." Except, indeed, the Mates who, by ranking as Lieutenants, are therefore equal to the Lieutenants of Marines, there are no officers in the Midshipmen's berth who could set up any pretence for the extension of the privilege to them.

So much, then, for the futile objections to the admission of Naval Assistant-Surgeons to their rightful standing and privileges. How the governing body of the Admiralty, cognizant of the facts which we have detailed, and feeling also necessarily the want of any soundness in the objections they urge, can nevertheless resist the just demands of the oppressed Assistant-Surgeons, we cannot divine. But, if they will shut their eyes to their own knowledge and common sense, it seems yet more marvellous that they can so lose sight of the interests of the service they superintend, as to persevere in those regulations respecting Assistant-Surgeons, so clearly destructive to its efficiency; that they can, when questioned in Parliament, adduce their fallacious arguments to uphold their system of injustice; and that they can resist the representations and recommendations of their own office-bearer, the Director-General, and of the several Colleges which have petitioned for a removal of the grievances complained of.

We are glad, indeed, to see the Royal Colleges of Surgeons of England, Scotland, and Ireland, unanimous in their condemnation of the present baneful system, petitioning Parliament to interpose for its redress; and we do hope that, during this Session, the Members of the House will be led to give an attentive ear to the statements made, and not be diverted from them by any of the vain objections which have heretofore been raised.

We observed, on commencing this article, that the melancholy event of the suicide of a Naval Assistant-Surgeon had furnished an additional reason for bringing forward the cause of that class. This is the second event of a like kind, which has come before the public; nor can it be wondered at, that such heart-rending occurrences should transpire among a class of officers so ungenerously and unjustly treated; doomed for many long years to await promotion in the midst of these hardships. The privileges demanded, we may observe, lastly, are no other than have been enjoyed by the Assistants in the Medical Service of the United States Navy all along, and in that of the French Navy for many years.

MEDICAL JURISPRUDENCE.

We have sometimes thought that, were we to devote a few editorial Articles to those subjects which afford a common ground to the Members of the Medical and Legal Professions, it might not prove unacceptable, either to the professional or to the general reader of our pages. We do not now refer to those points in which Jurisprudence, always doubtless with the kindest intentions, lays down the law for the guidance of her sister Medicine, but to those in which she requires her assistance to enable her to accomplish her great end of doing right between man and man. Subjects of the former class it has been, and will be, almost our weekly duty to notice, for legislative measures and judicial decisions which may affect the status of Medical Practitioners are being, especially in these times, objects of immediate and pressing interest. Not, however, of less real importance, perhaps, to the philosophic mind, of more permanent interest, are the latter class of topics to which we have adverted.

We have, it is true, many works on Forensic Medicine, some of much value. But, it appears to us, that they are for the most part calculated to be useful to the legal, rather than to the Medical Profession. They are frequently occupied with medical details, which, however interesting or novel to the legal Practitioner, are less so to the student of Medicine, who has access to other and fuller sources of information in works of an exclusively medical character. Our object, on the other hand, would be to supply the medical reader with a species of information which is to be obtained in great measures from works to which he either has not access, or which, from want of some degree of previous training as to their use, he could not successfully consult, without an unnecessary expenditure of labour and time.

Our notion of the way in which we should like to set about such an undertaking would be, not to crowd our pages with a profusion of technical details, nor our margin with a heap of references to Co. Litt., Shep. Touch. Stat. this, Cap. that, and Sect. the other, or any of those mysterious contradictions so dear to the eye of the lawyer; but, which would be about as edifying to the disciples of Galen as the mystic symbols that surround *their* bottles and jars would be to the votaries of John Doe and Richard Roe. Yet, though we should not always give chapter and verse, we should yet feel bound to *have* chapter and verse for every assertion we might make. Our student readers will acknowledge, that some acquaintance with the laws of his country, and especially of those which are in any way connected with his own pursuits, should form a part of the education of every gentleman; while readers of more matured experience might find it not uninteresting to contemplate their own science, as it were, *ab externo*, and to know what ideas were entertained respecting it by the members of a Profession which has produced abundance of profound thinkers, close reasoners, and hard-headed practical men. We fancy, too, that if we found ourselves—our subject, we mean—getting dry, we could occasionally disinter a good story from its grave in those folios which,

black and dismal as they look, were penned in the merry days when

> The brave Lord-Keeper led the brawls,
> The seals and maces danced before him.

Whether, and to what extent, our plan may be carried out will depend upon circumstances. At any rate, we have broached the subject, and that, if Horace be right, is the "*Dimidium facti.*"

THE SWINEY PRIZE FOR JURISPRUDENCE.

[From a Correspondent.]

No doubt most of our readers were struck with the announcement, made a few weeks since in our column of News, that a Prize of 100 guineas was awarded to Dr. Paris and Mr. Fonblanque, for their joint work on Medical Jurisprudence. They would be surprised no less by the fact, that, previous to this decision, the existence of such a reward had not so much as been heard of. And as there may still be some benighted individuals, on whom the knowledge of the object and character of the Swiney Prize, and of the circumstances of its distribution has not yet dawned, we think it advisable to make the following statement of facts, accompanied with a few comments. And we are the more induced to do so, if perchance we may be, in any degree, instrumental in effecting a reform in the future administration of the founder's bequests.

In the first place, therefore, we have to enlighten our readers as to the character and object of the prize for Jurisprudence; and, in order to this, we cannot do better than quote the terms of the bequest. In the original will of Dr. Swiney, we read:—"I leave 5,000*l.* stock, in the same Three per Cent. Consolidated Fund, to the Society for the Encouragement of Arts, &c., in trust, to apply the dividends therefrom arising, to the following purposes, viz.: That they do, on the fifth anniversary of my decease, and on every fifth anniversary of the same afterwards, for ever, present to that agriculturist, being a leaseholder in England, Wales, or Scotland, who shall, during the five years preceding the day of presentation, have brought into arable cultivation the greatest quantity of waste land, a silver goblet of the value of 100 pounds, containing gold coin to the same amount; and that they do apply the remainder of the dividends therefrom arising to the general purposes of that Institution." As in the case of the Lectureship, so here with the Prize, the object was changed by the codicil subsequently appended; the latter directing the proceeds from the 5,000*l.* stock, in trust to the Society of Arts, "for the purpose of presenting, at similar periods, a similar prize, to the Author of the best published work on Jurisprudence, to be adjudged by the members themselves, and the Fellows of the College of Physicians, with the wives of such of both as may be married, for ever,"—the surplus to be applied as before directed.

The pervading absurdity of these provisions needs no proof. The idea of placing the disposal of the prize in the hands of so many hundred individuals as are embraced in the two Institutions named, would not enter the brain of one with an ordinary amount of common sense and of powers of reflection. To call upon several hundred gentlemen to act as arbiters of his will in this respect, would not suffice the eccentric founder; but he must, in addition, enlist the services of their wives, and thus pay the latter,—for so it might appear, to his odd mind, a compliment on their legal and medico-legal knowledge and judgment. We fear, however, that this compliment was altogether lost upon the fair sex on the first award, as their opinion, most unfairly, seems not to have been solicited.

Such a complicated machinery for adjudging the prize must necessarily fail in its object; and, therefore, some modification of it must be made, in order to the carrying out of the testator's design hereafter. What was done, and how it was done, we shall see. But, at present, a few words are wanting respecting the object of the prize.

The Will directs, that the 100 sovereigns, in the 100*l.* silver goblet, be given to the Author of the best published work on Jurisprudence; no special division of the science is directly indicated. If a particular division were intended by the founder, and if we might in any way draw an inference from the provisions of the Will as to the intent, from the clause vesting the decision of the prize with the Fellows of the College of Physicians, we should presume that Medical Jurisprudence was the subject more particularly contemplated; and to the branch of Jurisprudence just named, the first prize, which recently became due, was dedicated; but there is no official notice that such will be the subject of its next award: we, indeed, apprehend that a cycle of legal topics will be adopted, and that the appointed judges will have presented to them, in turn, every department of Jurisprudence.

We have now, we think, a knowledge of the object and character of the prize,—what were the circumstancaes of its recent award? The prize was to be given to the author of the best Treatise on Jurisprudence, which surely means the best at the present time. As the time approached, therefore, for the decision, it behoved the various members of the Society of Arts, and the several Fellows of the College of Physicians, "with the wives of such of both as may be married," to busy themselves in conning the pages of the existing Treatises on Jurisprudence, however dry, abstruse, and technical, in order to arrive at a just value of their comparative merits. To the testator's mind, what pleasure must have resulted as he sketched out this magnificent design, and, in his gorgeous imagination, contemplated the picture of so many learned and honourable lords, ladies, and gentlemen, all busily occupied with its carrying out, thumbing the sundry tomes, and cogitating deeply on the manner in which the principles and practice of the law are discussed by the authors! But to a less lofty imagination, we fear the picture will not be so readily realized; that its details will appear impracticable. The appreciation of such impracticability would, therefore, be a sufficient excuse and motive to depart from the literal observance of the provisions instituted. And perhaps the plan which would seem best to the many adjudicators, would be, the appointment of a Committee for each corporate body concerned; a Committee representing the interest of every individual invested with the right of judging in the case, and elected by such persons out of their number; however, supposing Medical Jurisprudence to be the subject chosen, the opinion of the Committee of the College of Physicians should certainly be deferred to.

But in what manner have the directions of the bequest been fulfilled? This question we must answer by an appeal to facts. That the prize was to be an object of competition, is implied in the direction, that it should be given for the *best* work. Hence we should have naturally supposed, that such an object of competition would have been made public as long before the time of award as possible. Was this not done? No, the object and character of the Prize remained a secret with a few; no public advertisement appeared—no Report. On the 20th of January, 1849, five years had elapsed since Dr. Swiney's death; and the time for the adjudication of the Prize occurred. It was not, however, till July, 1848, that a Committee of three Members of the Society of Arts was formed, and not till October that a communication was entered into with the College of Physicians, and three of its Fellows constituted into a Committee. A Report to the Society of Arts was made on the 17th of January, 1849, coming, we suppose, from the College of Physicians, recommending the work of Dr. Paris and Mr. Fonblanque,—a recommendation which the Committee of the Society approved; and the close of this said eventful history was, that on the 20th of January, Mr. Tooke in the chair, the Swiney Prize was presented.

But what objection can be raised against the acting Committee? Only, in the first place, that neither the Members of the Society of Arts generally, nor the Fellows of the Royal College of Physicians, had any share in the appointment of such Committee; they were not consulted as to their will in the matter; the circumstances and time of the award were shrouded in darkness from them. A few active Members of the Society of Arts took the onus of managing the entire matter on themselves, by appointing the Committee of three; and, in the case of the College of Physicians, the matter was treated even more simply, the President himself, Dr. Paris, nominated three of his co-functionaries of the College to act: with them the decision rested, the Society's Committee agreeing to be guided by it.

Such a selection from the number of their brethren, many of whom were, unlike themselves, well known as having an acquaintance with Forensic Medicine, and some having in earlier life lectured, although not written, on the subject, was probably deemed some little honour, or mark of esteem, conferred on them by their friend the President; such a supposition being favoured by the result, for these three so distinguished Fellows could find no other Work on Medical Jurisprudence—perhaps owing to their not having seen another—than that produced twenty-five years ago, by Dr. Paris, their august President, jointly with Mr. Fonblanque, a Commissioner of the Court of Bankruptcy, &c.

This decision of the Judges may tempt some of our readers to search out, from the upper shelves of their libraries, any lurking copy of Paris and Fonblanque's Medical Jurisprudence, to restore it to the line of works now in use, or, if not content with the decision to examine into its rectitude. But, perhaps, by stating a few facts, we may rescue our readers from such research.

The book in question was published in 1823, and has necessarily no notice of many recent and most important improvements in the practical teachings of Medical Jurisprudence,—such as Marsh's and Reinsh's tests, theoretical precepts, &c., &c. and, what is of still higher moment, perhaps to Medical men in a court of law, no record of many recent enactments bearing on the science.

Yet such has been pronounced by the learned adjudicators to be the best work on Medical Jurisprudence—the best, that is, at the present day, in this, or in any other country, for there is no clause limiting the choice to British works. It is not only a fair assumption, that the best book published at the time of award is to be selected, but the wording of the will supports the supposition; for, according to the original plan, the goblet and coin were to be given to the leaseholder, who shall, *during the five years preceding the day of presentation,* have brought

the greatest quantity of waste ground into cultivation. Now, the clause relating to the form of the prize has been assumed as applying also to the codicil, not being formally revoked. Is there not reason, then, for extending the one specifying a certain interval for the performance of the object of the Prize? This question seems to us open to discussion.

The best work on Medical Jurisprudence having, by a mysterious process, been discovered, correspondents need no longer question us on the point, but at once procure the Prize-book; and to purchase it, will be the especial duty of the candidate for admission among the *élite* of the College of Physicians.

If the decision be just, vain have been the labours of Christison, Taylor, and Guy, in Britain, of Beck in America, of Orfila and others in France, in endeavouring to advance the knowledge of Medical Jurisprudence. And yet the Committees are so smitten with the beauties of Justice, as administered by themselves, that they must figure the goddess upon the silver goblet; and, lest a fitting figure should be wanting, a prize is offered to excite artists to competition. The expedient, however, fails; for how to exhibit justice in accordance with the circumstances of the award has apparently puzzled the artists, since none have been lured by the golden bait, and the Arts Committee are driven to call upon Mr. Wyon to try his hand. Whether and how the latter expedient will succeed remains to be proved. The balance, certainly, cannot be represented equipoised; some evil sprites must be seen playing their gambols at one end of the beam, unnoticed by the blindfolded arbitress; or a *three-volume book* must be seen physically outweighing *a single* volume.

The artistic goblet is, then, yet to be presented; and no doubt the anniversary meeting of the Society of Arts will be the opportune time for that purpose, when the Prince Patron of the Society shall occupy the chair, and be the prize distributor. The fortunate possessors of the goblet and its coin will enjoy a passing *eclât*; but to the discerning and the reflecting in the Medical Profession, no honour will be seen to have descended on their heads. We here suppose the prize to be conferred by the Prince; but surely, could the real circumstances of the case reach his ears, that anticipated honour of receiving it from him would be wanting.

DISSECTIONS OF EVIDENCE

TAKEN BEFORE THE SPECIAL COMMITTEE OF THE HOUSE OF COMMONS, SESSION 1848.

TO THE GENERAL PRACTITIONERS OF MEDICINE.

GENTLEMEN,—Observing with a vigilant eye each successive aspect and shade of professional opinion in reference to the "Medical question," I have been disappointed in not discovering some new element or unexpected combination that might quicken our interest, and cause us to review our old arguments, and dig round the roots of our faith. I except from this general statement the incomprehensible policy of the University of London; if policy that can be called which has neither shape nor dimensions, light, shade, nor colour, beginning, middle, nor end; that looms before us with a vague shadowy indistinctness, like the marvellous giant of the Harts mountain, that still flies from us the nearer we approach, and mocks our curiosity the more, the more ardently it burns. Leaving for a while the London University, and, I dare say, it will be quite happy to be let alone, and permitted to fold itself up in that dignified retirement whence it laments ever having been tempted to extrude its head, let us cursorily glance at the evidence presented by certain individuals styling themselves the representatives of the Members of the College of Surgeons, and deputed by an Association said to hold its meetings at the Freemasons' Tavern.

I do not think, gentlemen, that you are likely to forget, or the men themselves likely to pardon, the bold and unequivocal manner in which this fictitious Society was dissected, exposed, and punished in former articles published in this Journal. The hand that writes these lines proved then, beyond the possibility or the audacity of a denial, that no such Association ever existed, that the assumption was a gross and barefaced imposture, and deserved the reprobation and contempt of all honest men. Those articles crushed the creature at that time, but worms and reptiles cannot be killed. You may cut, scarify, and mutilate them how you please; you may sever them joint from joint, yet each separate member will retain its vitality, if only by its contortions, to exhibit the agony it endures. I am tired of the duty of flaying hardened offenders. The hand is raised with reluctance, and falls with disgust. But I loathe fraud, and my detestation of the crime must be permitted to outweigh my scorn for the criminal. I had hoped that my work in respect to these men had been concluded, when they retired two or three years ago from the public eye, but last year, in expectation, perhaps, of my indifference to their machinations, or presuming on the somewhat altered position of medical affairs, they again ventured to thrust themselves into notice, and to demand respect for pretensions which neither the confidence of the Profession nor their own talent, conduct, or station, qualified them to assert.

You may ask, Why assail men whom you profess to contemn? Because they are not equally well known to others as to myself, and because, also, they have had the hardihood to appear before a Committee of the House of Commons, and thus to urge their pretensions before another and more important tribunal. I am here, then, as counsel for the public, before whom it is my duty to state the case with impartiality and good faith.

I shall content myself with extracting the first twelve answers given to the Committee of the House by Mr. Ottley, who dubs himself Honorary Secretary to the Association. I do not select this gentleman's evidence because I think him the worst of the lot; on the contrary, I have always believed him to be the most judicious, respectable, and conscientious, of the fraternity, and, as a private individual, desire to treat him with respect. It is his official position that entitles him to my notice, as it must be assumed that, if any individual can be acquainted with the facts connected with the history of that conspiracy, the Secretary ought before all others.

Mr. Wakley puts a few leading questions, with the view of eliciting an explanation relative to the numbers and influence of the so-called Association, and thus goes on:—

"Mr. Wakley: How many are there belonging to that Committee?—About thirty; that is the Committee in London."

"Mr. Wakley: How many members are there *associated* for whom that Committee is the acting body?—*About* 1,200 *members*."

After ascertaining the objects of the Association, Mr. Wakley continues:—

"Mr. Wakley: What proceedings did you adopt with a view to obtain the successful accomplishment of these objects?—I may mention that the Association was formed in this way,—a number of the Members of the College of Surgeons felt dissatisfied with the course that medical legislation was taking, and especially with regard to the formation of a third incorporation, *and a requisition was sent up to Mr. Guthrie* to preside at a meeting of the Members of the College to be held in London. Mr. Guthrie had intimated his disposition to preside at such a meeting, if he could get a Requisition signed by 500 Members of the College. In a very short space of time, I do not remember exactly how long, 1,200 names were affixed to the Requisition. Our course of proceeding was influenced a good deal by the progress of the Bill before Parliament; we did not consider it right to call the Members from the country into London at a considerable inconvenience and expense to themselves, unless there should seem a necessity for it; and as the successive Medical Bills were from time to time postponed, and finally given up, *we, in fact, never had a general meeting of the body in London; the requisition was* NEVER *presented to Mr. Guthrie*, but the Members were addressed by the Committee, and those three propositions which I have mentioned, that of opposing the Medical Bills before Parliament, of opposing the formation of a third Incorporation, and of endeavouring to obtain for the Members of the College of Surgeons what we considered to be their rights in the College, were the principles upon which the Association was formed."

Mr. Wakley: "In fact, in conducting *your preliminary proceedings*, you may be said *to have accomplished one of your chief objects, that was, the defeat of the Bill before Parliament?*—Yes."

In reply to a question whether the Surgeons of England still retained their opinions—

Mr. Ottley replied, that he believed they did, but that "some few, despairing of obtaining those objects which we seek in the College of Surgeons, have, I see, signed a Petition to Parliament in favour of the measure now proposed by the Joint Committee; but those appeared to be few in number, chiefly from Brighton."

Mr. Wakley: "Amounting to how many?—Perhaps *ten* or a *dozen*; I do not remember exactly."

Now, Gentlemen, the foregoing evidence comprises a tissue of contradictions, mistakes, and fabrications.

1st. I deny that there is *any* ASSOCIATION!

2nd. I deny that there is *any* COMMITTEE!

3rd. I deny that these individuals *defeated the Bill before Parliament!*

4th. I deny that the Brighton Petition, in favour of the principles, contained no more than *ten or a dozen* names of Members of the College of Surgeons.

5th. I deny that these persons were deputed to represent the opinions of the Surgeons of England by any Association meeting at the Freemason's Tavern.

To the proof. Mr Ottley says, that 1,200 persons signed a requisition to Mr. Guthrie to preside at a public meeting at the Freemasons' Tavern, *which meeting* WAS NEVER HELD! These gentlemen signed a requisition for a specific purpose, which was abortive. They never gave their sanction to any individual or body to enrol their names as members of an Association, and never agreed to pay a subscription to support one. Many of the gentlemen who signed the requisition were the friends of the National Institute, and never intended to form a Society to antagonise the labours of that body. The use, then, that has been made of their names was a dirty and scandalous trick, as dishonouring to the individuals who practised it as unfair to the D-

fession, and could have been intended only as a low cheat on the Legislature.

Mr. Ottley says that there were 1,200 signatures to the Requisition. Will Mr. Ottley show the document? Why was it not produced before the Special Committee? For my own part, making every allowance for the manner in which the requisition was got up, I wholly disbelieve the assertion, and probably could reveal a few things that would highly astound even Mr. Ottley. My strong suspicion, based on good testimony, is, that the document was a fabrication.

If there were 1,200 names of Surgeons to the Requisition, why did not Mr. Guthrie, who promised that he would be satisfied with 500, preside at the meeting? It is clear that Mr. Guthrie considered the persons to be the mere rump of the Surgical body, that he could not gain credit or influence by associating with them, and declined the questionable honour.

It is true, that Mr. Ottley says, that the Requisition was never presented to Mr. Guthrie, although a moment before he stated that "the Requisition was sent up" to that gentleman, and we may, therefore, presume that he did not literally and verbally decline to receive it; but we do not forget, that Mr. Guthrie addressed a letter to the National Institute in reference to the proposed meeting, and enunciated opinions not particularly complimentary to the judgment of the gentlemen who wished to slip under his gaberdine. Hence, according to Mr. Ottley, the Requisition was never presented, and the meeting never held.

One word of comment is necessary in respect to the statement that the meeting did not take place. Mr. Ottley would make the Special Committee believe, that the meeting was purposely revoked; whereas the literal fact is, that the individuals calling themselves a Committee actually *advertised* that a public meeting would take place at the Freemasons' Tavern on a certain day, and on that memorable occasion only twenty-seven persons, inclusive of members of the Committee, and of other gentlemen who attended from curiosity, were present. It is certainly an indication—and the only one in evidence—of modesty, not to call this a public meeting.

Well, then, gentlemen, we have proved, from the letter of the evidence itself, that there never was a regularly organised Association, and, of course, the conclusion that there never was a Committee is a direct consequence. There cannot be a Committee where there is no Association to commit, entrust, or delegate duties to an executive body. The Committee of what? Of an Association? No; of Messrs. A. and B. Mr. A. commits his duties to Mr. B., and Mr. B., as bound in courtesy, returns the compliment. What a farcical parody of public business! We could pardon it, but for the presumption of palming the imposition on the House of Commons. This knot of individuals was in the habit of hiring a room now and then at the Freemasons' Tavern, for which they collectively paid, I have been informed, five shillings. Whether or not a glass of brandy-and-water were called for by each Committeeman, as an encouragement to the house, my informant did not state. There were, according to the statement of Mr. Ottley, thirty members of the Committee, consequently, a subscription of *two-pence* each—an enormous sacrifice for the public good—procured them an evening's accommodation for the purpose of devising low intrigues and spouting pot-house rhetoric. How is it possible that any set of men could have the unblushing audacity to pretend for a single moment that these twopenny meetings in a tavern parlour expounded the views and wishes of an honourable and learned Profession? How much longer will they continue in the attempt to delude the public? Just so long as the public may be silly enough to treat presumption and deceit with forbearance.

The assertion that any body of men that never held a public meeting defeated a measure in Parliament is, of course, too absurd to merit notice. When the lion roars, all the beasts of the forest flee in trepidation to their lairs. Thus, when the Government introduced their measure, the lions of the Freemasons' Tavern did not even condescend to show themselves, either head or tail, or even a single hair of their whiskers;—they roared! and the Home Secretary and all the Ministers fled with precipitation. To believe this requires great faith.

The fourth misrepresentation refers to the numbers that signed the Brighton Petition in favour of the principles agreed to at the Conference. Mr. Ottley says ten or twelve; the truth is, that fifty-three signed the Petition, of whom upwards of thirty-six were Members of the College. I will not accuse Mr. Ottley of intentional falsification, but his whole evidence is of a very suspicious stamp, and highly qualified to damage any gentleman's character for veracity.

I think, gentlemen, that I have proved, incontrovertibly, that the individuals who met at the Freemason's Tavern were never formally deputed to represent the surgeons of England before the House of Commons, and that their evidence ought not to possess the slightest weight with the Legislature. Yet it is amusing to observe that, whilst only *one* gentleman,—himself, however, a host,—was called to give evidence in favour of the views of the Institute, *three* persons from among this faction regaled the Special Committee with their notions on Medical Reform, and were permitted to bespatter the Institute with all kinds of misrepresentation. We believe, however, that the trick was too transparent not to be seen through, and received what it merited,—the contempt of the Committee.

The members of the College have a holy cause, requiring great talent, resolution, and integrity for its successful conduct; and I hope that if, at any future time, they should think fit to move in defence of their rights, they will wipe off the contamination which an unfortunate advocacy has fixed upon their principles, and that they will select men for their leaders who will gain the confidence of the Profession, by an abhorrence of fraud and by a straightforward and frank dealing with all other parties who may either then or now be engaged in a similar enterprize. Honesty is the only policy that will stand the test of time and public opinion. Deception may win the success of an hour, candour will hold fast to the end.

I remain, Gentlemen,
Yours most faithfully,
V. V.

REVIEWS.

The Closing Years of Dean Swift's Life; with an Appendix containing several of his Poems hitherto unpublished, and some remarks on Stella. By W. R. Wilde, M.R.I.A., F.R.C.S., &c. Dublin: Hodges and Smith. 1849.

The first portion of this exceedingly interesting work originally appeared in the *Dublin Quarterly Journal of Medical Science*, when the question of Swift's presumed insanity was considered, and it was whilst engaged in collecting materials for that subject that the Author discovered many curious and hitherto unnoticed facts respecting the eccentric and learned Dean; and it is with a hope of assisting future biographers, and rescuing the character of Swift from some of the aspersions which have been so freely cast upon it, that these facts are laid before the public.

Mr. Wilde appears to have succeeded in his charitable office of proving, and that very clearly, that Swift was not insane. That he not only "expired a driveller and a fool," but lived a madman, is what the world generally believes; and this opinion Howitt has industriously circulated in his work on the "Homes and Haunts of the Poets." Fortunately, however, for the memory of Swift, the numerous mistakes in this work have been ably exposed in the pages of *Frazer's Magazine* for February, and in an elaborate criticism in the *Athenæum* for January, 1847. From the latter journal we may be allowed to quote Mrs. Southey's opinion as our own, who, in exposing the libeller of her talented husband, says, "*He being dead*, yet speaketh; and there are those who, in reviling a good name, bear testimony to its high deserving." Swift seems to have had a presentiment of such writers when he wrote:—

"Hated by fools, and fools to hate,
Be this my motto, and my fate."

The Author adduces many "*great facts*," to prove the non-insanity of Swift; amongst others, that when walking through Phœnix-park, Dublin, with Dr. Kingsbury, he remarked a new building which he had never seen, and asked what it was designed for. On being informed that it was intended for a magazine for arms and powder, for the security of the city, "Oh! oh!!" says the Dean, pulling out his pocket-book, "let me take an item of that. This is worth remarking, 'my tablets,' as Hamlet says, 'my tablets—memory put down that!" Which produced these lines, said to be the last he ever wrote:—

"Behold a proof of Irish sense;
Here Irish wit is seen!
When nothing's left that's worth defence,
We build a magazine."

How far this proves the insanity of Swift, the reader can judge. Again, Mr. Wilde informs us, that in a letter to Lord Orrery, from one of the attendants on the Dean, it is stated, that "he never yet talked nonsense, or said a foolish thing."

Mr. Wilde gives us a review of the various opinions respecting Swift's malady, and the causes that led to it. The work also teems with interesting records of distinguished medical contemporaries, and will repay the time spent on its perusal.

Prophylaxis; or, the Mode of Preventing Disease, by a due Appreciation of the grand elements of vitality—Light, Air, and Water; with Observations on Intramural Burials. By Edward Bascome, M.D.

This book is intended to form part of a work which will shortly appear under the title of "A History of Epidemic Pestilences, from the Earliest Ages to the Present Period."

The following extract will show our readers the admirable spirit in which the subject is treated by the Author:—"In concluding these our remarks on the three grand essentials to life, we would observe, that it is astonishing with what little amount of food a human being may live in health and strength (we, of course, allude to those who eat to live) when supplied in due proportion with the requisites for vitality, namely, Light, Air, and Water. Further, we would ask, what can be more monstrous in this enlightened age,—so outrageous of every principle of reason,—so contrary to daily experience and common sense, as 'the barring out the free fresh air, and the meting out to mortals of heaven's light,' by that blot on civilisation, the Window-tax,—a tax which originated in iniquity,—at a time, too, when so much is being agitated about sanitary measures. We neglect the first principles of vitality, to go groping into sewers and cess-pools, which, we repeat, are but secondary considerations, the ultimatum of which will prove to be but little better than the relief of the olfactories, to tickle the

gustatory nerves, by furnishing for our palates, in the shape of Thames-water, the filthy abominations of an overgrown city."

Every true advocate of Sanitary measures should make this Pamphlet his *vade-mecum* on the subject.

MEMOIR OF M. BLANDIN.

This celebrated Surgeon, so well known to the English Medical Profession, died in Paris last week at the age of fifty.

Philip Frederick Blandin was born 3rd December, 1798, at Aubigny, department of the Cher, where his father was Comptroller of Taxes. As the income of this situation was all the family had to depend on, the subject of this memoir received his elementary education from his mother, who appears to have been a female of high intellectual powers. He afterwards pursued his studies with great success at the College of Bourges, of which he was one of the principal *laureats*.

In 1816, when he had entered upon the seventeenth year of his age, he came to Paris to study medicine, but, after six months of the most assiduous application, the privations which he imposed upon himself in order that he should not be burthensome to his family, produced a serious attack of disease, which compelled him to return home to enjoy the benefits of his native air. After a season of rest, his health was restored, and he again returned to Paris and resumed his studies. The celebrated Roux, Beclard, and Marjolin were his instructors, who were greatly attached to their pupil, and a lasting friendship was the result.

From 1819 to 1841 he successively obtained by *concours* the prize of the Ecole Pratique, the offices of Interne, of Anatomical Assistant, of Prosector to the Faculty, of Surgeon to the Civil Hospitals; and finally he occupied the Chair of Practical Medicine after Richerand and Dupuytren. At the age of twenty-seven he was Surgeon to the Central Bureau; at thirty, Surgeon at the Hôpital Beaujon, and at the age of forty-two he appears to have arrived at the highest point of his Profession.

As a teacher, a Surgeon, and an Author, Blandin shone with the greatest splendour. In diagnosis he was correct, in operating cool and collected, in teaching he exhibited a clear and comprehensive knowledge of the various subjects which he discussed; and the numerous works which he has written will perpetuate his name as one of the most distinguished Surgeons of the nineteenth century.

In 1836, Blandin became a Member of the Academy of Medicine, and from this period we find him frequently taking a prominent part in the discussions of that illustrious Society.

A short time before his death he suffered from diarrhœa; and to recruit his health he left Paris for the country, in the hope that a few days' repose would be sufficient for this purpose. The hope, however, was vain. After his return to Paris, on the 11th of April, he was attacked with bronchitis, which was complicated with severe cerebral symptoms. In his delirium, his mind appeared to be running upon his wonted avocations. He frequently imagined himself at the *Hôtel Dieu*, surrounded by his pupils, and performing some important operation. He expired on Monday, the 16th of April. His remains were followed to the grave by a large number of his former *confrères*, pupils, and friends. After the termination of the religious service at the Cemetery, three orations were delivered; the first by M. Langier, the second by M. Isid. Bourdon, the third by M. Foissac.

ON THE TREATMENT OF STILL-BORN CHILDREN.

[To the Editor of the Medical Times.]

SIR,—Having perused a letter in your Journal of the 14th inst., signed "J. Ogden Fletcher," "On the Treatment of Still-born Children," from some portions of which I entirely dissent, I beg that you will favour me with the insertion of a few remarks on the subject.

With regard to the practice of the alternate application of warm and cold water in the treatment of children apparently born dead, I have nothing to say, save that it is a plan which is based on rational and physiological principles. On the important subject of ligaturing the funis before the complete birth of the child in breech and feet presentations, sometimes even before the pulsations have ceased, I have, however, a few words to say, because there appear to me to be several objections that might reasonably be urged against a practice which Mr. J. O. Fletcher advocates, and which he seems to have found so very successful.

1. Allow me, in the first place, to ask if children really do die from loss of blood in breech and feet presentations? The children which I have seen under these circumstances have certainly not presented to me the external appearances of loss of blood, but those of an opposite character. They generally appear as if asphyxiated, the countenance bloated, lips livid, as well as the face, and other signs of impeded circulation and consequent congestion.

2. In the second place, is it not questionable whether or nothæmorrhage can take place into the placenta in so great a degree as to endanger or cause the death of the child?

If we examine the anatomical relations of the vessels of the cord, we shall find that it consists of one vein and two arteries—the arteries twisting round the vein in such a manner as to protect it in some measure. Now, in most cases of breech and feet presentations, we have the funis on the *stretch*; and it is a well known fact that *stretching* of the cord is equivalent to *pressure*, in so far as regards the impediment which results to the circulation in the *arteries*. This does not, of course, apply to the vein; for here we must have pressure, otherwise, in a normal state of the parts, the current of the circulation would not be interrupted. From this *stretching* of the arteries, and consequent diminution of their calibre, the symptoms of asphyxia are partly produced. When this impediment to the circulation of the blood takes place, then the danger to the child commences; and this danger increases when the arteries become *pressed upon*, which, I believe, is the case, as I shall in next place attempt to prove.

3. Allow me, in the last place, to ask, if we have ever pressure on the vein, and not on the arteries, during the process of parturition in the class of cases under consideration? I beg to submit, that we have not. If the vein is pressed upon, why should not the arteries be equally so, when the latter are just as much exposed as the former is. The arteries are certainly somewhat more resisting on account of their tunics being thicker and firmer; still, the difference is so very slight, that it scarcely deserves consideration, for every Professional man knows how easy it is to command any of the arteries of the body, as those of the extremities, for instance, by the aid of the fingers. In the cases under consideration, we have the child's shoulders and head pressing the funis against the brim and walls of the cavity of the pelvis. I cannot conceive that a pelvis would be so large as to admit the passage of the child without compressing the funis so as to interrupt the circulation; but I can conceive that the fœtus may be so small as to pass through the pelvis without any very great danger from pressure. Such a case as the latter is not, however, our present consideration; and I am prepared to maintain, that the cases are rare where pressure does not occur both on the vein and arteries, and that the danger to the child depends entirely on the *duration*, and, to a certain extent, the *degree* of pressure to which the *three* vessels are subjected.

I can with pleasure bear testimony to the professional ability of Mr. J. O. Fletcher; still, I do think he is in error when he states that children in presentations of the breech and feet die from hæmorrhage into the placenta, and not from asphyxia, or pulmonary apoplexy.

I am, Sir,
Your obedient servant,
JAMES LANCASHIRE, M.R.C.S., and L.A.C.,
London.

Stand, near Bury, April 17th, 1849.

OCHLESIS.

[To the Editor of the Medical Times.]

SIR,—The crowding together of the sick, and imperfect ventilation, will cause diseases, no matter what their nature or character, to assume a malignant form, and to spread like epidemics; for instance, "hospital gangrene." This has also been remarked of the dysentery which, when simple, does not spread; but, when combined with typhus, spreads rapidly, attacking all, through the contagious influence of the typhoid fever. (a) It is a remarkable feature in the history of such compound forms of typhus, that it almost invariably spreads itself in its *compound* form, *simple* typhus seldom appearing in those exposed to the contagion of the compound forms of the disease. Thus, a putrid pneumonia—a form of pneumonia characterized by a combination of the inflammatory affection with typhus—has been known to rage in the compound form, attacking and proving fatal to all coming within the range or influence of its contagion.

The Central Board of Health, in 1832, published, in the *Cholera Gazette*, one or two elaborate essays from the pen of Dr. Venables, in which that gentleman not only assumes that the Asiatic cholera, then raging in this country, was contagious, but accounts for its contagiousness in European climates by a combination with typhus fever, generated by overcrowding the sick, imperfect ventilation, &c. So far, then, "Ochlesis" seems to be merely a new designation for facts already familiar. But the mode of preventing the generation, or of arresting the spread, of *ochletic* diseases, is matter, perhaps, of more general interest.

Dr. Gregory, in an elaborate article on "Ochlesis," published in the *Medical Times* on the 31st ult., mentions, and, indeed, recommends, encamping the sick as the most effectual means of checking the spread of such malignant diseases. It may here, perhaps, be naturally asked, Has Dr. Gregory seen Dr. Venables' Essay on Asiatic Cholera, first published in 1832, and even lately in a fourth edition? If he has, has he passed over unheeded the latter's remarks upon encamping patients in the typhoid stage of cholera, and other febrile patients, as the most effectual means of suppressing the disease, and of effecting recovery? or was Dr. Venables anticipated by the gentleman quoted by Dr. Gregory? "Fair play is a jewel," as they say in Ireland; and, therefore, I must beg to call your attention to the following short extract from Dr. Venables' little work:—

"For the patients, when in the febrile stage, I should strongly advise the erection of a marquee. With the sanction of the Board of Health, I have adopted the plan here. A marquee, about 40 feet long and 16 or 17 broad, has been erected. A boarded flooring, raised about three inches from the ground, is placed in the inside; in the centre is a hot-air stove, with the funnel so constructed that the smoke is conveyed downwards under the floor. Thus the temperature can be raised or diminished at pleasure. By letting down the walls of the marquee the air is cooled, and there is a thorough ventilation, without any draft or currents. Closing the walls, and opening the air part of the stove, the temperature is again elevated. A thermometer suspended in the marquee determines whether the marquee or the stove should be open. Our marquee has now been in operation for one month, *and we have not lost a single case in the febrile stage since we put it in operation.* Indeed, the *typhoid characters* seem to be completely *suppressed by this* management, for in the marquee they all assumed the more *mild form of simple continued* fever. The *duration*, too, of the febrile stage seems to be *greatly shortened* by this means, as we find the sick recover sufficiently to be discharged, in about *two-thirds* of the time required when they went through the *entire* of the disease in the cholera building."(b)

Here, then, we see the advantages of encamping typhus patients, not only suggested, but practically demonstrated. It would not be right to dismiss this subject without observing, that the facts stated in the above extract are worthy the attentive consideration, not only of Dr. Gregory himself, but also of the Governors of both the Small-Pox and the London Fever Hospitals.

London, April 10, 1849. VINDEX.

CAPS AND GOWNS IN THE NINETEENTH CENTURY.

[To the Editor of the Medical Times.]

SIR,—Accept my thanks, in common with those of many Graduates of the University of London, for your most judicious remarks on the absurdity suggested by the approaching meeting with the Chancellor and Senate of our University.

What possible advantage can result to us from appearing in the antiquated—the old woman's costume of caps and gowns? And, if no advantage can result, let me ask, Why fix such a disguise on gentlemen in the Nineteenth century? A few young men whose love of display exceeds their common sense, fancy it, and, forsooth, *all* the Graduates are requested

(a) See Hasty on Dysentery.
(b) Venables on Cholera, &c., p. 67.

to mulct themselves in sundry pounds sterling for the benefit of the tailor, and to their own great discomfort. I know that the very notion of this absurdity will prevent many from being present at the approaching public day. I can add, however, that your admirable remarks will lead others to present themselves in the "garb of gentlemen of the Nineteenth Century," and no one can doubt that such members of the University will be thought quite as much of, if not more, than those who appear in Mr. Cox's borrowed plumes. With my best thanks,

I am, Sir, yours obediently,

April, 1849. MEDICO-CHIRURGUS.

MEDICAL MEN AND COUNTY COURTS.

[To the Editor of the Medical Times.]

SIR,—As it is probable some Bill may be brought before Parliament this present Session for (I trust, the benefit of) the Medical Profession, would it not be advisable to have some clause introduced, by which medical men may recover for their medicines and attendance, except the uncertain process which they are now obliged to have recourse to, viz., the present inferior County Courts, as the following cases will prove:—1st. In the year 1844 I was hastily summoned to attend a case of compound fracture of the thigh, of a lad who had that day arrived at Lynmouth, with his parents, from Porlock, on a visit to their friends, prior to embarking for Australia. While on the beach a large stone was rolled down the cliffs by some other boys, which fell on the lad's thigh as he was sitting on a rock, and caused the above-named accident, thereby preventing the family leaving their native shore. I should observe, that the fracture was attended by three extensive lacerated wounds, requiring nine sutures. It was a very tedious case, though after the space of three months it terminated very favourably. My bill, for attendance, &c., daily, and sometimes twice a day, for the above period, was six guineas, which, considering the distance being a mile from my own house, I thought was extremely moderate; the father being considered a very good workman in his trade of a joiner and carpenter. This case was brought before the County Court at Barnstaple, on Tuesday, the 6th of February last. I proved my case, of the accident and attendance, which was admitted by the defendant, but setting-off, as a plea, that it was out of his power to pay my bill, which he was sorry for, as it turned out a very good case; and that he never sent for me, but his brother-in-law, Mr. Robison, who was then lodging with his wife at his sister-in-law's, at Lynmouth, where the boy was confined during his recovery of the accident, was the person who sent for me, and that he had promised to pay my bill. The judge, therefore, questioned me as to the person who actually sent for me. It was entirely out of my power to say who really did send for me; suffice it to say, I was sent for and immediately attended, and the mother was there in attendance on him, and that I considered it quite sufficient for me to know the parents, who, I presumed, were the only responsible persons in the case, especially as Mr. Robison had never hinted to me a syllable about paying the bill. The answer of the judge was, that he was not quite satisfied that parents were always amenable for their children, and that he must see my books before he pronounced judgment—which I imagine is rather an unusual thing for medical men to be obliged to produce their books in a court of justice such as this is. The second case was that of a person,—a tailor by trade, who took an inn five miles from hence—whose wife was in a state of pregnancy, and had engaged my attendance in the year 1843. On the 23rd of September, in that year, I was sent for to attend her in her delivery, visiting her again on the 25th. On the 26th I was again requested to visit her, which I did, and gave her some medicines, for which my charge was 1*l.* 15s., and for medicines and attendance on himself and family during the years 1843, 1844, and 1845, my bill was 2*l.* 19s. Now, in this case also the judge required to see my books. Accordingly, on the 6th day of March, the last court-day, I attended and produced my book, to show that the first case was entered in Bricknall's the father's own name, and that I held him entirely responsible, no other person being named or even thought of. The judge, therefore, as the defendant was not required to be present, he living upwards of thirty miles from the court, ordered the payment of 2s. per month, which will be, from the time of the accident, before the bill and expenses (which latter are most excessive, and obliged to be paid by the plaintiffs into court before the cases can be heard) are paid.

The second case the defendant disputed some of my journies and medicines, which were regularly entered in my day-book, and I wished the judge to examine it; but, to my surprise, his answer was, he did not want to see my book. Now, why did he require me to bring my book a distance of twenty miles, and then tell me he did not want to see it. Now for the judgment: he said he should not allow more than a guinea for the delivery, and deducting 14s. for after-attendance, &c., as he considered that any after-occurrences were to be included in that charge. I told him my charge was always 1*l.* 1s., subsequent journies, &c., being charged separately; but no, he should not allow it. Now, the Profession, I consider, by these two palpable cases, is egregiously insulted. Accerding to this judgment in the first case, we must inquire who sent for us, and who is to pay us; in the second case, should puerperal fever, or any other accidental occurrence take place, we are to give our medical and surgical attendance gratuitously; and what folly to order a medical man to produce his book, and then tell him he does not want to see it! I leave it to you for further comment, as these are not the first cases which have been brought before this tribunal by the members of the Medical Profession. I could not refrain from giving utterance to the following:—That, from the severity he had hitherto shown towards the Medical Profession, I presumed he could have none of his own friends or family in that Profession, or he would not have given such a judgment. He repeated what he stated at a former court, that he unfortunately was obliged to sit there and act as judge and jury, and how much so ever his decision may be canvassed out of doors, he should not suffer such observations to be made in that court. Probably, it was too close a hit, for I have since heard he has a son studying for the Medical Profession; if so, I trust he will soon instil into his father's mind some better feeling towards our Profession than he at present appears to possess.

I beg to subscribe myself your most obedient,

J. CLARKE.

Lynton, March 13, 1849.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN IN LONDON AND ITS VICINITY.

The Annual Dinner of this Society, the Sixty-first Anniversary, took place last Saturday, at the Thatched House, St. James's-street, Martin Ware, Esq., one of the Vice-Presidents in the chair.

The Chairman explained, that His Royal Highness the Duke of Cambridge, the Patron, was, in consequence of severe illness, quite unable to preside, as he had promised. The President, Sir Charles Clarke, had so recently recovered from a severe illness, as to be unable to attend with safety, and a letter was read from him, expressing his very great regret at his absence, and his warm interest in the welfare of the Society.

Dr. R. Bright, in returning thanks for the College of Physicians, expressed his regret, that so few Fellows of that College were present. He felt the most cordial good-will towards the Society, and a desire for the greater extension of its benefits.

Mr. Stanley, as President of the College of Surgeons, was surprised at being the only person present in immediate connexion with the government of that body. He was convinced that the support and extension of this Society were objects of the greatest importance to the welfare of the Profession. The Profession could only contain two classes of members: those who would want the Society's help for their families, and those who would not. Both these classes ought to support it.

Mr. John Clarke, on the health of the President being given, returned thanks for the very cordial reception of the toast, and assured the meeting of his father's unceasing interest in the welfare of the Society.

Mr. Eyles returned thanks for the Society of Apothecaries, in the unavoidable absence of the Master.

The Chairman expressed his own strong conviction of the value of this Society as an insurance against want. He had held office and taken a warm interest in it for many years.

Sir James Eyre, on the part of the Court Directors, said, that the Court took great pains in carrying out the important objects of the Society, and had great pleasure in witnessing its prosperity.

Dr. Wm. Merriman, the acting Treasurer, read a list of the donations which he had received. The Society had to lament the death of Her Royal Highness the Princess Sophia, who, for many years, had contributed to its funds; and also that of their esteemed Vice-president, R. R. Pennington, Esq., who had shown his steady regard by a legacy of 100 guineas, duty free. A legacy of 500*l.*, less the duty, had also been received from the executors of the late Thomas Spencer, Esq., of Myddleton-square.

Mr. Tudor, of the Stock Exchange, for the visiters, expressed their gratification at contributing to the welfare of so deserving a Profession as that of Medicine, the members of which laboured so zealously for the good of others.

Mr. Fuller, for the Stewards, wished to give those of next year some extra trouble, by requesting them to aid in making the Society more known, and extending its influence. Let each steward exert himself to procure new members, as well as a full meeting and a good dinner.

Mr. Walsh, the Secretary, said, that the experience of sixty-one years had established, beyond a doubt, the power of the Society to do what it professed, namely, to secure the families of its members against destitution. All that was now wanting was its extension, and this, he found, could only be effected by individual members personally persuading others to join the Society. He had, within these few days, had two applications from widows suddenly left in complete penury. The husband of one, unhappily, had not been a member of the Society. To the other he was able to promise a grant for immediate relief, and such subsequent permanent assistance as her case might be found to require.

A good list of Stewards was announced for next year, and the names of several new members were received for proposal. The donations, including the legacy of Mr. Pennington, amounted to nearly 300*l.*

MEDICAL REFORM.

THE CHELTENHAM PETITION.

To the Right Honourable Sir George Grey, Bart., G.C.B., M.P., and Her Majesty's Principal Secretary of State for the Home Department.

We, the undersigned Medical Practitioners, resident in Cheltenham, have had our attention drawn to certain "Outlines of a Bill for Regulating the Profession of Physic and Surgery," which, it is stated, have been submitted to you by a Conference of Delegates from the principal Medical Corporations of London.

We have also seen published in the Medical Journals a Memorial relating to this subject, which has been forwarded to you by our Professional brethren of Manchester, and which expresses in detail various objections to the proposed measure.

Not wishing to weary you with a communication of unnecessary length, and believing that nothing we can say will better deserve your full consideration than the document referred to, we desire to record our entire concurrence in, and to adopt, as our own, the sentiments so well put forth in the Manchester Memorial, and earnestly beg you to award to the arguments therein stated that deep attention which their importance, and the temperate tone in which they are propounded, so justly merit.

We would only suggest, in addition, that, while the health of the public imperatively requires that all persons permitted to practise the united Profession of Medicine and Surgery should be qualified in both branches of their art, the same consideration of public welfare, no less than the respectability of the Profession, demands that any legislation upon this subject should have a tendency to discourage for the future the connexion generally subsisting between the functions of the Medical adviser and the trade of Pharmacy, so far, at least, as long established prejudices will allow, and without interference with the rights of existing Practitioners.

Holding this view, we need hardly say how entirely we differ from those who would create, in addition to our already too numerous Colleges, a new Institution, for the purpose, as it appears to us, of perpetuating a combination, to which we would gladly do all in our power to put an end.

We submit this suggestion with all deference to

your consideration, in the full conviction that we are thereby consulting the true interests both of the Profession and the public, and will merely, in conclusion, repeat most respectfully our earnest hope that you will not commit yourself to the measures proposed by the Conference of Delegates, but allow to the well-considered objections of the Manchester Memorialists that weight to which we believe them to be entitled.

John Baron, M.D., F.R.S.; J. Allardyce, M.D.; W. R. Bernard, M.D.; Æneas Cannon, M.D.; Wm. Conolly, M.D.; W. P. Brookes, M.D.; Thomas Wright, M.D.; G. Bagnall, M.D.; E. Acworth, M.D.; A. W. Gabb; S. Davies, M.D.; C. F. Elcum; W. Cary; Fred. Hyett; C. S. Shaw; W. T. Sheldon; C. T. Cooke; Charles Fowler; G. Ford Copeland; G. I. Hawkins; A. Eves; W. Bell; Charles Prentice; S. E. Comyn, M.D.; C. B. Ker, M.D.; T. J. Cottle; Robert Newman; Wm. Dalton; W. H. Hooper, M.D.; James Wyatt; James Fortnom; Ed. Fricker; C. Edwards; David Hartley; Geo. Arnott; T. R. College, M.D.; John Orrell; J. S. Willis; Collings Robinson, M.D.; W. Gibney, M.D.; J. H. Peebles, M.D.

FRENCH HOSPITALS AND FRENCH PRACTICE A CENTURY AGO.

In the Hotel Dieu, (says an old writer,) the wards are very lofty, and proportionable in length and breadth, but are so crowded with beds that I cannot give the exact dimensions. The patients are here, generally, in number about four thousand, more or less; they are well nourished, and kept tolerably clean; grown people lie from one to four in a bed, children from one to ten.

The surgeons dress their patients twice a day—viz., at five o'clock in the morning, and at three in the afternoon. Students have liberty to visit any part of this Hospital but the lying-in ward; they formerly had liberty to see this practice, but, on repeated irregularities, this great privilege was prohibited by an absolute order from the King.

La Charité is the completest Hospital I ever saw, having no more smell than a private house; it contains about 150 patients, all men, who are taken care of by priests—a priest being apothecary, and so on, to the meanest servitude. The floors are of brick, round in the middle, and flat on each side. It is divided into five wards, all on the same floor, and each decorated with several admirable paintings. The wards are very lofty,—the largest is about sixty yards in length, and twelve in breadth. The patients here are dressed at seven o'clock in the morning, and three in the afternoon. The number of surgeons' patients is only 32, the others being all physical cases; these are visited every morning. The practice of physic consists in little more than repeated bleedings, clysters, and ptisan. Be the case what it will, they never vary their prescriptions, but repeated the same, *iterum atque iterum*, till death interferes, *vel natura evincit morbum*. They have great dependence on their ptisan. The Hospital surgeons frequently make use of the most ill-natured expressions they can invent to a patient for crying out while they are mangling him with a knife, which is often as dull as an English coulter. They are likewise very liberal with their blows, as the following case proves:—A poor man having fractured his leg in a terrible manner, was immediately brought to the Hotel Dieu. While the surgeon, with great force, was making the extension, the patient (as is natural) cried out, on which the surgeon suddenly flung down the leg and beat the poor man, in as enraged a manner as if he had greatly injured him. The surgeons are very ungenteel to students. All ulcers in these Hospitals have the same treatment. In the middle of each ward are three charcoal fires, over which are a great pan of cataplasm, a pan of black digestive, and a vessel with some French brandy and oil of turpentine. These are their topical and universal applications. They do not take any notice of the different kind of ulcers. They have no notion of wetting their dressings with warm water to bring them off easily, but tear them off at once.

A BOARD OF GUARDIANS BEATEN.

(Sittings at Nisi Prius, at Westminster, before Mr. Justice Maule and a Common Jury)

BIRD *v.* M'GAHEY.

In this case Mr. Serjeant Wilkins and Mr. Atkinson appeared for the plaintiff; and Mr. Serjeant Byles and Mr. Howarth for the defendant.

The action was brought by the plaintiff, who is a surgeon, against the defendant, as the Secretary of the Board of Guardians for the parish of St. Pancras, to recover the sum due to him for eighteen days' professional attendance upon the poor of the said parish.

Mr. Serjeant Wilkins said that the resistance which his client had met with to his demand reflected but little credit upon the Board of Guardians, who were the real defendants in this case. In the month of January last malignant cholera broke out in a certain establishment at Tooting. On the evening of January 5 a Mr. Smith, one of the parish Guardians, called on the plaintiff, informing him that the Board had determined upon immediately removing their paupers from Tooting to their own workhouse, and requesting him to undertake the management of the sick who were to be thus removed. It appeared that Mr. Bird had had former dealings with the parish, in which he did not consider himself well used, and he therefore, at first, refused, alleging that he had his own practice to look after, and was, therefore, unable to give them his assistance. He was, however, prevailed upon to attend a meeting of the Guardians on the following morning, where he found other medical men also, who had been summoned to assist in keeping under the disease. The plaintiff agreed, after some time, to attend for two days, saying his own business would not admit of his longer absence. On the following Tuesday there was another meeting of the Guardians, and it was then arranged that he should continue his services, the entire management of the Hospital being placed in his hands. He remained night and day in attendance at the Hospital, being absent from his duty on two occasions, for a short time only, during the whole time (18 days) that he had the superintendence of the cholera patients. During this period 138 cases of cholera had come under his hands, of which 9 only proved fatal. For his services on this occasion his demand against the Board was 151*l.* 4*s.*, being after the rate of 8 guineas per diem. Of this sum, 40*l.* had been paid on account, and 16*l.* 14*s.* had been paid into Court since the action was brought, which would amount to the sum of 3 guineas per diem only, which, it was contended on the other side, was a fair remuneration for his services. The learned serjeant contended, that, under all the circumstances, taking into consideration the loathsome nature of the disease the plaintiff was called upon to minister to, the risk he ran of infecting himself and his family, and the unavoidable neglect of his own business, consequent upon such close attention to his new duties, the demand was a just and reasonable one.

A number of witnesses, amongst whom was the Master of the Workhouse of St. Pancras, proved the attendance of the plaintiff upon the occasion in question. It was also proved, that he had an extensive practice of his own, and several medical gentlemen spoke as to the reasonableness of the plaintiff's demand.

For the defence it was attempted to show that the plaintiff had undertaken the management of the Cholera Hospital without naming any particular sum as a remuneration for his services, and leaving it entirely to the judgment of the Board as to the sum to be paid to him. It was also contended that the sum which he had already received was as much as he was justly and reasonably entitled to.

The learned Judge told the jury that it would be their duty—first, to consider whether there had been any agreement between the plaintiff and the Board that he should be paid such a sum as they in their discretion should consider sufficient; and, secondly, what sum would be a fair remuneration for his exertions under all the circumstances.

The Jury, after some deliberation, found a verdict for the plaintiff for 75*l.* 12*s.*, in addition to the sum already paid to him, being after the rate of seven guineas per diem.

GOSSIP OF THE WEEK.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, April 19th, 1849.—Frederick Duke, Hastings; William Matthew Sheppard Fulham; Isaac Tucker, Westbury Leigh; John Clarke, Greenham, Berks; Philip William Govett, Plymouth; John Higginbottom, Nottingham; Thomas John Warburton, Betley, Staffordshire; Thomas Hutchinson, Camborne, Cornwall; James Denton Hulme, Leicester; James Newham, Lyme Regis; Edmund Whitaker, Bacup, Lancashire; James William Crow, Gorluton, Suffolk; David Morris Thomas, Cwmamman, Carmarthen.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College, at the meeting of the Court of Examiners, on the 20th inst.:—Messrs. Edgar William Mayne, Hon. East India Company's Service, Bengal; John Frederick Pritchard, Portsmouth; Henry Edward Brameld, Swinton, near Rotherham; Augustus Law, Artillery-place, Finsbury-square; William Tidmas, London; John Cox Lynch, London; Wm. Tomlin, Nottingham; Edwin Younge, Walesby, Lincolnshire; William Harrison, Bedford; Thomas O'Kearney Gordon, Cork; Christopher Antisell Allen, Dublin; and Henry Briggs, Halifax.

WAR OFFICE, April 20.—4th Light Dragoons: Surgeon Thomas Hunter, M.D., from the 68th Foot, to be Surgeon, vice Graves, who exchanges. —68th Foot: Surgeon John Stewart Graves, from the 4th Light Dragoons, to be Surgeon, vice Hunter, who exchanges.

MEDICAL SOCIETY OF KING'S COLLEGE.—The Medical Society of King's College, London, has adjudged the prize offered by them for the best Essay on "Bone, its Chemical Composition, Mechanism, Minute Anatomy, Development, and Growth," &c. &c., to Mr. J. D. Macdonald. Mr. Macdonald is already known to the Profession by several publications on the Functional and Anatomical Analogy between the Organs of Vision and Hearing, &c. &c. &c.

MARISCHAL COLLEGE AND UNIVERSITY, ABERDEEN.—The following gentlemen have lately received degrees at the University:—M.D.—England: Churchill, Samuel; Peke, —. M.B.—England: Pearse, Thomas; Mauritius: Pellegrine, —; Scotland: Duffus, James; Smith, John.

OBITUARY.—On the 17th of January, at Graham's Town, Cape of Good Hope, in his 34th year, Edward Russ, Esq., surgeon, late of Castle Cary, Somerset.—On the 10th inst., at his residence, Nuneaton, in the 79th year of his age, John Bond, Esq., surgeon.—At Naples, on the 12th inst., Charles O. Reilly, Esq., surgeon, in his 69th year. —In Russell-street, aged 35, Henry Shaw, Esq., surgeon, son of the late J. Shaw, Esq., of Great Marton.—At Oxton, after a severe and protracted illness, aged 60, Mr. Brereton Nightingall, surgeon. —On the 23rd inst., W. Warden, M.D., Surgeon of Her Majesty's Dockyard, Chatham, in his 72nd year.—A letter has been received from the Governor of Ceylon, announcing the sudden death, from apoplexy, of Dr. George Gardner, Superintendent of the Botanic Garden, Peradenia, Kandy, Ceylon. The deceased was known as the Author of "Travels in the Interior of Brazil." The loss of so indefatigable and sound a naturalist will be seriously felt, and it is to be hoped that his collections and manuscripts will be carefully preserved.

BERZELIUS.—The Royal Academy of Sciences at Stockholm has just held its anniversary meeting. The King, who was present, and all the company, wore mourning for the illustrious Berzelius, who, it will be recollected, expired during the past year. At the meeting, a letter from the Dowager Baroness de Berzelius was read, announcing her gift to them of the scientific library of her late husband, amounting to upwards of 2,000 volumes, as well as of his mineralogical collection and his laboratory, with all the instruments it contained.

NEW LUNATIC ASYLUM.—At a meeting of magistrates, during the Middlesex County Sessions, last week, a mortgage was executed on the County-rate for 23,000*l.* for the new Lunatic Asylum at Colney Hatch.

THE LONDON HOSPITAL.—The usual Annual Dinner of this Charity took place last week at the London Tavern, where about 150 gentlemen assem-

bled to do honour to the occasion. Mr. W. Colson was Chairman, and ably advocated the claims of the Hospital on public benevolence. It appears from the Report, that, during the past year, 4,185 patients, each for an average period of one month, have been admitted into the wards; and that 364 applications have been refused for want of funds. The value of the Hospital in relieving persons who have met with serious accidents, may be estimated from the fact, that the total number of in-patients during the past year, under that head, is 2,442; the number of out-patients, under the same head, being 6,574. The amount of subscriptions announced by the Treasurer during the evening was 1,720*l*., of which sum the Hebrew table contributed 500*l*. Baron Anthony Rothschild, who was present, expressed his regret that the sum was so small. He stated, that he had written 2,000 letters soliciting contributions, but, so great was the scarcity of money out of the banks, he had failed to get more.

Sanitary Reform in Sunderland.—On Friday, the 13th inst., a meeting of the Guardians took place at the Register Buildings. Mr. J. Clay was elected to the office of Chairman, and Mr. J. Hills to be Vice-Chairman. A Sanitary Report was presented by Mr. Bruce, inspector, from which it appeared, that of the thousands of human beings living in the parish of Sunderland, the great majority are extremely poor, and are huddled together in narrow, ill-paved, dirty streets, without proper ventilation. In this filthy district the pestilence has been most prevalent. A great number of the lanes have been sluiced with salt water, and the houses whitewashed; cellars that had never been cleansed for years have been purged of their filth; 200 pigs have been ousted; and it is a "great fact," that as these measures proceed, the cholera departs. At the close of the meeting, it was unanimously agreed to continue the present sanitary operations by the means of unemployed paupers, under the excellent superintendence of Mr. Bruce.

Testimonal to Mr. Fowke. — This gentleman, having recently resigned his connexion with the Wolverhampton Dispensary, to which he had been Surgeon for fifteen years, has been presented, by the inhabitants of the town and neighbourhood, with a silver salver, value 50*l*., on which was placed, for his acceptance also, the handsome sum of 1,508*l*.

Meteorology. — Prevailing Winds. — Arrangements are in progress to insure a daily return of the prevailing winds over every portion of this island to which the railroads or electric telegraph have been extended. The importance of this must be evident to every one who has made meteorology the subject of attention; as these returns may, in all probability, serve to establish the law of the progress of great aërial currents, and of the disturbing influence of peculiarities in the form of the earth's surface. M. Quételet has communicated to the Royal Academy of Sciences of Belgium some particulars relative to the arrangements in England; and he states that a series of analogous observations are already being made at Brussels, Ghent, Louvain, St. Trond, Liége, and Namur. We may hope that they will be extended to the extreme stations of Ostend, Antwerp, and Verviers,—and gradually be carried on over a much larger extent of the Continent of Europe.

A Medical Witness. — The assizes for the county of Cornwall, which were brought to a close on Saturday week, produced few cases of interest. In a will cause, a very curious incident occurred of the force of habit. A surgeon, named Ward, gave the following understandable evidence for the benefit of twelve clodhopping Cornish jurymen, in relation to the testator's capability of executing a will:—"I found him in erysipelatous inflammation, face and scalp of a dusky brown, covered with furfuraceous scales, the result of the peeling of the cuticle; tongue dark, brown, and dry; pulse 120, and thready; slight subsultus jactitation; low muttering delirium; answered when roused sometimes coherently, sometimes incoherently; he was in a sleepy comatose state, and clearly moribund."

Habits of Lunatics.—From the lately published reports of the visiters of the Bedford Lunatic Asylum, it appears that of 233 patients, 110 are males and 123 females, and that the greater number of the patients are between 30 and 50 years of age. For instance, there are, between 30 and 60, 29 males and 26 females; and between 40 and 50, 25 males and 34 females. Of the Bedfordshire patients, 9 males and 6 females are reported of dirty habits. Of the Hertfordshire, 1 is reported to be dangerous to himself or others. Of the Huntingdonshire, 1 also is similarly reported, and 1 male and 1 female of dirty habits.

The Ether Discovery.—The Americans have been bestirring themselves to settle the proprietorship of the ether discovery amongst the competitors for at least the honour of its introduction into modern practice. The Trustees of the Hospital at Boston—in which the experiments were tried that established this discovery—made an unanimous Report, awarding the credit of the discovery to Dr. W. T. S. Morton of that city. These Trustees are a board of fifteen gentlemen of the highest character and intelligence, we are told, and having the advantage of a personal acquaintance with the history of the discovery. Dr. Charles T. Jackson, however, in an elaborate printed memorial, asks of the Trustees a revision of their judgment; and the result has been, that, in their Report for the year 1849, they have unanimously re-affirmed it. The subject has been before Congress too, where it was referred to a Committee of five, who have just made a report. Drs. Jackson and Morton appeared personally before the Committee, and a thorough investigation of the case seems to have been made. The Report takes the same ground with that of the Trustees of the Hospital, and awards the credit of the discovery to Dr. Morton. In the meantime, our French neighbours, probably without a knowledge of the state of things in America, have given to Dr. Jackson the cross of the Legion of Honour for the discovery. Dr. Morton publishes a letter in the American papers, showing that he has had no hearing in France; that his evidence has not been before the French Academy or the French Government.

MORTALITY TABLE.

For the Week ending Saturday, April 21, 1848.

Causes of Death.	Total.	Average of Five Springs.
All Causes	1089	963
Specified Causes	1076	959
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	248	198
Sporadic Diseases:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	52	48
Tubercular Diseases	217	200
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.....	121	123
Diseases of the Heart and Blood-vessels.....	36	34
Diseases of the Lungs, and of the other Organs of Respiration	181	131
Diseases of the Stomach, Liver, and other Organs of Digestion	60	62
Diseases of the Kidneys, &c.	11	11
Childbirth, Diseases of the Uterus, &c.....	11	8
Rheumatism, Diseases of the Bones, Joints, &c.....	9	8
Diseases of the Skin, Cellular Tissue, &c.	1	1
Malformations	1	3
Premature Birth.....	22	21
Atrophy	23	17
Age.....	35	50
Sudden	13	11
Violence, Privation, Cold, and Intemperance	35	33
Causes not Specified	13	4

Electrical Properties of Gutta Percha. —The attention of scientific men was first called to the electrical properties of gutta percha by Mr. Faraday, in the *Philosophical Magazine* for March, 1848. Its utility, as an insulator, was fully pointed out by him. It differs from glass and sealing-wax in the fact, that the slightest friction speedily developes in it a large quantity of electricity. If a few square inches of the thinnest sheet gutta percha be held in the fingers by means of a silk-handkerchief, (as an insulator,) and rubbed rather sharply for a few seconds, the gutta percha attracts light bodies strongly, and may be made to adhere to the hand, or any surface on which it is applied. To a non-conducting surface, like glass, it will adhere for many hours. When rubbed, while placed on a silk-handkerchief, brilliant flashes of electric light are said to have been evolved on raising it from the surface of the table. It retains its electrical properties for some minutes, and even the humidity of the air does not interfere with their development.

TO CORRESPONDENTS.

"Dissector."—(1) The engagement is not legally binding, and, therefore, may be dissolved before the specified time. (2) Lectures are given in London during the summer on Medical Jurisprudence and Clinical Medicine. (3) The fees vary.

"South Wales" asks the following questions:—1. Does a member of the College of Physicians take precedence of an M.D. of the London University as a right, or merely from the last being generally a younger man? By right, within seven miles of the metropolis. 2. Does the degree of M.D. from the London University entitle a man to practise as a Physician in London without passing the College of Physicians? (No.) 3. Cannot young men studying for the Church at King's College, London, be ordained without going to Oxford or Cambridge at all? (Yes.) 4. Can the University of London grant the degrees of B.A., M.A., B.D., and M.D., to students who have not spent any time at Oxford or Cambridge? The University has the power of granting degrees in Arts and Medicine, but not in Divinity.

"M.R.C.S., Ongar."—(1) Mr. Tomes' work on Dental Surgery will suit our correspondent. (2) By attending hospital or private practice.

"Z. Z."—The ointment can be made thin by adding a little sweet oil, which will answer the purpose intended.

"Southton."—Communication received.

"Dr. Tuthill Massy" is thanked for his letter.

"Mr. Farr, Euston-square."—Communication received.

"Mr. Edward Caudle, Great Guilford-street, Borough."—The Coroner is considered as having the right to name a surgeon, under such circumstances.

"Mr. Brown, Haverfordwest," "On the Effect of Tobacco-smoke in the Reduction of Strangulated Hernia," received.

"Dr. Kidd, Limerick."—Received.

"A Subscriber" writes: "I beg to refer you to any book of Heraldry, to see that M.B. is "M.D. by courtesy," and that we should as soon think of calling the eldest sons of certain noblemen by the title of 'Mr. A.,' or 'Mr. B.,' as we should think of calling an M.B. of any University by any other name than that of 'Doctor.'"

"A Subscriber, and liberal-minded Member of the Profession," says, "The druggists, and druggists alone, spoil half the practice of both London and Provincial Medical men."

"Mr. Clarke, Lynton."—The delay has been unavoidable.

"Mr. Postgate, Kilham, Yorkshire."—We will look for the communication.

"P. Z."—Dr. Watson's.

"An Annual Subscriber" asks for information on the following case:—A patient of mine suffered from syphilis two years since, followed by the secondary symptoms of sore throat, a few copper-coloured blotches, &c.; there is still remaining a scurfy state of the scalp, with occasional itching, and the hair has become weak, and gradually comes out. The patient has been through a mecurial course, and treatment with Potass. Iodid and Sarsaparilla. The general health is now very good, with the exception of occasionally feeling tired sooner than usual. As there is an objection to having the head shaved, can you suggest any local remedies likely to be of service? Would the application of the bichloride of mercury in any way affect the hair?

"Mr. Thomas Hunt, Islington."—Communication received.

"Justice."—A Licentiate can sue in the County Courts for medical attendance, &c.

"Z. A. Z., Yeovil, Somerset."—There are no systematic lectures delivered on Military Surgery in London during the summer session.

"Errata" in last week's Number:—Page 491, in the note at bottom of third column, for "Aquæ Distillatæ, ℥vj." read "℥xvj.;" page 492, column 1, line 45, for "alternative" read "alterative;" column 2, same page, for "blennorhagigne" read "blennorhagique."

"Dr. Corfe's" valuable paper on Laryngitis will appear in the next Number.

"A Student Reader."—The valuable Lectures appear as they are received from the talented Physician who delivers them.

"Dr. Richard King."—Communication received.

"Dr. Meggison, Whickham."—Received.

ORIGINAL LECTURES.

HUNTERIAN LECTURES
ON THE
GENERATION AND DEVELOPMENT OF THE INVERTEBRATED ANIMALS.

By RICHARD OWEN, F.R.S.,

Hunterian Professor and Curator of the Museum of Royal College of Surgeons, Corresponding Member of the Institute of France, &c.

[Reported expressly for the "Medical Times," and revised by the Lecturer.]

LECTURE IV.

GENERATION OF POLYPI.—General character and divisions of the class.—Spontaneous fission rare; gemmation the rule.—Process of Gemmation: buds detached in Hydra, retained and developed in Sertularia.—Male and female organs in Hydra.—Various conditions of the male in dicecious polypes.—Various positions of the ovaria.—Individuals from buds develope ovaries or sperm-sacs, and propagate males or oviparous females.—Alternate generation of Plumularia and Coryne.—Ova and embryos of Bryozoa.—Antiquity of the Class, and importance of Lithophytous polypes in modifying the crust of the earth.

MR. PRESIDENT AND GENTLEMEN,—The groupe of animals which is to form the subject of this Lecture is hardly less widely diffused over the globe than those we considered on the former occasion, and the individuals, also, of the groupe are so minute as to require for the most part microscopic examination, in order to unfold their anatomy; the exceptions to this are few, and are presented by the *actiniæ*, or Sea-anemonies. The name Polypi, which is now given to this class, was originally applied by the Greek naturalists to that class of higher organised invertebrata to which we now give the name of Cephalopoda, some of the species of which, still common in the Ægian Sea, were described very accurately and anatomically by Aristotle and the external resemblance of which to the little modern Polypi is singularly close, owing to the disposition and form of the feet, as a radiated circle of tentacula at the anterior part of the body. The common external characteristics of both groupes are—the development of tentacula, or prehensile organs, from the anterior extremity of the body. But beneath this outward form are concealed very different types of organic structure; in fact, the highest and lowest that are met with in the invertebrate series. The Cephalopodous polypi are amongst the most active and predacious of marine invertebrata; the *polypi* of modern zoology are rooted like plants, and commonly ramified and composite like plants; they seem to have been unknown to the ancients, and their recognition as members of the animal kingdom is of comparatively recent introduction: it cannot be dated further back than the time of Imperato in 1599, and Peyssonel in 1756. Amongst those naturalists who have subsequently contributed to improve and extend the history of the Polypes, our countryman Ellis will always take a high rank.

A polype generally presents a cylindrical or oval body, with an aperture at one of its extremities, which is surrounded by a coronet of long tentacula. In most of the class this aperture leads to a simple digestive cavity, consisting of a stomach without intestine: in the higher organised species, the digestive sac is prolonged into an intestinal canal, which is bent upon itself, and terminates by a distinct anus opening upon the external surface. The organisation of the polypes is in general very simple, and their faculties or vital phenomena seem feeble and inconspicuous. Nevertheless, the influence of their combined powers in modifying the crust of the earth, is neither slight nor of limited extent.

This great division of the radiated animals is divided into three groups or classes, according to the modifications of the alimentary canal. In the first and lowest organised class, which I have called *Hydrozoa*, digestion is performed by the secretion of a simple sac, excavated in the gelatinous and granular parenchyme of the body. In the second class, called *Anthozoa*, the digestive sac, which, like the first, throws out the rejectaments by the same aperture as that which receives the nutriment, is suspended by a series of vertical folds of membrane in a distinct abdominal cavity, to the outer parietes of the body. In the third and highest class, called by Ehrenberg *Bryozoa*, the alimentary canal, which is likewise suspended loosely in an abdominal cavity, is provided, as has been already stated, with a distinct mouth and anus. The simplest of these groups is well represented by the little fresh-water-polype of our own streamlets, in which they may be found with little difficulty in the summer season. The general external form is well shown in these relaxed specimens of the hydra viridis, and the hydra fusca. If the tissue of these be examined, it is found to present, with the exception of the prehensile arms, such an organism as you may find in the ordinary lower class of plants, the "plantæ cellulares." The external cells are condensed, and elongated in the axis of the body, so as to form two tegumentary layers; the internal cells are elongated transversely to the axis of the body, and form a stratum of villi, projecting into the abdominal cavity; the thick intermediate mass of nucleated cells seems to fulfil the ordinary functions of muscular or contractile tissue.

The hydra commonly adheres, by a small prehensile disc, or rudimentary foot, situated at the extremity of the stem or body opposite to the mouth. When the little animal would change its position it slowly bends its body, and, fixing one or more of its tentacula to the supporting surface, detaches the posterior sucker, approximates it to the head, and advances by a succession of these leech-like motions. The hydra can make progress in water, as well as on a solid plane; when it would swim it suspends itself to the surface of the water by its foot or terminal sucker, which it expands, and exposes to the air: the disc soon dries, and in this state, repelling the surrounding water, it serves as a float, from which the hydra hangs with its mouth downwards, and can row itself along by means of its tentacula. Its ordinary position is one of rest, adhering to an aquatic plant by its terminal sucker, with the dependent oral tentacula spread abroad in quest of prey.

Should a small Näis, or Entomostracan, or any of the larger Infusories, come within the reach of the little carnivorous polype, they are immediately seized, pulled towards the mouth, and swallowed. The rapidity of the digestive process is manifested by the diffusion of any characteristic colour of the animalcules swallowed, through the gelatinous parenchyma of the devourer; and when this process is completed, the indigestible *débris* of the prey are rejected by the same aperture which had just gorged it.

Each tentaculum in the *Hydra fusca* is a slender membranaceous tube, filled with a fluid albuminous substance mixed with oil-like particles. This substance swells out at certain definite places into denser nodules, which are arranged in a spiral line. Each nodule is furnished with an organ of touch, and another singularly-constructed one for catching the prey. The organ of touch consists of a fine sac, enclosing another with thicker parietes, and within this there is a small cavity. From the point where the two sacs coalesce above, there projects a long spine, which is non-retractile. The seizing organ consists of an obovate transparent sac, immersed in the nodule with a small aperture. At the bottom of the sac, and within it, there is a solid corpuscule, which gives origin to a calcareous sharp sagitta or spine, that can be pushed out at pleasure, or withdrawn until its point is brought within the sac. When the hydra wishes to seize an animal, the sagittæ are protruded, by which means the surface of the tentacula are roughened, and the prey more easily retained: Corda believes that a poison is at the same time ejected. The nodules of the tentacula are connected together by means of four muscular bands, which run up, forming lozenge-shaped spaces by their intersections; these are joined together by transverse bands. There is no communication between the tube of the tentaculum and the cavity of the body. The lip of the mouth is armed with spines, similar to those of the tentacula; but the rest of the body is destitute of them.

That the tentacula have the power of communicating some benumbing shocks to the living animals which constitute the food of the Hydra, is evident from the effect produced; for example, upon an Entomostracan, which may have been touched, but not seized, by one of these organs. The little active crustacean is arrested in the midst of its rapid, darting motion, and sinks, apparently lifeless, for some distance; then slowly recovers itself, and resumes its ordinary movements. These and other active inhabitants of fresh waters, whose powers should be equivalent to rend asunder the delicate gelatinous arms of their low-organised captor, do, nevertheless, perish almost immediately after they have been seized, and so countenance the opinion of Corda of the secretion of poison; unless, indeed, the little polype may have the power of communicating an electric shock.

The most extraordinary properties of the Hydra are, however, those which best accord, and might be expected to be associated, with its low and simple cellular grade of organisation; although they excited the greatest astonishment in the physiological world when first announced by their discoverer, Trembley, and are often still called wonderful.

If a polype be transversely bisected, both halves survive; the cephalic one developing a terminal sucker, the caudal one shooting forth a crown of tentacula; each moiety thus acquiring the characters of the perfect individual. But in a healthy and well-fed *Hydra*, the same phenomena will take place if it be divided into ten pieces; provided part of the cellular body of the polype be included in the segment detached. I have not observed the reproduction to take place from a separated tentacle, unless part of the base or body be also detached with it.

The Hydræ are not less remarkable for their power of generation, than for that of regenerating mutilated parts. They have been observed to multiply by spontaneous fission, dividing themselves transversely. Roesel figures a specimen in the act of transverse fission; but there may have been some previous injury at the part. But the most ordinary process of generation is by the development of young polypi, like buds, from the external surface of the old one. This property depends on the small amount of change which the germ-mass has undergone in the development of the body.

In the freshwater polype, the progeny of the primary impregnated germ-cell retained unaltered in that body, may set up, under favourable stimuli of light, heat, and nutriment, the same actions as those to which they owed their own origin; certain of the nucleated cells do set up such actions, those, *e. g.* in the *hydra fusca*, which are aggregated near the adhering pedicle or foot; and the result of their increase by assimilation and multiplication is, to push out the contiguous integument in the form of a bud, which becomes the seat of the subsequent processes of growth and development; a clear cavity or centre of assimilation is first formed, which soon opens into the stomach of the parent; but the communication is afterwards closed, and the young *hydra* is ultimately cast off from the surface of the parent. This mode of propagation is termed "gemmation." It differs from the development of the hydra *ab ovo*, inasmuch as the impregnated germ-cell, which set on foot the process, is derivative and included in the body of the adult, instead of being primary and included in a free ovum. But the germ-cell is the essential part of the ovum, and the chorion an accessory and non-essential part.

According to my observations, buds are not developed indifferently from any part of the polype. I have never seen one growing from a tentacle, nor does a wound of this part lead to the development of a young hydra, like a wound of the base of the body. I conceive that the greater amount of metamorphosis which the germ-cells and nuclei have undergone in the formation of the complex organs of the tentacula is the condition of this inferior power of generation and regeneration.

The very small size in relation to the entire body, and the superficial position of the secondary germ-cell which takes on the processes of development in the Hydra, appear to be the chief conditions influencing that modification of the generative process

by which a small portion only of the Hydra is taken into the system of the new individual, instead of one-half of the body, as in the case of the Monad. So insignificant is the distinction between gemmation and spontaneous fission; the essential condition of both being, as in the development of the ovum, the presence of the pellucid nucleus of a secondary impregnated germ-cell, as the centre from which all the processes in the formation of the new individual radiate.

The Hydra propagates by ova as well as by buds. It even presents a periodical development of sexual organs of two kinds: one, at the anterior or oral extremity of the body consists of small nodules or sacs, which Ehrenberg discovered to contain moving filaments, or seminal animalcules; another series of cells, developed in the posterior part of the stem, contain ova. Sometimes one individual Hydra developes only the male cysts, or sperm-vesicles; sometimes only the females ones, or ovi-sacs; but the rule is generally to have both kinds.

In the formation of the ova, certain of the retained germ-cells multiply themselves, and coalesce to form a larger central cell, surrounded by others, of smaller size, with nuclei, the exterior of which cells are metamorphosed into a chorion. Certain other germ-cells are converted into sperm-cells, and develope spermatozoa. The ova are extruded and fertilized by these, and they develope a hydra, retaining, however, a large proportion of unchanged cells in its composition. Accordingly, this hydra may propagate by buds, and the hydra so developed may propagate again by ova, and these two kinds of generation may alternate indefinitely.

In most of the marine hydriform polypes, the delicate tissue of the body is supported in the waves and breakers, and protected from the briny element, by an external horny integument. Were such a polype to propagate by gemmation, and the external crust to grow with the growth of the bud, and expand to protect the soft digestive sac of the new polype, an apparently compound animal would result from the number of individuals so held together. Such is the nature of a vast family of marine zoophytes which our Lyncean Ellis has so accurately described and beautifully figured as "Corallines."

The species of the marine Hydrozoa which is nearly akin to the fresh-water hydra, is the Tubularia Indivisa, beautifully figured in this fine work on the "Remarkable Animals of Scotland," by Sir John G. Dalyell, who has devoted some twenty or thirty years to the careful examination of the animals of the Frith of Forth. In this species each individual is distinct, like the hydra; it propagates its kind by gemmation, and has, also, great powers of reparation, reproducing its polype head and double crown of tentacles many times in succession. It also propagates by ova. These are formed, in a groupe of long ovarian tubes or sacs, which proceed from the space between the long and the shorter tentacula, and, in proportion as these ovaria or ovisacs are developed, the tentacula begin to decay, and the whole flower-like head falls of with all the ovisacs. When cast off, the head does not lose its vitality, but moves, for a few days, perhaps, and crawls off with these eggs to some distance from the parent. A locomotive ciliated animalcule like a planaria, and called by Sir J. G. Dalyell "*planula*," issues from the ovum; swims by its cilia, and has the power of moving by a general contraction of its tissues. It crawls rather than swims, and in twenty-four hours presents the appearance of a body with a series of peripheral rays; settles, expands, and a stem shoots up, developes a polype, and thus a new individual is generated.

These also must propagate by ova, in order that the species may be dispersed. In some species the germ-cells are metamorphosed into ova at particular parts, and the concomitant growth of the soft tissue and outer crust furnishes those ova with a capsule; which modification in the growth of the coralline Professor E. Forbes compares with that "metamorphosis in flowering plants in which the floral bud is constituted through the contraction of the axis and the whorling of the individuals borne on that axis, and by their transformation into the several parts of the flower."

The ova may escape from the ovi-capsule in the condition of ciliated locomotive bodies, called "planulæ" by Sir John Graham Dalyell; or the planulæ may be hatched in the interior of a polype-individual developed from the summit of the ovi-capsule, and which, after liberating them, may wither and fall like the flower of a plant, as in some *Campanularia*. Or a generated individual of a particular form, such as, *e. g.* the *Medusa octocilia* and *duodocilia* of Dalyell, developed from *Eudendrium ramosum*; and the *Tintinnabulum* or Bell-medusa observed by the same author to be developed from the *Campanularia dichotoma*, may be developed and become detached, and, by its own power of locomotion, carry the contained ova to a distance from the composite and fixed groupe of nutritive individuals.

The ova may be developed within the bell-shaped Acalephoid prior to its detachment, as in the *Coryne vulgaris*, observed by Wagner, or not until it has become detached and acquired the full characters of a bare-eyed Medusa (*Gymnophthalmata*, E. Forbes).

This remarkable phenomenon is best shown in the claviform Corallines, and has been especially described by Loven, in an excellent Memoir on the *Syncoryne ramosa* of Sars, and by Steenstrup in the *Coryne Fritillaria*. This species originally developes a many-armed nutritive polype, or individual; but retaining many unchanged germ-cells, these, by the stimulus of the excess of nutriment, begin to repeat the process, and push out buds in an analogous position to that in the *Hydra fusca*, viz., around the base of the stomach of the first, or parent animal; but the buds, instead of repeating the form and condition of that animal, take on a higher form, resembling that of a bell-shaped Medusa; they become detached and swim off to a distance, forming and discharging the ova, which, as Steenstrup conjectures, in their turn develope the fixed polype-shaped *Coryne*.

This stage of the cycle has not yet been the subject of observation; but, by the analogy of the larger Medusæ, is the more probable process than that direct metamorphosis of the medusiform individual into the pedunculate polypoid individual, which V. Beneden has described by the aid of a conjectural figure in the *Tubularia*. (a)

In the *Eudendrium ramosum* Sir J. G. Dalyell observed the ovicapsules, containing the young medusoid animal to be developed, from many parts of the parent stem. A very active movement of the inclosed animal may be seen near the mouth of the ovicapsule. It then opens; a small white bud protrudes, then some tentaculæ, in active struggling motion; and at last a little free-swimming medusoid animal appears, in the shape of a small bell. It courts the light, and manifests all the characteristics of the Acalephæ. Many elegant modifications are observable in the form of the ovicapsules. Sometimes they are crossed by transverse bars; sometime shaped like a vase, and provided with a little lid or cover; sometimes traversed along the middle by a continuation of the soft tissue of the polype, which may be compared to an umbilical cord. From this, in Campanularia, Mr. Lister observed the ova to be successively developed, and proceed to the mouth of the capsule, where one or more polypi make their appearance, into which the ova pass, and are developed into planulæ, when the generative or nursing polypes are cast off, and carried perhaps to some distance; after which, the locomotive planulæ is changed into a fixed zoophyte.

The medusiform ovigerous locomotive or distributive individual of the *Coryne* and *Campanularia dichotoma* is obviously homologous with the polype-shaped ovigerous individual, which seems to nurse, as it were, the ova into planulæ in the *Campanularia geniculata*; and the nutritive gemmiparous polypiform individuals in all the compound Radiaries would seem rather to manifest the typical form of the species; as the leaf is a more typical form of the plant than the parts of the flower. Superadd, however, distinct nutritive and circulating organs to the free-moving ovigerous individual, and prolong its existence, and it would then cease to have the subordinate character of a nurse to the ova of the fixed individuals, and would assume that of the perfected form of the species; and such, in fact, is the case with the larger gelatinous Radiaries called Medusæ.

When the ovisac is the seat of development of a medusoid oviparous individual, as observed by Sir J. Dalyell, the phenomena attending the escape of these is remarkable. Great exertions are made to force the orifice, until the animal finds its way out; and portions of sea water in which specimens of tubularia ramosa have been kept, are sometimes found crowded with the little medusoid animalcules. This phenomenon much surprised Sir J. Dalyell, until he became aware of the origin of them. His observations have been confirmed by Sars and others on the *Podocoryna carnea* and the *Coryna mutans*. In the same month in which Sars observed the development of Medusoid animalcules from the *Podocoryna carnea*, he found other specimens of Podocoryna developing clear capsules containing ova. Steenstrup, who was more successful in preserving the life of the medusoid individuals, appears to have traced the phenomena of the development of the ova in them, and arrived at the conclusion that they are not directly transformed into the polyp as Van Beneden supposed; but that they developed either ova or sperm-sacs; which giving origin to "planulæ," these by the metamorphosis so well described by Sir J. Dalyell, would finally produce the rooted zoophyte, from which a compound ramified groupe might result by successive incomplete gemmations. So that with regard to the generation of the compound zoophyte we find these modifications, either the ovisacs arise from the body of the polyp, and are cast off, or bell-shaped Medusæ are developed in capsules from different parts of the body, and escape; or else, a small nursing polyp is developed, which incubates the ova, and falls like a flower. Or Medusæ may be produced by gemmation, as in Syncorynæ, and these, becoming detached, continue to move for some time (fifteen or eighteen days) before they fully develope the ova, which produce the planulæ, which are metamorphosed into the compound zoophyte.

With regard to the propagation of the *Anthozoa*, there are many points of difference. These differ from the Hydrozoa, not only in the important anatomical character of a distinct abdominal cavity, with mesogastric lamellæ, *mesorchia*, and *mesoaria*; but the ova and the matter of the sperm are developed respectively in distinct *internal* ovaria and testes.

In the anthozoic polypes of the red coral, most of the individuals are androgynous, and present both the ova and the spermatozoa; but a few instances occur in which some polypes develope only the one kind of generative product, and others the other kind. The ova of the anthozoa are detached from the internal ovaria, and impregnated, and fall into the abdominal cavity; they are hatched in that cavity, benefited by the fluids of the cavity and the sea-water circulated over it by the action of the vibratile cilia, and, after attaining the form of the parent, they enter the stomach of the parent, and are ejected by the mouth. This curious mode of birth may be seen in the actiniæ of our own coast, commonly in the summer-time.

Many of the large actiniform polypes of the tropical seas combine with a structure which is essentially similar to our own sea-anemonies, an internal calcareous axis or skeleton, which, penetrating the interior of the mesogastric folds, presents the lamellated and radiated structure which we recognise in the enduring support of the large *Fungiæ* and in the polype cells of the skeletons of the *Caryophilleæ*, *Madreporæ*, &c.

The species of polypes which take the most important share in the fabrication of the coral islands and reefs, belong to the present groupe, and have essentially the organisation of the sea-anemony, which has just been described.

(a) "Recherches sur l'embryogénie des Tubulaires," 4to., 1844. pl. 2. fig. 5.

To the eight-armed division of the Anthozoic Polypes belong those species which have an internal ramified calcareous or jointed axis, as the red coral polype, the gorgonia, and the isis. To this division likewise belongs our common *Alcyonium*, or dead-man's-toes, in which the hard axis is wanting; and the phosphorescent Sea-pens, the *Veretillum*, and other *Pennatulidæ*, in which it is in detached pieces.

In those singular forms of compound polyps, called *Pennatulæ*, or sea-pens, the ova are found in the common stem or axis of the polyp. But groups of individuals have been found in which only sperm-sacs are developed.

In reference to the highest order, the *Bryozoa*, there we find the general plan of generation to agree with the lowest, that is, by buds or gemmation, leading to the formation of compound groups, and by ova producing locomotive ciliated gemmules. The complicated and characteristic condition of the alimentary canal in the Bryozoa was discovered independently, and nearly about the same time, by Ehrenberg, Milne Edwards, and Dr. V. Thompson. The ciliated structure of the arms was observed by Steinbuch and Dr. Fleming. The ciliated gemmules, and their development, have been well described in the *Flustra carbesia* by Dr. Grant. All these observations have received a welcome confirmation, and many highly interesting facts in the organisation and properties of the *Bryozoa*, have been added, by Dr. A. Farre; a careful perusal of whose admirable Memoir in the Philosophical Transactions for 1837, will amply repay the reader.

Most of the Bryozoa are microscopic; but, being composite or aggregated animals, they sometimes form sufficiently conspicuous masses. The most familiar and common species constitute the substance called sea-mat (*Flustra*), which incrusts, by its little hexagonal cells, as by a delicate mosaic pavement, sea-weed, shells, and other marine bodies. The calcareous sea-mat is called *Eschara*. Some species rise from their surface of attachment and form amorphous masses, like sponge; or are regularly and delicately ramified, like the little hydriform corallines.

Each polype presents an oblong depressed, or elongated and cylindrical figure, and is protected by a dense integument in the form of a cell or case, to the mouth of which is attached a sac, composed of very delicate and flexible membrane. This constitutes the upper or anterior integument of the polype when it is protruded, and is reflected, like the inverted finger of a glove, into the firmer portion of the cell when the polype is retracted. In general the integument forming the firm cell is of a horny texture; but in the *Escharæ* it is hardened by the deposition of particles of carbonate of lime in the organised animal basis.

Certain polype individuals are completely male, and develope only spermatozoa; others are exclusively female. In the Halodactylus, the ova are developed in the common uniting mass of the polyps. The ova undergo development in a cyst, and result in a gemmule or larvæ, having the cilia located on certain lobes or organs near to the orifice of the digestive sac; so that they typify the Rotifera. Their movements are, accordingly, more varied than those of the planulæ of the Hydrozoa, consisting in their making sommersaults, waddling about from side to side, or gyrating on their axis. The period during which they have been observed to move thus, is forty-eight hours; they then settle and attach themselves, having first cleared off all foreign bodies from the spot by the whirling movements of the cilia. The whole of the ciliated gemmule is not converted into the first polyp, but only a part, and this retains much of the primitive cellular and nuclear structure; so that the part not converted into a polyp is in a condition to manifest the parthenogenetic mode of propagation by gemmation.

But it is time that I should endeavour to relieve the weariness of attention to these minute details in the generative economy of these minute and seemingly insignificant animalcules, by some notice of their higher relations to the world in which their vital career is thus maintained. These relations are interesting and important, chiefly by virtue of their peculiar property to support themselves by aggregating a quantity of carbonate of lime in their interior; and the constant progress of this accumulation is such, that considerable portions of the globe become covered with it. The influence which these zoophytes exert on the surrounding ocean, moreover, is not very unlike that which the Infusoria exert in regard to the atmosphere. The zoophytes effect a chemical change on one of the mineral products carried into the sea by every river that flows through a lime-stone district. The caustic soluble lime carried incessantly into the ocean, is seized by the myriads of calcareous zoophytes, combined with one of their own excrete products, and precipitated in the form of harmless insoluble carbonate of lime.

The most important productions of the apparently insignificant race of the Polypi are the accumulations of these calcareous skeletons of the *Anthozoa*, which form the coral islands and reefs,—the dread of the navigator, the admiration of the lover of the picturesque, the subjects of the closest and most interesting speculation to the naturalist and geologist.

That masses of rock many leagues in extent should be founded in the depths of the ocean, and built up to the height of hundreds of feet by minute, frail, gelatinous animalcules, is, indeed a phenomenon calculated to stagger the unversed in zoological science, and which has demanded the repeated observation of the most accomplished and enlightened voyagers to render intelligible.

These zoophytic productions have been recently classified by Mr. Darwin under three heads:—"atolls," "barrier reefs," and "fringing reefs." The term *Atoll* is the name given to the coral-islands, or lagoon-islands, by their inhabitants in the Indian Ocean. An atoll consists of a wall or mound of coral rock rising in the ocean for a considerable depth, and returning into itself so as to form a ring, with a lagoon, or sheet of still water in the interior. The wall is generally breached in one or more places, and when the breach is deep enough to admit a ship, the atoll affords it a convenient and safe harbour. The outer side of the reef usually sinks to a depth of from two to three hundred fathoms, at an angle of forty-five degrees or more: the internal side shelves gradually towards the centre of the lagoon, forming a saucer-shaped cavity, the depth of which varies from one fathom to fifty. The summit of the exterior margin of the reef or wall is usually composed of living species of *Porites* and *Millepora*. The *Porites* form irregularly rounded masses of from four to eight feet broad, and of nearly equal thickness; other parts of the reef are composed of thick vertical plates of the *Millepora complanata* intersecting each other at various angles, and forming an exceedingly strong honey-combed mass. The dead parts of these calcareous skeletons are often cemented over with a layer of the marine calcareous vegetable called *Nullipora*, which can better bear exposure to the air.

This strong barrier is well fitted to receive the first shock of the heavy waves of the fathomless ocean without; and what at first appears surprising, instead of wearing away at its outer edge, it is here only that the solid reef increases. The coral animals thrive best in the surf occasioned by the breakers. Through this agitation an ever-changing and aerated body of sea-water washes over their surface, and their imperfect respiration is maintained at the highest state of activity. Abundant animalcules, and the like objects of food, are thus constantly brought within the sphere of the tentacula of the hungry polypes. Their reproductive gemmules are rapidly and extensively dispersed amongst the crevices of the calcareous mass.

By the force of unusual storms this outer reef is occasionally breached, and huge masses are torn off and driven towards the lagoon, where they form an inner barrier or reef. The broken surface becomes the seat of attachment of the young of the neighbouring corals, the successive generations of which, by the rapid growth and development of their calcareous skeleton, soon repair the damage of the storm. The masses of broken coral thus driven inward towards the lagoon, accumulate in time to the height of some feet above high water. These fragments are mixed with sand, and shells, and form a favourable soil for the development and growth of vegetables, as cocoa palms, the large nuts of which may be borne hither by currents of the ocean, from Sumatra or Java, 600 miles distant. Turtles likewise float to the nascent island, browse on the sea weeds which grow in the lagoon, and breed there. Numerous species of fish and shell-fish flourish in the same still water, which abounds with animal life. Man comes at length and takes possession of the island; and the cocoa-nut, the turtle, and the fish afford him abundant and wholesome food. But you will ask how he supplies himself with that necessary of life, fresh water? This is obtained in a very simple and unexpected manner from shallow wells, dug in the calcareous sand, which ebb and flow with the tides, yet are almost wholly free from the saline particles of the ocean. Some have supposed that the sea water lost its peculiar salts by infiltration through the calcareous mass. Mr. Darwin thinks that it is derived from the rain water, which, being specifically lighter than the salt, keeps floating on its surface, and is subject to the same movements; howsoever this may be, the fact is certain. A fit and convenient abode for the human species is fabricated by the action of the feeble, gelatinous polypes, and a wild and almost boundless waste of waters is enlivened by oäses, which navigators have described as earthly paradises.

A Barrier Reef is essentially similar to the Atoll or Coral Island. It runs parallel with the shores of some larger island or continent, separated, however, from the land by a broad and deep lagoon channel, and having the outer side as deep and steep as in the Lagoon Islands. Here, likewise, the skeletons of the zoophytes, of which the reef is composed, are found on the outer precipitous wall, as deep as sounding-line can reach.

The third class of coral productions which Mr. Darwin terms "Fringing Reefs," differ from the Barrier Reefs in having a comparatively small depth of water on the outer side, and a narrower and shallower lagoon channel between them and the main land.

These differences in the characters of the wonderful fabrications of the coral animalcules are explicable by the following facts in their physiology. The animals of the *Porites* and *Millepora* cannot exist at a greater depth than twenty or thirty fathoms; beyond this the stimuli of light and heat derived from the solar beams become too feeble to excite and maintain their vital powers. On the other hand, their tissues are so delicate, that a brief direct exposure to the sun's rays kills them; and unless they are constantly immersed in water or beaten by the surf, they cannot live. Thus, in whatever position the calcareous skeleton of a Madrepore or Millepore may be found, it is certain that it must have been developed within thirty fathoms of the surface of the ocean. If it coats the summit of the lofty mountains of Tahiti it must have been lifted above the sea by the elevation of the rock on which it was originally deposited. Mr. B. Stutchbury here found a regular stratum of semifossil coral at 5,000 and 7,000 feet above the level of the sea. If it is brought up from the depth of 200 or 300 fathoms, as at Cardoo Atoll or Keeling Atoll, it must have been dragged down to that depth by a gradual subsidence of the foundation on which the living madrepore once flourished. It is by these movements of upheaval and subsidence of the earth's crust, that Mr. Darwin explains the different forms which characterise the extraordinary productions of the coral animal. The *Atolls*, or Lagoon Islands, according to this author, rest on land which has subsided, and part of which was once dry. *Barrier reefs* indicate the islands or continents, which they encircle, to be the remains of land now partly submerged, and perhaps in progress towards final disappearance. *Fringing reefs*, on the contrary, indicate either that the shores are stationary, or that they are now rising, as in most of the

Sandwich Islands, where former reefs have been raised many yards above the sea.

Elizabeth Island, which is eighty feet in height, is entirely composed of coral-rock. The coral animals, thus progressively lifted above their element, are compelled to carry on their operations more and more remote from the former theatres of their constructive energies, but cannot extend deeper than their allotted thirty fathoms: the direction of their submarine masonry is centrifugal and descending. Where the land that supports them is, on the contrary, in progress of submergence, they are compelled to build their edifices progressively higher and in a narrower circuit; in other words, the direction of their growth is centripetal and ascending. The terms ascending and descending, of course, only here apply to the relation of the coral-builders to the unstable land, not to the level of the unchanging sea.

The prodigious extent of the combined and uninterrmitting labours of these little world-architects must be witnessed in order to be adequately conceived or realised. They have built up a barrier-reef along the shores of New Caledonia for a length of 400 miles, and another which runs along the north-east coast of Australia 1,000 miles in length. To take a small example, a single atoll may be 50 miles in length by 20 in breadth; so that if the ledge of coral rock forming the ring were extended in one line it would be 120 miles in length. Assuming it to be a quarter of a mile in breadth, and 150 feet deep, here is a mound, compared with which the walls of Babylon, the great wall of China, or the pyramids of Egypt, are but children's toys; and built too amidst the waves of the ocean and in defiance of its storms, which sweep away the most solid works of man. The geologist, in contemplating these stupendous operations, appreciates the conditions and powers by which were deposited in ancient times, and under other atmospheric influences than now characterize our climate, those downs of chalk which give fertility to the south coast and many other parts of our native island. The remains of the corals in these masses, though similar in their general nature, are specifically distinct from the living Polypes which are now actively engaged in forming similar fertile deposits on the undulating and half submerged crust of the earth, washed by the Indian and Pacific Oceans. Again, those masses of limestone rocks which form a large part of the older secondary formations, give evidence, by their organic remains, that they are likewise due to the secretions of gelatinous polypes, the species of which perished before those that formed the cretaceous strata were created. As the polypes of the secondary epochs have been superseded by the *Porites*, *Milleporæ*, *Madreporæ*, and other genera of calcareous Anthozoa of the present day, so these, in all probability, are destined to give way in their turn to new forms of essentially analogous Zoophytes, to which, in time to come, the same same great office will be assigned, to clothe with fertile limestone future rising continents.

ORIGINAL CONTRIBUTIONS.

ANTEVERSION OF THE UTERUS AS A CAUSE OF STERILITY.

By EDWARD RIGBY, M.D., &c.; Examiner in Midwifery in the University of London; and Lecturer on Midwifery at St. Bartholomew's Hospital.

In continuing the subject of anteversion of the uterus as a cause of sterility, I may remark, that this diplacement is of far less frequent occurrence than retroversion, a circumstance which would scarcely have been expected, when the oblique direction of the uterus, and the direction in which it is supported by its ligaments is considered. The following case illustrates some of the more marked features of anteversion, as regards the effects which it produces upon the uterus itself and adjacent organs:—

Mrs. F., aged 32; married eight years; never pregnant.

April 6, 1848.—Complains of sharp drawing pains in the pelvis, with dull pain at the lower part of abdomen, and slight pain upon sitting down upon a hard seat; frequent urging to pass water, but evacuation of the bladder does not relieve the want; it is, however, relieved by the supine posture; tongue foul and flabby; constant leucorrhœa; bowels confined.

For the last year she has been in the habit of passing what she describes as little bladders (query exudations?); they appear chiefly at the half-way period. She has had exudations in the catamenia from her youth. *Exam. per vaginam.* Os uteri turned backwards; it feels soft and pulpy; the anterior surface of the uterus is felt, per vaginam, running forwards, showing the existence of anteversion.

The os uteri is difficult to be brought into the field of the speculum; its surface is covered with granulations. Applic. argenti nitras.

℞ Pil. hydrarg. gr. iij., ferri sulph. gr. ij., extr. coloc. co. gr. v. M. ft. pil. ij. om. nocte sumendæ.

℞ Sodæ potassio-tartratis ʒi—ij., primo mane p. r. n.

℞ Acidi hydrochlorici dil.; acidi nitrici dil.; aa. ʒi.; tr. hyosc. ʒii.; syrupi aurantii ʒss.; infusi gentianæ co. ʒvij.; M. ft. mist. cujus sumat cochl. magn. ij. bis terve die.

℞ Liq. plumbi diacetatis ʒij.; decocti papaveris ʒviij. M. ft. lotio.

June 3, 1848.—Has continued the above treatment in the country, taking the pills occasionally; shewed me something in a bottle, which is merely a lump of mucus coagulated by the lotion, and a catamenial exudation; feels better; the application of argenti nitras to the os uteri gave much relief; bowels confined; she complains of much the same pains as before. I was unable to make an examination, as she was in a hurry to catch the train to return home.

℞ Ferri sulph. gr. ij.; magnesiæ sulph. ʒj.; acidi sulph. dil. ♏viij.; syrupi rhœados ʒss.; aquæ menthæ pip. ʒj. bisdie; rep. lotio.

September 5.—Has again visited London. The leucorrhœa and vesical irritation have diminished; there is less pain on sitting down, and fewer of the shreds, &c., above-mentioned; tongue large, flabby, and furred.

Examination per Vaginam.—Uterus is still anteverted. Os uteri is brought more easily into the speculum; it is less tender, and has only a slight excoriation upon its surface. Applic. argenti nitras. Let her use the supine position.

℞ Pil. hydrarg., extr. hyosc., extr. coloc., co. aa. ℈i.; m. ft. pil. xij., sumat ij., septimâ quâque nocte.

℞ Extr. aloes aquosi ℈ii.; extr. hyosc. ℈iss.; masticbes gr. xij. M. ft. pil. xx., sumat j.—ij. h. s. p. r. n. Rep. lotio.

℞ Acidi hydrochlor. dil; acidi nitrici dil., aa. ʒi.; tr. hyoscyami ʒii.; syrupi limonum ʒss.; infus. aurantii co. ʒvii. M. ft. mist. cujus sumat coch. magn. ij. bis terve die.

January 25, 1849.—Has still the sensation produced by anteversion; bowels confined; no coagula with the last catamenia. The two last periods but one occurred after four weeks, the last after three weeks interval; the discharge was more florid; since which a slight appearance has taken place twice at intervals of a week.

Examination per Vaginam.—Os uteri feels closed and soft; it is still directed backward, and the fundus is felt forwards.

℞ Extr. Taraxaci, ʒi. o. n. ℞ Ferri sulph. gr. ij.; magnes. sulph. ʒi.; acidi sulphurici dil. ♏x. Syrupi rhœados ʒss.; aquæ menthæ pip. ʒi. M. ft. Haust. o. m. s.

April 24.—Looking well. The catamenia appeared on February 9th; the discharge at first was pale, but afterward became more florid; some shreds appeared on the 7th day. The next period was on the 3rd of March, and, like the previous one, the catamenia appeared again on the 3rd of April, but this time there have been no exudations; feels stronger and looks decidedly better; she has less pain.

Rep. mixt. o. m. ℞. pil. hydrarg. extr. hyoscyami. aa. gr. v. M. ft. pil. ij. semel in hebdom. sumendæ.

℞ Acidi nitrici dil. Acid hydrochlor. dil. aa. ʒi. extract taraxaci ʒi.; infusi aurantii. co. ad ʒviii. M. ft. mist. cujus. sumat coch. magn. ij. ter die.

The date of the displacement of the uterus in this case is necessarily uncertain, but the probability is, that it has existed from her youth, at least if we are to consider the exudations in the catamenia an indication of ovarian irritation resulting from a cause of this sort, which in the present case we are justified in doing, from the fact that she had been subject to exudations in the catamenia from the earliest periods.

The application of the speculum is not easy in anteversion from the difficulty of getting the os uteri into the field of the instrument. It showed, however, that this displacement tends to engorge the lower portions of the uterus by obstructing the returning circulation, as is the case in retroversion, though (as far as I have seen) not to such an extent, and the removal of angry granulations by a slight use of lunar caustic, gave considerable relief to the uterine irritation which was thus kept up, although the original cause was not removed.

R. H., aged 34, single, was admitted into the hospital for women June 6, 1845.—Complains of uneasiness at the lower part of the abdomen, increased upon making any exertion; frequent urging to evacuate the bladder, with pain in doing so, or even occasional retention. Pain in back, loins, and pubic region, extending down the thighs; leucorrhœal discharge; throbbing headache.

The catamenial periods from their first appearance, at the age of sixteen, until five years ago, were perfectly natural, since which they have been attended with continued retching and vomiting, lasting for twenty-four hours. Her first attack with the above-mentioned accompanying symptoms occurred two months ago, and was attended by a considerable discharge of coagula.

Examination per Vaginam.—Os uteri small, and directed backwards; the fundus is turned forwards, and may be felt firm and enlarged between the os uteri and symphisis pubis.

℞ Pil. aperientes, gr. x., hâc nocte.

June 17.—The reduction of the uterus has been delayed by the appearance of the catamenia. I passed Dr. Simpson's uterine supporter; the os uteri being turned so backwards made it very difficult to introduce the instrument, and the operation was attended with some coloured discharge.

June 18.—Has passed a tolerable night, is free from pain, and has lost that peculiar uneasy sensation about the lower part of abdomen and pelvis of which she had hitherto complained; is free from headache. Pulse 100, soft; skin moist; tongue clean; bowels slightly relieved. Catamenia have not yet appeared.

Rep. pil. aperientes.

July 16.—Having worn the supporter a month, it was removed; the uterus appeared to retain its natural position very well; and she returned to her home in the country.

Sept. 21st.—A letter has been received from her, stating that she had lost the former uneasiness in the pelvic region, and she now only suffers from general debility. The catamenia have appeared regularly since her return; the discharge was without exudations, and attended by no more than the ordinary pain.

It is about seventeen years ago that I first noticed the fact of anteversion occurring in the unimpregnated state. My attention was directed to it by the constant sense of pressure behind, or rather above the symphisis pubis, amounting at times to actual pain, which was increased by the upright posture, and especially by the presence of a moderate quantity of water in the bladder, producing a constant urging to evacuate it; they were slight cases, and seemed to be relieved by keeping the bowels open, and sponging the loins daily with cold water. The present case presented the above symptoms in a severer form—the fundus pressed firmly on the bladder, so as even sometimes to produce retention of urine. The displacement of the uterus evidently

also produced a good deal of sympathetic irritation, for the catamenial periods of late had been attended with severe retching and vomiting; and the throbbing headache, which she complained of at first, was something of the same character, as it disappeared immediately after the uterus was replaced.

As to the cause of the displacement, this must remain in doubt, as there was no evidence of any circumstance or agency that could have specially produced it. She had the management of a large dairy in the country, and perhaps the exertion of lifting and carrying heavy pails of milk, &c., especially in conjunction with the pressure of a loaded intestinal canal, might have tended to displace the uterus. The application of the supporter is, generally speaking, not so easy as in retroversion, for the os and lower portion of the uterus are much more moveable, and render it sometimes very difficult to introduce the instrument into the cavity of the uterus.

She wore the supporter but for a short time; but it appears to have answered well; and two months afterwards the uterus was evidently still retaining its natural position.

CHRONIC LARYNGITIS.

THREATENED SUFFOCATION. — LARYNGOTOMY.—RECOVERY.

By GEORGE CORFE, M.D., Resident Medical Officer, Middlesex Hospital.

I was hastily summoned, on the morning of March 19th last, to a man who had just arrived at the Hospital, and who, it was stated, was gasping for breath, and seemed to be dying. The morning, it should be observed, was very dull, foggy, and a drizzling rain was falling, with a south-west wind. I found the patient in question, Patrick Grady, a tailor, aged forty, walking about the admission-room in great distress; his countenance was slightly livid, the alœ nasi freely acting, and his eyes distressingly wandering about the place. His breathing was performed with strenuous efforts to draw the air through the larynx, which sent forth a stridulous noise—the seat of the obstruction was obviously in this part of the respiratory system. His voice was a mere whisper, the hands and feet were cold, and the pulse small and feeble. His general appearance was that of a strong, well formed, and otherwise healthy man. He was immediately sent to a warm bed, and Ward, and I desired him to swallow a nauseating dose of tartar emetic in solution. In a few minutes his urgent distress somewhat subsided, when I elicited the following history in snatches from him.

His larynx was externally covered with pustules, the result, no doubt, of the potassio-tartrate of antimony ointment.

Two months ago he suddenly lost his voice, after a slight cold, and he paid but little attention to it until one month since, when he found some difficulty of breathing, especially towards night, and a short harassing cough. He sought relief at the Welbeck-street Dispensary, where he appears to have been judiciously treated. He had gone there earlier than usual on the morning in question, but not being able to gain admission, he stood on the pavement, when his breathing became so much more distressed, that he walked to the cab stand, and got into a vehicle and drove to this Hospital.

There had been spasmodic attacks of dyspnœa every night for a week past, threatening to suffocate him; but during the last three days these attacks had occurred with equal severity during the day also. There was some tenderness about the larynx, but not such as to warrant the supposition that active inflammation was then going on.

A consultation was called, when it was unanimously agreed to perform the operation of laryngotomy, to which he readily assented. Mr. Shaw accordingly cut down upon the larynx, the upper point of the incision being opposite to the inferior edge of the thyroid cartilage, and the lower point level to the under surface of the first ring of the trachea; the crico thyroidean ligament was soon fully exposed, when it was pierced by a trocar carrying a canula, and the latter was left in the larynx. The relief was instantaneous and most gratifying. The respirations became tranquil, the countenance placid, and of a natural hue; the thorax no longer heaved, and the respiratory muscles ceased to strive to drag in air.

The lungs were now heard to fill throughout their whole extent, for it should be observed that percussion and auscultation previously satisfied us that no disease existed in these organs, although but little air passed into them. The epiglottis was also felt by the operator's finger healthy and unaltered by disease.

He was placed in a temperature of sixty degrees, and carefully watched by a separate nurse, and ordered hydr. chlor. gr. i. sextis horis, and an effervescing saline draught, with ½ gr. ant. pot. tart.

March 21.—The tube was removed this evening, and some plastic tough mucus-like pellets cleared out; and it was then replaced. The double tube was found disadvantageous; for, on attempting to remove the inner one, the toughness of the fibrinous clot around its interior caused so much obstruction that it harassed him a good deal in getting it out; we were, therefore, contented to keep the single tube only in the larynx.

March 23.—No constitutional disturbance has arisen since last report. There is a copious flow of saliva and mucus from the mouth; his gums are vascular, and there is free exit of mucus from the tube. The absence of all inflammatory symptoms may be attributable in a great measure to the suppuration of the several pustules, already mentioned, around the larynx.

April 6.—He was now allowed to leave the tube out, as there had been a brisk arterial hæmorrhage during the preceding two nights, when it was removed to be cleaned and replaced. The succeeding week he walked about the Hospital garden with an artificial respirator over his mouth, composed of four layers of fine damask linen fastened round his neck; and he is now daily regaining his tone of voice, the wound has nearly healed, and his breathing is quite natural through the larynx. He sleeps soundly; and he says he feels strong and well.

April 16.—The patient exhibited to me this morning a portion of bone which he had coughed up after severe efforts, attended with a sharp pricking sensation over the seat of the cricoid cartilage, since which the pain and cough is perfectly easy. He is very anxious to go home to his work, which he may probably do in another week.

The subjoined sketch exhibits two aspects of the bone, for which I am indebted to the kindness of Campbell De Morgan, Esq.

May 1.—The patient left the Hospital to-day, most grateful for the relief he had received. His voice was daily gaining in strength.

HEPATIC ASCITES.—PTYALISM.—ERYSIPELAS OF HEAD AND THROAT.—ŒDEMA OF THE RIMA GLOTTIDIS.—DEATH BY SUFFOCATION.

George Mann, aged 34, formerly a pot-boy, but latterly a cab-driver, admitted on February 6, with the following symptoms:—

Countenance thin, sallow, and features pinched; thoracic respiration; abdomen much swollen, tense, shining, with several large inosculations of the mammary, with the epigastric veins meandering over its surface; hardness and tenderness over the whole hepatic region; the percussion is dull, as high as the right mamma, and as low as the umbilicus; distinct fluctuation; no effusion elsewhere. Urine scanty, acid, and slightly albuminous, both by heat and nitric acid. Evacuations are sometimes like pitch. Auscultation detects only the wheezing and cooing of subacute bronchitis, with tolerably free vesicular breathing throughout.

The present attack, which is of one month's duration, appears to be only a *resumé* of a former seizure twelve months ago, when he was similarly laid up; and reports that he had been pretty well ever since. Acknowledges himself to have been a hard spirit drinker. The case was obviously one of thickened hepatic interlobular cellular tissue, with hypertrophy of the lobules, and deposit of abnormal matter in and around them, thus giving rise to obstructed and tardy hepatic circulation, and consequent engorgement of the intestinal branches of the portal system. Ascites was the relieving issue of such delay in the hepatic branches of the *venæ portæ*.

It is needless to pursue the details of this case on the present occasion, as it is only brought forward to exhibit the peculiar mode of death. Ptyalism supervened from a combination of squills, digitalis, and blue pill; and the face and throat were attacked with erysipelas on February 14th, which gave rise to sore throat and some delirium. On the 22nd he was suddenly seized at 9, p.m., with a fit of strangulation; he leaped out of bed, being suddenly aroused from a deep sleep, and was found struggling for breath. In five minutes the distress subsided, and he went into bed. The throat was covered with leeches. The voice was a mere whisper, and the difficulty in deglutition was in no wise relieved. At twelve at night another fit of a similar kind attacked him whilst dozing, and a third at three in the morning of the 23rd, and a fourth at six, which destroyed life in less than three minutes.

The throat was found to be infiltrated with purulent matter, both in front and behind the larynx and pharynx. There was also a similar collection on both sides of the œsophagus, mixed with a slate-coloured turbid serum. The edges of the glottis were nearly closed by an œdematous puckering of the mucous membrane. The lungs were healthy, but gorged with fluid.

The liver was enormously hypertrophied; the increase was owing to an unusual deposition of yellowish matter in and around the lobules; it was adherent by layers of coagulable lymph to the stomach, diaphragm, spleen, and large intestine.

SYPHILITIC DISEASES OF LARYNX—LARYNGOTOMY — SINGULAR DEATH FROM PNEUMONIA TWO MONTHS AFTERWARDS.

E. G., aged 60, was admitted under the care of Dr. Hawkins, with the following symptoms:—

Countenance ruddy, but anxious, breathing with a snuffling noise through the larynx. The epiglottis is felt to be rugged and hard on its edges. Any attempt to swallow food, unless it was done with great care, and in a slow manner, caused a suffocating attack of cough; aphonia. The crico thyroidean membrane is painful on pressure, and the whole larynx feels harder, and more bulky than natural. Occasional orthopnœa, and severe fits of dyspnœa. Appetite good; pulse tranquil.

Auscultation.—The respiratory murmur is feeble heard throughout the lungs, but the amount of air that enters the chest is evidently so small, that no very decided opinion can be given as to the actual condition of the lower lobes. There is some dullness on percussion in the upper portions of both lungs.

His history was, that two years ago he was a patient in St. Bartholomew's Hospital, with syphilitic sore throat, from which he recovered, with the exception of a weakness in his voice. This last symptom had been gradually increasing ever since, and for six months past he had suffered from severe attacks of dyspnœa, and had been under medical treatment at a Dispensary, with some relief. These fits, however, had grown more urgent, and he sought admission into this Hospital.

It is needless to detail the whole treatment up to the period of the operation,—suffice it to observe that repeated leeching, tartar emetic ointment, and blisters to the larynx were administered, and the system was slightly affected by mercury. The symptoms, however, grew worse from week to week, when a consultation was held; and it was determined to let the poor fellow have the benefit, if possible, of an operation.

Mr. C. De Morgan, the operator, accordingly lai

bare the crico thyroidean ligament, and cricoid cartilage, with one incision of the scalpel, and then took a trocar, carrying a canula, and attempted to thrust it through the former membrane, but all efforts to penetrate this ligament were fruitless. Mr. C. De M. then abandoned the trocar, and, with the scalpel and bone-nippers he removed a large portion of substance which proved to be a mass of crico-thyroidean membrane and cricoid cartilage, converted into an osseous structure; so that, as the operator remarked to the class afterwards, had he not laid bare the body of the larynx in the first instance, but had simply plunged the trocar against the larynx from the external skin, as some operators have done before, he might have caused serious damage to the organ, and the attempts would have been worse than fruitless, as they would have added to the sufferings of the patient; and the external incision must have been subsequently made. The operation thus performed necessarily left a large and open wound for the free egress and ingress of air.

The patient fell asleep, and continued to do so soundly for many hours. No untoward symptoms arose until within one month after the operation, when slight difficulty of swallowing again appeared. Soon afterwards it was noticed, that particles of food and some drink oozed through the opening when he took his meals. This symptom was succeeded by a puffiness of the neck at the point opposite to the lower portion of the bag of the pharynx on the left side. The food was now forcibly driven through the wound, and kept up a source of incessant irritation, so that he was afraid, and at length declined to take any nourishment; from this period he gradually sunk and died from a slight attack of pneumonia, induced by some food, as it afterwards appeared, which had gone down the trachea from a communication that existed with the pharynx. This was two months after the operation. The *post-mortem* examination proved, that there was extensive ulceration of both cordæ vocales and edges of the epiglottis. An ulcer in size to a four-penny piece was situated on the pharyngeal side of this part of the organ, and it led directly into the bag of the pharynx. Particles of food were found strewed along the trachea and right bronchial division. There was pneumonia of this lung, and tubercular solidification of the upper lobes on both sides.

OBSERVATIONS ON STRICTURE OF THE URETHRA, AND ITS APPROPRIATE TREATMENT.

By BARNARD HOLT, F.R.C.S., and Assistant-Surgeon to the Westminster Hospital.

(Continued from page 509.)

Instruments of every imaginable variety have been had recourse to in the treatment of this disease, but without, in my opinion, sufficient attention being paid to the principles upon which it should be conducted. It must be borne in mind the parts we have to contend with, consist of morbid changes in living and excitable structures, evincing the most exquisite sensibility, and resenting rough treatment in a manner only appreciable by the experienced surgeon. It is not my intention to enter into a minute description of the manner in which these different products of ingenuity are manufactured, but consider it sufficient to endeavour to point out the evils attendant on their several applications. The ordinary wax bougie is an instrument totally useless where the obstruction is in any degree severe, as, should the stricture be of such a character as not to admit one of a tolerable size, it becomes bent and twisted into every conceivable shape, and has been frequently imagined to have passed into the bladder, but upon withdrawal is found broken, coiled, and twisted, as before described, having only reached the face, or front, of the stricture. The gum elastic catheter, when properly made and retained on a stilett for a considerable period, (as recommended by Sir Benjamin Brodie,) is decidedly a better instrument. Where the stricture is not very much contracted, it will retain its shape sufficiently to be passed without the wire, which can, however, be immediately added, should the difficulty not be overcome. I much prefer the stilett to have a large wooden handle, and the wire to be made, in the smaller ones, of well-tempered steel, and the larger, brass; thus, you insure a degree of firmness which, in experienced hands, will be usually attended with success. There is a kind of solid, yet elastic bougie, which, by friction, or the application of heat, becomes perfectly flexible, and is a very good instrument to allow patients to pass upon themselves, after attaining a No. 8 or 9, and even in the more severe forms of the disease can be occasionally introduced, after every other instrument has failed, always bearing in mind the necessity of not letting any portion of it become coiled or twisted, as it is then immediately rendered useless. The silver catheter is an admirable instrument, and when of a proper curve, and having only one oval opening, the edges of which should be well rounded off, will frequently pass with greater facility than any other; it possesses the great feature of retaining the curve originally intended, and is, in my opinion, devoid of the objection urged against it when small, (namely the chance of false passage,) from the facility of direction, and the command it gives the operator, recollecting the rule of never using force. The shape, curve, and make of the instrument, should be most scrupulously attended to; many gum elastic catheters are rough, hard, and unyielding, and do not possess that elasticity of texture, which so admirably adapts them for irritable urethras and those cases where hæmorrhage usually follows the passage of the plated, or silver sound. The silver catheter, in like manner, should be smooth, highly-polished, and devoid of those small holes in its extremity, which very much assimilate a file, being sharp, rough, and quite unfitted to come in contact with an excitable urethra. The same observations will apply to the solid steel, or silver bougie, taking care that every instrument employed, whether of hard or soft materials, should be as near as possible the natural curve of the urethra. There is a species of sound, made of iron, or some hard metal, covered with elastic gum, and having a moderately large handle. I cannot see any advantage it possesses over the ordinary steel, or silver sound, being much more adhesive, quite as likely to produce false passage, and, however well oiled, does not glide along the urethra with the facility awarded to those just mentioned. These instruments are frequently made with a conical point, an evil quite insurmountable. As, acting on the principle of a wedge, in the first place, the diameter of the stricture can never be accurately determined. The point being sufficiently large to enter the part behind, will not proceed without considerable violence, any attempt at which must be attended with ultimate mischief, by adding to the inflammation that already exists, and preventing the repetition of treatment for a considerable period. Caustic bougies have been had recourse to, and much written on the subject. I need add but very little to what has been already published, the advocates and opponents of this particular kind of treatment having freely discussed the advantages and disadvantages to be derived from their application. From what I can gather, with regard to the employment of caustic bougies, the only benefit likely to arise is from the application of the argentum nitratum to the face of a stricture, in which the lining membrane of the urethra is in a state of extreme irritability. Here the introduction of an armed bougie may be of benefit; but that an impassable stricture is ever destroyed by the caustic properties of the argentum nitratum I do not for one moment believe. Some have advocated the necessity of passing an instrument through the stricture, and applying the caustic to its inner surface. I need only answer, should the stricture admit of any instrument being passed into the bladder, it is unquestionably in a condition to be cured quite as quickly by the ordinary method of dilatation; thus my use of the armed bougie is now limited to those caseswhere great irritability is present, and where I believe the application of the caustic is attended with considerable benefit. A very ingenious instrument has been invented by Mr. Stafford, for the purpose of dividing an impassable stricture without cutting through the integument covering the urethra, and consists in a lancet, concealed in a hollow tube, which can be projected at pleasure and the stricture divided. A catheter is immediately afterwards introduced and the parts allowed to heal over it. Could this be practically carried out as easily as explained it would certainly be a great boon in the treatment of this severe form of the disease. Should the stricture be situated anywhere anterior to the triangular ligament, or where an instrument of a straight form could be made use of, it might be had recourse to without much danger; but where the stricture is situated beyond the curve of the urethra, and is of that hardened cartilaginous character in which the textures of impassable stricture are frequently found, it becomes a measure attended with hazard to the patient, and want of success in the operator. The considerable hæmorrhage that frequently ensues, the danger of wounding the healthy structures of the canal, and the consequent infiltration of urine, with all its attendant perils, are sufficient to deter me from its employment, except in the instances I have mentioned. The catgut bougie has its advantages, but I consider them limited to cases of very severe obstruction. Where the strictured portion of the canal is uneven and twisted, this instrument, by careful manipulation, will occasionally succeed when all others have failed; should, however, the obstruction be such as to cause the point of the bougie to become bent, it is better to immediately withdraw it, and introduce another, than persevere with one in this condition. There is a clever instrument, made like an ordinary wax bougie, with an end of a softer material than the body, which, by being kept steadily pressed against the face of the stricture, takes a cast, or model, of its peculiarities. Its use should, however, be limited to those cases of cartilaginous deposit, where not only the mucous lining of the urethra, but the surrounding textures are implicated, by which a steady resistance is offered to the exercise of any moderate pressure. Thus you may obtain a tolerably faithful representation of the condition of the diseased structures; but, if the stricture be irritable, or accompanied by lax mucous membrane, &c., no such result can be accurately obtained. Previous to any examination of the urethra the history of the case should endeavour to be made as clear as possible, more particularly as to when inconvenience was first experienced, date of the supposed cause, size and form of the present stream, time in accomplishing, and frequency of micturition,—whether there be discharge, pain in the perinæum, or seminal emissions; thus, by getting a tolerably clear outline, you will have some idea as to the kind of instrument it may be necessary to have recourse to. In the examination of a person the subject of stricture, there are many circumstances requiring considerable care and tact on the part of the surgeon. Patients who present themselves for the first time are generally nervous, timid, and liable to faint; not from actual pain caused by the introduction of the catheter, but from a peculiar almost indescribable sensation, which is apparent by a feeling of sickness, dizziness of the head and eyes, perspiration, and a tremulousness through the entire frame, and they frequently fall as if shot. These effects may be obviated, in a material degree, by the examination being conducted with the greatest possible gentleness. The catheter, or whatever instrument employed, should not be thrust rudely into the urethra, and, by an attempt at dexterity, passed with rapidity and roughness, but, after being well oiled, should be slowly introduced, and allowed to remain whenever the patient complains of uneasiness, and again gently pressed forward as this feeling subsides. Thus, by moderate measures, and diverting the patient's mind by conversation, an accurate diagnosis can ordinarily be made. In some cases, however gentle the examination may be conducted, they cannot bear the passage of the instrument through the entire canal, and will beg you to postpone its introduction to some future period. Although I consider it better to pass the instrument into the bladder, if possible, yet, in these instances, it is advisable to desist, and trust to the

confidence of your patient to allow a further trial at some future period, when, after a few times, he will become quite familiar to the necessary manipulation. The instrument to be employed will almost determine the manner of its introduction,—thus wax, catgut, or elastic gum bougies, are ordinarily introduced in a straight form, or nearly so, and pushed gradually forwards, their softness or elasticity being sufficient to allow of their taking the natural curve of the urethra; whereas, those composed of a hard metallic substance, such as silver, steel, &c., are introduced in three different ways, according to the fancy of the surgeon. One will prefer introducing it with the convexity downwards, the handle being placed in apposition with the patient's abdomen, when, by elevating the point, and gradually depressing the handle, the instrument passes into the bladder. Another will prefer placing the handle over the left groin, the point is then pressed forwards as far as it will go, and the handle gradually brought to the mesian line, and depressed in a similar manner; while a third prefers the concavity downwards, the handle being between the patient's thighs. The point is gently pushed onwards for three or four inches, and, gradually progressing, the handle is made to describe a semicircle, being brought to the centre of the abdomen, and depressed as before. Great care should be taken, while turning the instrument, that its point is kept progressing, otherwise, as Mr. Vincent observes, where a small catheter is employed, the point is apt to become entangled in the mucous lining of the urethra, and thus prevent its introduction into the bladder. I know of nothing in manipulative surgery, requiring greater care, or lightness of touch, and where, to use an old phrase, your eyes are wanted at the ends of your fingers, than in the introduction of a catheter. I have frequently seen an instrument glide into the bladder with apparent ease in the hands of one surgeon, when every effort on the part of another has been ineffectual in accomplishing it. In the majority of cases it is worse than useless to use force, a moment's reflection convincing us the textures we have to contend with are in a state of excitement, probably inflammation, and hence easily alarmed, and ready to contract spasmodically, upon the least extra excitement. Some surgeons are in the habit of passing instruments very quickly along the canal, more especially where spasm exists, under the impression they can, by expertness, anticipate the muscular action, and take it, as it were, by surprise. Nothing is more fallacious than such treatment, and nothing more likely, where the catheter or sound exactly fits the diameter of the stricture, to frustrate the intended object. It is utterly impossible for any one to pass a number 3 or 4 sound, into an irritable and easily excited urethra in the manner just mentioned, putting quite out of the question the present pain and ultimate serious consequences experienced by the patient. Where the urethra is but slightly constricted, not irritable, and the patient a healthy subject, an instrument may be passed by the almost inexperienced; but, where the diameter of the stricture is very limited, and the parts easily excited, it is quite impracticable to introduce any instrument into the bladder, except by the most gentle means; always remembering the direction of the canal, and endeavouring to keep the point as near in the centre as possible. In these cases, an uneasy, hot, cutting sensation is experienced, which becomes exceedingly acute when passing through the strictured part, and leaves a dull, heavy, aching in the perinæum and course of the canal. A further proof of the dexterity and gentleness required in the introduction of a catheter for the retention of urine, is the frequency with which practitioners, who are not constantly in the habit of treating these cases, are foiled in their endeavours to pass a catheter. Not being enabled to introduce it at the first or second attempt, some degree of force is generally used; hæmorrhage occasionally, to a considerable extent, ensues; and that which was probably, in the first instance, a moderately easy matter, is now beset with difficulties and dangers. The liability to shivering and stricture fever is more likely to occur after many ineffectual attempts to get an instrument into the bladder, attended with very slight hæmorrhage, and where the instrument is passed beyond the triangular ligament, than where the hæmorrhage is free, and flows in drops from the end of the penis. I have seen several instances where patients had been progressing in the most favourable manner, the urethra becoming gradually dilated without more than the ordinary amount of irritation, when, upon some one occasion, greater difficulty will be experienced in passing the catheter, spasm is excited; and, after pressing the instrument, even with the greatest gentleness, against the surface of the stricture, or even getting within its orifice, but unable to proceed, upon withdrawal it is found smeared with blood. In almost every case of this kind, shivering, to a greater or less extent, will ensue; in some, bordering on a regular attack of stricture fever, in others, going through its successive stages, accompanied by headache, giddiness, great febrile disturbance, and wandering delirium. Should, however, the attack be incomplete, and accompanied by perspiration, a recurrence of the symptoms will generally supervene, until it is naturally or artificially produced. The same effects occasionally ensue where the surgeon may be solicited to proceed quicker than his judgment would induce him to do; and by passing over an intermediate number, endeavour to introduce an instrument two sizes larger than previous. A gentleman, the subject of a very bad stricture, where there had been considerable difficulty in effecting an entrance into the bladder, had been progressing most favourably, until attaining No. 8, when, from the facility of introduction, I was induced, at his request, to pass to No. 10; it proceeded with more difficulty than before, and its withdrawal was followed by a slight oozing of blood. I desired him to go home, foment the parts, and keep very quiet. I was, however, sent for in the evening, and upon my arrival was informed, that almost immediately after dinner he was attacked with violent shivering, his stools passed involuntarily, he was unable to make a drop of water, was thirsty, skin hot, intense headache, and altogether in a very uncomfortable, and, to those who had never seen a similar attack, apparently alarming condition. I desired he might be immediately placed in a warm bath, take 10 grains of Dover's powder, and a draught of castor oil and opium in six hours. In an hour after taking the Dover's powder, he became calm, passed his water without difficulty, had perspired freely, and, upon my seeing him in the morning, was nearly as well as before the attack. In the first case, the urethra was in a state of irritative inflammation, the mucous membrane highly infected, and the surrounding muscular structures ready to contract, and offer the most strenuous resistance to the introduction of any foreign body. In the second, the lining membrane was stretched, and, by the efforts of the surgeon, the patient placed in a position similar to that just described. It sometimes happens, that where there is more than the ordinary difficulty in passing an instrument, a feeling of chilliness is experienced, commencing about six hours after the introduction, and continuing for an hour or two; something evidently bordering upon an attack of stricture fever, but where the irritation has not been sufficient to produce the effects in their more formidable shape. It is curious to contemplate the effect a shivering fit has on the constitution of persons who have been the subject of rheumatism or gout, although the patient may not have suffered for years from either one or the other; yet, after one of these attacks, a recurrence of rheumatic or gouty pains will almost invariably ensue; the nervous irritation appearing to bring forth what had been laying dormant for years.

[To be continued.]

CONTRIBUTIONS TO THE MEDICAL TOPOGRAPHY OF THE MEDITERRANEAN.

By WILLIAM THOMPSON KAY, Esq., Assistant-Surgeon of the Plymouth Division of Royal Marines.

(Continued from page 74.)

Mode of Travelling.—*By land.*—The usual mode of travelling in Syria, and all the surrounding countries, is on horseback. The price of a horse for hire being from three to four shillings a day while travelling, and half the price while resting; with the understanding that it is not to be taken beyond the place named, and the forage to be supplied by the owner, who generally makes use of whatever falls in his way for that purpose.

To travel with comfort, a European requires either a Parisian courier's saddle with broad stirrups, or an English one thickly padded; but the natives object to the latter, on the plea that they cause sore backs.

In addition to the horse for riding, it is necessary to have one for a servant, and a couple of mules, the first of which carries a tent on one side, and a canteen, saddle-bags, &c., on the other, with a few sundries in the centre, as a hammock, portmanteau, or carpet-bag; and the second, the muleteer, with an array of mats, water-bottles, pipe-sticks, guns, &c., &c.

Camels are used for conveying luggage, &c., which is placed on either side of a pack-saddle, the load being regulated according to the distance and nature of the road.

It is generally the custom to start early, and to make only a short journey the first day, halting near a town, so that any deficiencies may be supplied from it in case of need; and in the hot weather to travel by night.

By Water.—The boats of the country, engaged chiefly in the melon and corn trade, convey passengers, pilgrims, &c., for small sums, between the various ports on the coast; but they are filthy in the extreme, alive with vermin of every description.

Communication between Towns.—Russell, in his "History of Aleppo," mentions the use of pigeons in the English factory in former times, as a means of conveying intelligence from Scandervon to Aleppo, of the arrival of the Company's ship at that port. The pigeons performed the journey in two hours and a-half, a distance of sixty or seventy miles in a straight line. The feet were wetted with vinegar before starting, to keep them cool. At the present day, the communication is carried on by messengers or private parties, and is, consequently, very irregular.

Food.—Provisions, generally speaking, are extremely cheap in comparison with European prices, but they are inferior in quality.

The average prices may be given as follows:—

	Piastres.(b)		Piastres.
Beef, per oke (a)	3½	Bread, per loaf (6oz.)	1
Mutton	4	Potatoes, per oke	1½
Veal	4	Salt, per basket	6
Ham	10	Coffee, (raw,) per oke	8
Fowls, per pair	10	Sugar, loaf ,,	6
Chickens, ,,	6	,, crushed ,,	5
Turkeys, each	30	Soap, yellow ,,	6
Geese ,,	20	Rice, Turkish ,,	2½
Woodcocks, per brace	5	,, white ,,	3½
Sheep, each	90	Tea, per lb	30

HOSPITAL REPORTS.

ST. BARTHOLOMEW'S HOSPITAL.

Reported by T. M. GIRDLESTONE, Esq., M.R.C.S. Surgeon to the Blenheim-street Dispensary. Formerly House-Surgeon to St. Bartholomew's Hospital.

HYDROCELE OF BOTH SIDES. INFLAMMATION AND SUPPURATION OF THE LEFT TUNICA VAGINALIS, FOLLOWING THE OPERATION OF TAPPING.

T. W. P., aged 55, is a warehouseman, of a nervous and irritable temperament. On December 23, 1848, he came to St. Bartholomew's Hospital, for the purpose of having his right hydrocele tapped. He stated that it commenced three years and a half ago, and was preceded by a blow on the scrotum. It had already been tapped five times; the fluid was clear on each occasion; no injection had ever been used. The swelling was now large, of a pyriform shape, and the scrotum was tense. There was also a hydrocele of the left side, of three months' duration, but not large enough to distend the scrotum. The right one was tapped with

(a) The oke is nearly 2lbs. 12oz. avoirdupois.

(b) A piastre averages 2¼d.

a trochar in the usual way; rather more than a pint of fluid was evacuated; no injection was employed. It was observed that the fluid was rather dull, and its evacuation was not followed by the usual collapse of the scrotum, owing to the parts beneath it being thickened. After the operation, the patient, not wishing to remain in the Hospital, walked home, a distance of two miles. On the next day his testicle was very painful; the scrotum was red and swelled, and he was obliged to keep in bed. The pain and swelling increased, the former being very severe.

On December 29 he again came to the Hospital, and was admitted. The left side of the scrotum was firm and elastic, very much swelled, and distended, apparently with fluid; it was very painful, as large and of the same shape as it was before the tapping; the skin was hot, and of a dull red. The hydrocele of the right side was soft, and not affected by the inflammation. Leeches and warm fomentations were applied to his scrotum, and he was ordered to take calomel and opium.

This treatment was followed by some abatement of the pain and swelling, but they increased again in a few days.

January 4.—As fluctuation could be felt, Mr. Lloyd punctured the tunica vaginalis with a trochar, and let out seventeen ounces of fluid, composed of equal parts of pus and serum; this was followed by great relief. The fluid was examined with the microscope, and pus globules were seen in it.

The strength of the patient being reduced he was ordered wine, and a nourishing diet. A poultice was applied to the scrotum.

January 11.—The pain, swelling, and inflammation have much diminished, but there is still fluid in the tunica vaginalis; another puncture was made with the trochar; half an ounce of thick pus escaped at the time, and a considerable quantity of pus and serum during the two following days.

Omit the calomel and opium; let him have a warm bath daily.

January 18.—The bulk of the swelling has considerably diminished since his admission, fresh fluid has collected in the tunica vaginalis, and the right side of the scrotum remains thickened. An incision an inch long was now made with the knife through the scrotum, and an ounce of thick pus was discharged.

He was again ordered to take small doses of calomel and opium.

February 5.—The hydrocele of the right side was tapped, six ounces of clear yellow fluid escaped, no injection was employed, and no inflammation followed.

February 22.—His mouth has been kept tender by mercury taken internally, and mercurial ointment has been applied to the scrotum. The swelling of the left testicle and its coverings has continued to decrease; the latter are adherent to the testicle; it is about twice its natural size, and hard, the epididymis seems involved in the surrounding thickness and cannot be distinguished. There is no inflammation. The right testicle is natural.

February 24.—Discharged.

A PIECE OF TINNED SHEET IRON EXPELLED FROM THE ŒSOPHAGUS BY VOMITING, AFTER REMAINING IMPACTED FOR EIGHT DAYS.

Allen Newman, aged four years, was admitted on December 14th, 1847. Her friends stated, that she accidentally swallowed, on December 11th, a sharp cornered piece of common tinned sheet-iron, while she was playing with it in her mouth. She complains of pain in her neck; she can swallow fluid and soft food, but not without difficulty. The finger, pressed into the pharynx as far as it will reach, detects nothing, neither can any projection be felt externally in the neck. There is no obstruction to her breathing.

December 17th.—She still swallows with difficulty and pain. She has taken very little food, and generally allows the saliva to run out of her mouth. On touching the right side of the neck she complains of its being tender.

December 19.—Vomiting came on spontaneously, and the piece of tin was thrown up. It had very rough sharp edges and angles, and measured one inch across its greatest diameter. She soon recovered the use of her œsophagus.

Remarks.—That nature will sometimes expel of herself foreign bodies from the œsophagus, there can be no doubt. It appears that great injury may be done to this canal by attempting to draw from it a sharp-pointed foreign substance, by means of forceps or other ingenious contrivances invented for that purpose, or even by administering emetics, which may act with great violence, while no interference at all may be followed by a very favourable result. Of course, if the respiration be interfered with, or food cannot be administered, it will be necessary to remove the obstacle either by the forceps or by the operation of œsophagotomy. In the present case there were no alarming symptoms, therefore it was thought prudent to wait. The foreign body being ultimately so easily expelled by vomiting, is probably owing to its having being first loosened by some slight ulceration.

KING'S COLLEGE HOSPITAL.

We were induced to pay this little Hospital a visit on Saturday last, on hearing that some important operations were to be performed by Mr. Fergusson.

The first was a case of stone in the bladder, in a young man, on whom the lateral operation of lithotomy was performed. The patient was placed under the influence of chloroform, and the usual incisions were made, and the bladder quickly cut into; the forceps were then introduced, and the stone was caught immediately on the first gush of urine, and extracted with the greatest facility. The stone was about the size of a chestnut. In some remarks which the operator made, he stated, that it would have been possible to have crushed this calculus, but there was so much irritability of the urinary passages as to forbid the employment of the lithotrite.

The second case of interest was the operation of amputation of the foot at the ankle joint. The patient was a poor boy, who had long laboured under disease of the foot, more particularly affecting the ankle-joint itself. The operation was performed in the following manner:—An incision was carried over the front of the joint from one malleolus to the other; the knife was then carried from the extremity of this, over the sole of the foot, to the point where the first incision commenced; the joint was next cut into in front, and the soft tissues cautiously dissected away from behind, and on each side of the os calcis, and the foot thus removed, a large posterior flap remaining. The tissues were then dissected away from the lower ends of the tibia and fibula, and a thin section of these bones sawed off. This is now the fifth or sixth time this operation has been performed in London, since its first adoption by Professor Syme; and it certainly bids fair entirely to do away with the old proceeding, of removing a large portion of the leg as well as the foot; the operation is a difficult one, and requires great caution in the use of the knife, more particularly in dissecting off the skin from the heel, but, in the hands of Mr. Fergusson, the proceeding appeared to us to be nearly as simple as an ordinary amputation.

PROGRESS OF MEDICAL SCIENCE.

GERMANY.

[Berlin Correspondence.]

You doubtless remember the awful famine and typhus which, from 1847 to 1848, desolated the southern part of Silesia, and of which the most harrowing accounts were given almost daily by the German Press, until the outbreak of our revolutions and political convulsions directed the attention of the public into another channel.

The southern part of Silesia is inhabited by a rude, wretchedly poor, population, scattered over wide plains. At the period mentioned, such was the dearth of medical resources in the afflicted districts, that the Government had to send into them a great number of physicians and army-surgeons, to combat the formidable scourge which desolated the land. Unfortunately, it was only after thousands of victims had fallen, and private associations had taken the lead, that the Government came forward at last with efficient measures of medical relief.

At the present moment Upper Silesia is visited by endemic typhus, which it appears has assumed of late, a very alarming form. In this instance the Government has exhibited, certainly, much greater promptitude of action than characterized its conduct on the last occasion. The threatened quarter has been divided into medical districts; and each of the physicians and surgeons resident in the affected locality has been charged with the medical superintendence of one of these districts. The Government has, besides, declared its readiness to send twenty-six additional physicians from other provinces to those parts of Upper Silesia where their assistance is most urgently required. Now, how many of our colleagues do you think have applied for these by no means lucrative nor, otherwise, over-desirable appointments? No less than 300! Considering that the successful twenty-six will be obliged to reside in villages that may fitly be classed among the most unhealthy, dirtiest, and poorest in all Germany; that these villages are inhabited by a rude Sclavonian (Polish) population; and that the remuneration of these practitioners is trifling, and altogether disproportionate to the laborious duties of their office and to the serious risk and danger inseparable from the conscientious discharge of its duties:—the 300 applications may surely be regarded as a proof of how great must be the Proletarianism among the Prussian physicians.

Our valiant ministry has struck another blow at the democratic section of the Berlin physicians, Dr. Virchow, a highly talented young man, Prosector at the Charité, and our principal, and, in fact, only Lecturer on Pathological Anatomy, has been dismissed upon a charge of having disseminated democratic opinions and anti-ministerial pamphlets among the officials of the Hospital. Even the intercession of Alexander Von Humboldt has been of no avail to save him from suspension.

A great number of the medical practitioners of Berlin, without distinction of party, have now agreed to petition the ministry for the reinstatement of Dr. Virchow, as that gentleman has most creditably performed the duties of his office; and as his conduct, in all other respects, has been perfectly free from anything that could possibly render him liable to legal or judiciary censure. I greatly doubt the success of the Petition, for we have here a class of misdemeanours deemed much more heinous and unpardonable by our present Ministry than even highway robbery; the distinctive appellation of this class of misdemeanour is, "Exciting disaffection against the Government."

Hitherto the publication of interesting cases, treated at the Charité, has been left entirely to chance, or to the pleasure of the attendant physician. It appears, however, that we are soon to have a regular record of cases, similar to the *Paris Gazette des Hôpitaux*, and under the title of *Annalen des Berliner Charité, Krankenhauses*.

Recent statistical researches have shown, that, whereas the population of Berlin had, from 1843 to 1847, kept steadily increasing by 14,000 to 17,000 souls annually, it has, in the year 1848, decreased by 3,000. In 1847 the immigration into the city exceeded the emigration by 11,000; in 1848, the latter exceeded the former by 5,154. Upon the births, also, these troubled times have exercised a depressing influence. In former years the number of births exceeded that of deaths by 2,500 to 3,000 annually; in 1848 the excess of births over deaths was only 1,935.

THE MICROSCOPIC CONSTITUENTS OF TUBERCULAR DEPOSITS.

Different observers of tubercles have variously stated, (1,) that it contains peculiar "tubercle cells or bodies;" (2,) that it does not contain any definite microscopic constituents, or, (3,) that the crude or miliary variety contains an organic body of definite form.

Albers, of Bonn, in Schmidt's "*Jahrbrücher*," No. 2., 1849, confirms the latter of the three opinions. This peculiar body occurs very seldom in miliary tubercles, but more frequently in the infiltrated form. Its size is very variable, its form irregularly roundish; its outer surface is mostly covered with fine amorphous granules; no nucleus exists in its interior, or anything whatever answering to it. This body is the first step to organization, viz., that in which plastic fibrine takes the form of a deformed mass previous to the construction of a cell. But its form is too irregular to afford the presumption of a definite nature; it is merely an aggregation of matter present in crude transparent tubercle, and sometimes called "Enchym-Korper," or pregnant mass. It exists only in the first stage of tubercle, and in all probability, never undergoes a development into a nucleus, far less into a cell: in the second stage it disappears by separating into amorphous granules. In this way the softening of tubercle commences. The amorphous granules increased in number; the "pregnant masses" become smaller and more thickly covered with these granules; and, finally, by the time the tubercle has attained the consistence of pap they have altogether disappeared; while pus corpuscles are found in their place. The latter appear with the commencement of softening, and increase in number to its termination.

The Author states, that these "pregnant masses" are not always present, and that this absence is an indication of a very low capacity for organisation. And so their predominance in miliary tubercle indicates the higher capability of this variety,—a fact which its more frequent cicatrization corroborates. He regards the suppuration in a tubercular cavity as an effort of nature towards reparation; indeed, he strangely regards it as compensative of the lost tissue; and the pus-secreting membrane he calls a "Regenerations Haut,"—membrane of regeneration.

Thus, on the whole, Albers would make out tubercle as even less organised, *i. e.* containing fewer cell-forms, than Rokitansky, Vögel, and other observers. And in any case, whether the few nuclei observed be mere mixture or no, one may notice how little the granular mass deserves the *functional* name of blastema, so erroneously applied to it. The Author's "first step to organisation," might almost be called "coagulation," since there is nothing here which may not be fairly referred to this well-known process. Finally, the notion of pus being an attempt at "regeneration," is one of those over-strained analogies which could only be imagined after forgetting what regeneration is; or, in other words, an organised body which *never* produces a tissue, can scarcely be considered compensative of one.

ITALY.

DISSEMINATION OF THE SYPHILITIC POISON BY NURSES AND BY VACCINATION.

BY DR. LAURO VIANI.

The question whether any other virus than the vaccine can be transmitted by vaccination, is still far from being decided. Assuming the complete unity of the vaccine pustule, are we always positive that, in the operation, we communicate nothing but the pure vaccine matter?

The following case, by Dr. Lauro Viani, in the *Gazetta Medica Lombardi*, relates to this matter:—

A young and healthy woman having married an Italian while in Egypt, returned, after a time, to Florence, where, in 1838, she was delivered of a child, which she suckled for some months. She soon discovered syphilitic ulcerations on the nipples, but, not attaching much importance to them, she resigned the child to another nurse, who was soon, however, attacked in the same way, as also a third and fourth nurse. Each, in turn, resigned her charge, and the mother weaned the child. The fourth nurse, to relieve the distention of her breast, occasionally gave suck to another child, in whose mouth ulcerations soon appeared; the bowels became affected, and death followed in a few days. Meanwhile, the child, the probable cause of all the mischief, continued in good health, with the exception of a slight opthalmia.

During the year 1839, a very fatal small-pox was epidemic in Brescia, where the child lived with its uncle and aunt, who, having re-vaccinated their nephew, determined to go through the operation themselves, and to receive the virus from the child. The operator, a stranger to the history of the child and its five nurses, saw no other objection than the ophthalmia under which it laboured, and vaccinated accordingly. All went apparently well until the eighth day, when the pustules arrived at their height, disappeared, and were replaced by a hard rugose crust, surrounded with a reddish yellow aureola, very different from the ordinary vaccine scab. Shortly afterwards, both were freely covered with similar scabs or scales, giving them the appearance of lepers. Exostosis followed, with pains in the bones, inflammation and profuse suppuration of the glands of the neck.

In the man, these symptoms were particularly marked; while the aunt was further affected with ulcerations on the genital organs, with numerous condylamata around the anus, and severe opthalmia of the left eye. For some time, the nature of these affections were unsuspected; but, as soon as an anti-syphilitic treatment was adopted, the patients began to improve; but five long years elapsed before a perfect cure was effected.

So much doubt and mystery hangs over the above case, that we have hesitated to lay it before our readers, feeling unable to explain how a child could transmit to so many persons a disease from under which it did not apparently labour, its only tangible disease being a slight opthalmia. We fully agree with the Editor of the *Progres Medical*, that the story is not unlike that mentioned by Orrans, of the man who infected with the plague every one who touched him, without himself suffering from the disease. We much doubt the facts stated by Dr. Viani, particularly as he appears to have related the case more from hearsay than from actual observation. He did not see the ulcerations, therefore he could not pronounce them to be syphilitic, nor does the fact that they yielded to mercury prove them to have been venereal. Again, the uncle and aunt are reported to have been, the former scorbutic, the latter scrofulous, and the disturbance of the system, consequent on re-vaccination, may have called these latent affections into active operation.

If vaccination and re-vaccination are not in general attended with any untoward contingency, it is nevertheless true, that they may act as exciting causes, and call into activity certain diseases which otherwise might not have become manifest. It is well known that children, after vaccination, are often affected with cutaneous diseases, particularly of an impetiginous type. We are not inclined to arrive at the same conclusions as Dr. Viani, and we dissent from his opinion that the disease was venereal, or that it was transmitted in the manner he describes.

FRANCE.

THE IODURET OF POTASSIUM IN THE CURE OF MERCURIAL AND SATURNINE AFFECTIONS.

At a late meeting of the Academy of Sciences at Paris, M. Dumas presented a note from M. Melsens on the treatment of mercurial and saturnine affections by the ioduret of potassium. M. Melsens proposes to render soluble the metallic compounds retained in the system, by combining them with a substance easily eliminated. He mentioned several cases of individuals suffering under the effects of lead poison, all of whom he had successfully treated by the ioduret of potassium; and he endeavoured to prove that the sulphuric acid and the soluble sulphates were not remedial agents in chronic lead affections.

When the sulphate of lead is administered, during a few weeks, to a dog, it acts as a poison; but if the sulphate of lead is exhibited for a like period, combined with the ioduret of lead, no morbid symptom arises. Again, according to M. Melsens, if a dog, labouring under the lead poison, is given a large dose of the ioduret of potassium it quickly dies; whereas, if the dose is small, and gradually increased, the animal speedily recovers. M. Melsens also states, that doses of ioduret of potassium, which would destroy a dog labouring under the effects of lead, have no influence on a healthy animal.

We avail ourselves of this opportunity of addressing a few words to the medical men of Southampton. The leading Physician of that town lately stated to us, that a patient had consulted him for dropped hands, stating it was an hereditary complaint, and that several of his family had died from it. Of course lead poison was at once detected, and the man snatched from the impending fate of his unlucky ancestors; while, on examining the water which was used in his family, it was found strongly impregnated with lead. Mr. Osborne, the talented and very scientific chemist of Southampton, has done much to show the deleterious character of the water used in that town and neighbourhood, and the Magistrates and Council have done something towards a remedy. But more than this is required; and it is necessary that the Medical men—and none more able than those of Southampton, but who, unfortunately, have hitherto done little or nothing in the matter—should now bestir themselves, and show that there, at any rate, the aphorism of Pindar, "water is better than wine," is not applicable, except, indeed, for the very equivocal use of the Miller—that is the Doctor.

IRELAND.

[From our Dublin Correspondent.]

NITROUS ACID BLISTER IN CHOLERA.

By Dr. KELLY, Mullingar.

April 10, 1849.—Mr. Patrick Martin, aged 56, in very comfortable circumstances, was seized, about 10 p.m. yesterday evening with retching, which, he said, was preceded for the greater part of the day by flatulence and acidity of stomach.

Between 10 and 12 p.m., purging at first developed itself, and when first seen at 3 a.m., he was all but collapsed; pulse just perceptible, body and extremities cold, constant and colliquative purging dejections whitish like rice water, precipitating nitrate of silver, and interspersed with true choleraic flocculi; cramps continuous, but considerably aggravated on the slightest exertion; prostration so profound, that for the last hour he was incapable of leaving his bed; incessant thirst, with burning feeling in the pit of his stomach; voice low and whining, countenance collapsed; constant desire to pass water.

Two parts nitrous acid, and one part water, was at once rubbed into the pit of the stomach and adjoining hypocondria, until the cuticle became detached. The detached cuticle was then scraped off, and the denuded surface sprinkled over with 2 grs. acetate of morphia, a fold of flannel, wetted with turpentine, laid over that, and a flannel roller over all.

Flannel bandages, wetted with turpentine, were also rolled round his legs, jars of warm water applied to his legs and feet, and bottles to his hands, and a table-spoonful of the following mixture every half-hour, until four doses were taken, the intervals then to be increased to an hour:—℞. Acet. plumbi., ʒi.; acet. morph., gr. iv.; aquæ distillatæ ʒ 8. M.; plenty of cold water to drink, and the bandages to be wetted with the spirit of turpentine every second hour.

10 a.m.—Had no motion since the application of the blister; slept for at least two hours; cramps all but gone; thirst still continues; algide symptoms things that were; tongue warm, and loaded with a dirty whitish fur; pulse distinct; 120, but very compressible; voice greatly improved; feels much relieved; urine, of which he passed about 5 oz. between eight and nine a.m., straw-coloured, acid, of the low specific gravity of 1,008, becoming opalescent and slightly thickened by heat, and assuming, on the addition of nitrous acid, a tint of carmine, which, after the lapse of an hour, he changed to an opalescent flesh-colour,—the c

escence produced, most likely, by the partial coagulation of the proteinaceous excretion, and the carmine tint by the conversion of the elements of the uric acid into purpurate of ammonia by the reaction of the nitrous acid; discontinue the mixture.

2 p.m.—Progressively improving; tongue loaded, dusky, brownish-looking, and presenting at its tip a triangular portion, dry and corrugated; thirst; retching. To check the retching, a tablespoonful of the following mixture: ℞. Acid hydrocyanici, ♏ xxxij.; aquæ puræ, ʒ 8, M.; was given every hour; the turpentine repeated, and a spoonful or two of cold riced chicken broth every hour.

9 p.m.—Had no return of the retching since the first dose of the last medicine; tongue more loaded, except at the apex, which still continued dry; passed about 4 oz. of urine since 2 p.m., which apparently contained some shreds of prostatic mucus; specific gravity increased to 1028; same phenomenon apparent when tested with nitrous acid; thirst nearly gone; had no return of the purging since 4 a.m.; slight hiccough.

11th.—Much improved; tongue cleaning, moist throughout; pulse 108, full and tonic; skin moist and warm; perspired some during the night; passed about 10 oz. urine during the past thirteen hours; specific gravity 1030, loaded with pinkish white lithates, and presenting, but, in a less degree, the same appearances as yesterday; bowels not opened since.

A lavement of oj. infusi rhei; ʒ ij. liquoris potassæ, was administered, which, after the lapse of about half an hour, brought away a copious, dark-coloured motion, interspersed with granular masses of dark turf-mould-looking matter.

7 p.m.—Passed about 6 oz. water since morning; tongue cleaning; rather more thirst; abdomen full; 10 grains hydrargyrum cum cretâ at bed time, and a rhubarb draught in the morning.

12th.—The medicine had a most satisfactory effect, bringing away two very large dark bilious-looking motions, with the most complete relief of all the symptoms of fullness and distension he laboured under.

14th.—Convalescent.

The features of most importance in this case, are the singularly fortunate result of the nitrous acid blister applied as directed by Assistant-Surgeon Pard, in India, in 1818, combined with the endermic application of morphia, and the peculiar action of nitrous acid on the urine in developing the purpurate of ammonia.

The conversion of the mal-assimilated elements of proteine in the urine into purpurate of ammonia, and its development by the re-action of nitrous acid, is not only an exceedingly novel, but also a most interesting and valuable phenomenon, as by it you will be able positively to say whether an individual labouring under diarrhœa may or may not be threatened with cholera, as the two following cases abundantly prove.—

Case 1.—April 12th.—Mary Gannon, aged 8, had diarrhœa of two days' continuance before her mother applied at the Dispensary; she had also most painful micturition. A very small quantity of her urine having been procured, it at once assumed a deep carmine tint on the addition of the nitrous acid, which deposited, after the lapse of a few hours, a slight darkish precipitate.

Next day, although every possible precaution was had recourse to, cholera developed itself, and she finally sank on the 8th day, under the sequential form.

Case 2.—April 20th.—John Murphy, aged 56, had colliquative diarrhœa for the past three days, which he attributed to his having drank some fresh ale at Murray's brewery, where he was working two days before, and when first seen, at 8 a.m., cholera had fully developed itself.

Having passed a small quantity of water the evening before with pain so great that he likened it to boiling lead, the nitrous acid test at once developed in it the purpurate of ammonia, but in this case combined with a shade of opalescence, similar to the appearance presented by the urine of Martin during convalescence, and Murphy is now doing well.

Since the appearance of the epidemic here, I have paid considerable attention to the urine in every case in which it was secreted, and the conclusions I have come to are, that the more opalescent, the lighter the shade, and the greater the precipitate deposited by it, the less the danger; whereas in any case where the colour became highly developed, the urine remaining clear and having something the appearance of raspberry vinegar, no matter how mild the disease might originally be, the patient invariably sank.

To prevent misconception, the above remarks and observations refer to the premonitory and sequential stages, as it is only in these stages the kidneys are capable of acting.

LIMERICK INFIRMARY.

CASE OF CAROTID ANEURISM.

By Dr. GELSTON.

John Joyse, aged about 40 years, a leucophlegmatic and unhealthy-looking man, was admitted into the County of Limerick Infirmary on Saturday, 17th March, 1849, with a tumor situated at the angle of the right jaw, which had been punctured on the 27th February last with a lancet, having been mistaken for an abscess. It immediately bled a good deal, and then ceased, but again bleeding set in on the Sunday following, (March 4th,) and which, by his own account, weakened him very much, and was only controlled with compresses of tow, strong pressure with bandages. Bleeding again occurred on Tuesday following, (March 6th,) and was in a similar way restrained; finding then that the nature of the case was different from what was supposed, he sought for admission to the Infirmary, and on the following day, about twelve o'clock, when at the water-closet, bleeding occurred, and he lost about eight ounces of blood and fainted. It was restrained by the resident Apothecary, with graduated compresses and pressure. Hæmorrhage once more took place on Tuesday night, when I was sent for; but, finding that it had been again controlled by the resident medical officer, I directed a consultation to be summoned for the following morning, Wednesday, March 21st.

Drs. Wilkinson, Griffin, and Russell, in consultation with myself, agreed upon opening the bandages and compresses, and laying the entire tumor fairly open to our view; this being done, alarming hæmorrhage took place, which Dr. Wilkinson restrained by pressing his fingers into the bleeding cavity, and, on consulting, we, for obvious reasons, preferred cutting down on, and taking up the common carotid artery, to that proposed, viz., cutting down on the bleeding point, and there taking up the wounded and diseased vessel. The operation was speedily performed; no difficulty occurred, and the swelling and turgidity of the internal jugular vein, usually represented as a very embarrassing feature in this operation, did not offer any obstacle; on the contrary, it lay perfectly flaccid. The descending noni nerve occupied the external portion of the sheath of the vessels, and was easily drawn aside by a blunt hook; the sheath of the vessels pinched up with the forceps, was cautiously opened with the point of the scalpel, when a blunt-eyed probe, armed with a ligature, was passed behind the vessel, and, before finally securing the ligature, I compressed the vessel between my thumb and index-finger, Dr. Wilkinson, at the same time, withdrawing the pressure from the bleeding point, when very little bleeding, and that in a slow jet, dark-coloured, and evidently from the dystal end of the wounded vessel, followed. Being now satisfied that we had arrested the hæmorrhage, I secured the ligature with a double knot; on this being done the pulse fell from 120 to 84, the hæmorrhage ceased almost entirely, except that from the dystal end of the wounded vessel opening into the aneurismal tumoric cavity, and the depth of which, fully six inches, we plugged with sponge, and a double-headed roller-bandage applied; the depth of this bleeding cavity was so great, that the styloid process of the temporal bone was distinctly felt with the point of the finger. The incision to expose the vessel was brought together by two sutures, and lightly dressed; one end of the ligature being secured by a small bit of adhesive plaister at the lower angle of the wound. Pulsation immediately ceased in the corresponding temporal and facial arteries, and he complained of neither pain or uneasiness in his head, as might be expected from so quickly altering the current of so large a flow of blood.

The temporal and facial pulsations, however, were to be observed, but in a weakened state, on the morning following the operation.

The history of the case was, as told by Joyse, very simple. Some six months past, while at work, he suddenly felt an acute pain at the angle of the jaw, but which subsided after a short time; pain at various intervals was again felt, when, finally, it ceased altogether, and, after the lapse of five weeks, a small lump was discernible, conveying to him a distinct sensation of throbbing, and for which he sought advice; when counter-irritation was recommended, and carried into effect, but without any benefit. Finding that the tumor was increasing in size, some old quack recommended poultices of snails' urine, and cow-dung. This he continued for a long time; and when, finally, as he, and the sapient quack whom he consulted, conceived that all was ripe for operation, he (the quack) plunged a lancet into the aneurismal tumor, and the result, as before mentioned, followed.

The morning after operation, complained of slight laryngeal irritation, with cough; slept at intervals; drank freely of whey; pulse 130. Ordered—an 8 oz. mixture, containing a dram of the tincture of morphia. A spoonful to be taken whenever he felt the cough troublesome.

From this date, he rapidly improved in every respect, bowels being relieved on the 24th with ½ oz. of ol. ricini; all the irritation in his throat ceased, and two of the pieces of sponge, used in plugging the aneurismal cavity, came away with the suppuration; the latter is sufficiently abundant and healthy, as well from the bleeding cavity, as from an incision over the carotid artery.

28th.—Pulse came down to 80; bowels naturally evacuated; tongue clean; slept well; in fact, on inquiry, he says he can complain of nothing but hunger.

29th, 3 o'clock, a.m.—The resident medical officer was hastily summoned to his bedside, the nurse reporting that bleeding had set in, and, on his arrival he found that such had been the case, but it had ceased altogether, and it evidently came from the site of the ligature, but could not have been to any extent. Still, on my visiting him, I found him very much more blanched, exceedingly weak, pulse feeble, 110, but nothing of an hæmorrhagic character; his skin hot and dry; tongue loaded. This untoward circumstance was mainly attributable to his having foolishly seen and conversed with his wife and brother. Complains of thirst; to have imperial for his drink, and no one but the nurse allowed near him; fire in his ward to be put out, or kept barely lighting.

30th.—No recurrence of the hemorrhage; slept well; mind seems easy; pulse came down to 86; bowels opened freely. To have clean sheets and shirt, and one pint of thinly made arrow-root, and strict quiet enjoined.

April 1st.—No bleeding took place from the 29th until this morning, when slight oozing of blood came from the wound, but not to the amount of a teaspoonful, and which soon ceased without interference; care, however, being taken to leave a skilful assistant at his bedside, with instructions how to act in case of hæmorrhage.

I was hastily summoned to this man at 10 o'clock p.m. of this night, and, in company with Drs. Wilkinson and Russell, visited him immediately, no time having been lost, and on arrival we found him sinking rapidly, perfectly insensible, eyes fixed, and the resident medical officer with his fingers compressing the bleeding point, which, on removal, a gush of blood followed; he sunk very soon, not so much from the actual loss of blood, as from the impression conveyed to his nervously-anxious mind;

nothing could have been done in the way of operation, as on our arrival life was almost virtually extinct.

The morning following that of his death, I made an accurate dissection of those portions of his neck interested in the operation, and found that the aneurismal tumor had sprung from the external carotid close to its origin from the parent trunk, and that the ligature had completely become detached from the vessel, and the cardiac extremity of the artery was patulous, not having formed in it any thrombus, and also the entire of the vessel seemed in a gritty state, evidencing disease.

Remarks.—I attribute the want of success to two causes: first, being induced to apply the ligature so close to the subclavian artery from the abnormal appearance of the vessel, indicative of a diseased taint, and by which the formation of an internal cosgulum, a physical phenomenon, generally present in tied arteries, was prevented, as well also to a general diseased state of the entire vessels, and which, in the first instance, induced the aneurismal disease.

I can point out no particular new feature in this case, but simply send it for the Editor's own opinion, as to whether he may consider that advantage may be gained by the publishing of it. I would, I confess, had I such a case again under my care, be disposed, did such oozing of blood take place as on the morning of the day of his death, (although at the time being so trifling,) to have cut down again and tried to secure the vessel, or its parent trunk, the innominata; the latter in this case was the only operation (from the closeness of the ligature to the subclavian) that could have been applicable, and would, also, I am sure, have been followed by a similar secondary hæmorrhage.

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THE MEDICAL TIMES.

SATURDAY, MAY 5, 1849.

In a former number we made some reference to a celebrated controversy on the nature of the foundations of Medicine. We called attention to the contest between the Rationalists and the Empiricists, as they named themselves, from *εμπειρία, experientia.* We then intimated, that it appeared to us this old feud was becoming obsolete; that, as usual, truth seemed to lie between the disputants, and that Medical knowledge, as indeed all human science, is founded, to use the words of Humboldt, on a "rational empiricism." We are now desirous of showing how Medicine, formerly so completely empirical, is daily becoming more rational, from the influences of improved collateral sciences; but, before doing so, it is necessary to define this term of "rational empiricism," and to prove its applicability and justice.

Since the time of Bacon, there has been no real dispute as to the proper method of seeking into physical truth. Man, the Interpreter of Nature, has to unfold the phenomena which Nature presents. To do this he must collect facts; that is, he must express in terms, more or less precise, the successive changes which he traces in the forms of matter. Observation is the basis of all inquiry, and the primary condition of all knowledge. In physics, men ought never to reason *à priori*; or, if they do so, it should be only on the ground which Bacon authorises, when he states, that we may frame hypotheses, and found experiments upon them, if, by so doing, we can the better ask "questions of Nature."

At the present moment, there is more real observation being carried on in that part of Physics which relates to healthy and diseased organised matter, than at any former period. The number of labourers has increased, and the methods of inquiry have improved. In Pathology, our observations are now more minute than they used to be, owing to the employment of the microscope and the test tube; and they are more accurately arranged, from the use of the numerical method. The aim of the Physicians of our time is to observe closely, to record precisely, and to throw the facts into groups so large, that the general result shall be unaffected by individual errors.

This aim is, or ought to be, common both to Rationalists and Empiricists. Each should pursue the same method; each should arrive at the same result: the use of the microscope, of organic analysis, of numerical records of phenomena, are the improved modes which have been added, in our time, to the older and better-known means of noting and of recording the deviations from health. A real difference, however, between the Rationalists and Empiricists subsequently arises. The strict Empiricist, having obtained a certain number of recorded phenomena, arranges them in a sequence determined by the numerical method; having done this, he deems all further explanation impossible. Although, from the constitution of the human mind, he cannot altogether avoid conceiving some causal connexion between phenomena which invariably stand to each other in a certain relation, yet he repels this as much as possible, as illusory and uncertain. The Rationalist, on the other hand, having arrived in the same way, at the same sequence, seeks to know the reason why it follows its antecedent, and to explain the nature of the connexion. He does this by the aid of chemistry, by pure physics, and especially by physiology, which is itself a composite science made up from many sources.

One error of Rationalism lies in the supposition that this explanation is possible in every case, and in the attempt to apply to all complex manifestations of disease, a physiology which is, in many points, yet crude and immature. An unphilosophical Rationalism may, indeed, go further than this, and may fall into deeper errors. It may seek to anticipate the sequences, and to announce, *à priori*, and independently of observation and numerical record, the successive steps of morbid action. Now, this appears to be at present utterly futile and impossible. We cannot do it in the case of healthy processes, much less are we able to accomplish it in the intricate interlacements of Pathology. Such a Rationalism is of the same kind as those fugitive pseudo-philosophies of Paracelsus, Van Helmont, Brown, or Broussais, which were all founded on erroneous applications of partially apprehended truths. The most bigoted Empiricism, which is erroneous rather by omission than commission, rather by refusing to advance, than by advancing wrongly, is to be preferred to such a Rationalism as this, which attempts to inculcate as truths the fantastic forms, reflected in its distorted and angular mirror, from the face of Nature.

True Rationalism has no alliance with this pretender to its name; it seeks only to apply to pathological phenomena the knowledge it has learned from all other sciences; and in this application it passes beyond pure Empiricism, with which so far it has journeyed in common. It endeavours to explain what has been already proved by experience to have a real existence; if it infers as to what *may* exist, but is yet unproved, this is hypothetical, and is subject to the correction of observation. True Rationalism is possible only with a true physiology, by which it is, in fact, necessitated, and from which it naturally and inevitably flows. The Chinese, for many centuries, and the mariners of Amalfi, and of Europe generally, for more than 300 years, steered their vessels by an empirical use of the compass. They knew and profited by the fact, that the charmed needle assumed a certain direction; of the explanation of that fact they could form no notion. But almost in the present day, the rapid unfolding of a wonderful science has displayed the laws which govern the position of the magnetic needle, and has taught us how the deviations which appeared to Columbus as aberrations from Nature, are really the result of consistent and invariable laws. So, also, with many pathological facts: for centuries the facts have been noticed; empirical use has been made of them; the knowledge which can truly explain some of them, has, however, only lately become known. It appears self-evident, that directly the advance of science has determined with certainty one physiological truth, that truth must have some bearing on pathological phenomena. The necessary tendency, indeed, of physiology and pathology, is to approach each other, to unite, and by this union mutually to profit. They fuse together, to assist in forming the great science of the entire phenomena which are presented by organized beings in all grades, and under all conditions, whether normal or abnormal, transient or enduring.

The strict Empiricist may, indeed, refuse his assent to this doctrine, on the grounds that the Physiology is not true, or is only partially and imperfectly true; and, in either case, at present incapable of application to Pathology. And if by this he intends to assert, that there are many physiological truths, whose application to Physiology cannot yet be made, and many pathological facts which remain unexplained

and empirical, we entirely agree with him. But if he should contend that, in no case is physiological truth applicable to Pathology, that it never can be so, or is so remote an era that the present generation may disregard it,—then from this statement, if such is entertained by any one, we entirely dissent. And we shall take an early opportunity of bringing forward some striking examples of the applications of Physiology to practical Medicine, which appear to us to warrant the opinion we have given.

MEDICAL PROVIDENT INSTITUTIONS.

A Correspondent lately favoured us with some interesting remarks on the subject of Medical Provident Institutions, and the importance of the matter has induced us to turn our own consideration to it. The subject has been again and again agitated; but the organization of any scheme is attended with so many difficulties that little progress has been made, notwithstanding the many ingenious suggestions that have been proposed. There is no profession that needs so much, kindly and fostering aid as the medical. The long and expensive education required; the loss of some of the freshest and most interesting parts of early life in the protracted and often heart-sickening delay, awaiting reputation and full practice, — the more difficult to bear because the medical aspirant does not generally spring from the wealthiest classes of society; lastly, the wear and tear, of daily, incessant, practice, which makes such terrible inroads in both the mental and physical system—all these tell hard upon a Medical Practitioner, not only as an individual, but as the head and support of a dependent family.

The common Life Insurance Offices present themselves on all sides, and their advantages are obvious; but, while they have our unqualified approbation, they do not peculiarly meet the requisites of the Medical Man. Some association is required, where the *esprit de corps* might be called into operation, and where the contributions of the successful and rich practioner might be available, to a certain extent, to the less fortunate members of the Society, so that a certain provision might be made, not only for his family, in case of premature death, but in cases of prolonged illness, when his exertions, for the most part personal and rarely to be supplied by deputy, are, in consequence, suspended.

Some twenty years ago, a Medical Provident Institution, on the plan just alluded to, was tried in Scotland; but it was unsuccessful, and is now extinct. There is, however, in the same country, a "widow's scheme" attached to the Royal College of Surgeons, and sanctioned by Act of Parliament. This scheme is, we believe, supported in two ways. In the first instance, by certain payments from the entry fees of Fellows,—ninety-two in number—apprentices to Fellows, and certain portions of the fees paid by Licentiates. Besides this, each member pays an annual contribution of 5*l*. In this way an annuity is procured for the widows of deceased members, if they should be in circumstances to require such. The amount, of course, will vary with the number on the roll, and the state of the funds; but, we believe, 60*l*. is the usual annual allowance to each annuitant. The Edinburgh Faculty of Advocates has, also, a Widow's Fund on a similar plan.

There is another scheme, belonging to the Scotch Kirk, and in which the Professors of the Scotch Universities also participate. This scheme was proposed by a very ingenious clergyman of Edinburgh, in 1743, and was soon after established by Act of Parliament. Each clergyman, on his appointment to a living, and joining the Association, pays a certain sum into the fund,—about 10*l*., and every year afterwards, a contribution, varying from 4*l*. to 8*l*. On his decease, his widow is allowed an annuity, varying from 40*l*. to 50*l*. and 60*l*., according to the rate of his annual contribution.

This has been found in Scotland to work well, and the number of members may amount to nearly 1200,—most of whom are married men. In England similar schemes have also been tried, but, as we shall see, with very partial success.

More than sixty years ago, a Society was established for the "Relief of Widows and Orphans of Medical Men, in London and its Vicinity." As its title indicates, it is purely local, and therefore restricted in its operations; besides, it merely professes "to secure the families of its members against destitution," as is the case with all other Insurance Offices; and, in like manner, in 1845, a General Medical Annuity Fund was established at Northampton, with branches in several of the principal towns. Its object is to grant Annuities to *permanently* disabled Members of the Society, and to their widows and orphans; but no Member, or his widow, or children, are eligible for an Annuity, unless he shall have been *bonâ fide* a subscriber to the Society five years from the payment of his first subscription.

Since its establishment, the Annual Subscriptions have amounted to 367*l*. 10s., and the amount of Donations to 217*l*. 11s. Mr. Edwin Carr, of Newport Pagnell, is its excellent Secretary.

In the schemes just mentioned, it will be perceived that there is no provision for cases of disability from sickness. This is, perhaps, the most complex matter of any to adjust —the difficulty of deciding on the nature of the application—the scope given for undue claims—the periods for which such allowances should be continued—all must be taken into consideration. Yet these difficulties are not insurmountable, and, to a certain extent, the scheme has been found quite practicable.

Thus the Benevolent Fund, in connexion with the Provincial Medical and Surgical Association, and under the able management of Mr. Newnham, of Farnham, has, so far as its limited means permits, afforded relief to Medical men under circumstances of temporary distress from sickness or misfortune, as well as assistance to the widows or orphans of Medical men who have been left in poverty and pecuniary necessity.

The two former schemes, as we have seen, extend relief to their members only, and to their families; the latter, however, as the good Samaritan, gives wherever the wretched victim of misfortune is to be found. The former afford aid to those who have entitled themselves to relief by being subscribers; while the other relieves the wretched child of misery who has not connected himself by subscription with any Local Societies, but who is reduced to destitution by the ordinary troubles of life.

Yet, strange to say, since the institution of the Benevolent Fund in 1836 to the 1st of July last, the subscriptions to it have amounted to only 1,639*l*. 3s. 2d.; and those to its accumulating fund,—which is not to be made available till it amounts to 2,000*l*.,—but 1,400*l*.; and let us ask, "What is this among so many?" The answer is, that it has afforded relief, according to the last Report, to 139 unfortunates, and at the rate of something more than eleven guineas each!!

Under these circumstances it is quite clear that it becomes the wealthier members of the Profession—nay, morally speaking, it is their imperative duty, to come forward and contribute to the support of such a fund. Let the Physician, or General Practitioner, as he drives along our crowded thoroughfares, cast his eye on either side, and think of his hard-labouring *confrère* who, trudging along with professional anxieties, and with a wife and increasing family at home, has to toil day and night, and night and day, for a scanty pittance. His education has been the same, his abilities may be as great, or even greater, than those of his more fortunate contemporaries; still, as a man of honour, he disdains advertising himself in an unprofessional manner, and, evening after evening, when his daily labour is ended, he sits down, having his needy family around him, with a scant provision for the present, and a blank prospect for the future. Has such a man, we ask, no claim to the sympathy of his more fortunate professional brethren? Look to the army,—the navy,—the clergy,—nay, commercial men, and even tradesmen,—they have their widows', their orphan funds, their sick-clubs, supported, it is true, by small, but, at the same time, efficient contributions; and shall men, whose very education recoils upon them, and embitters their sense of penury and their gloomy anticipations of the future, implicating the happiness, the health, or it may be the life, of those who are nearest and dearest to them,—shall they be placed apart, and the mite withheld from them which shall assist them to recover the means of obtaining an honest and honourable livelihood? We would appeal, in the strongest and most emphatic manner, to the higher class of the Profession; we would feign say to them, were their guineas converted into pounds, and the odd shilling—nay, the half—devoted to such a charitable purpose, it would help to meet the contingency of the case; for, be it remembered, the Medical Man is placed in a most peculiar and painful position—Professional etiquette forbids that he shall make any kind of appeal to the public,—so that he must toil and struggle with his anxieties and adverse fortune in a state of solitary and utter hopelessness. Let us, therefore, appeal to the good sense and feeling of those who are basking in the sunshine of Professional prosperity, and remind them, that their fortune and success should suggest to them, that

they have a moral duty to perform in thus contributing to a charity which has the strongest claim to their sympathy and support. We could enforce our appeal by citing cases that would harrow up the feelings; but the simple statement of the urgency of the case is, we would fain hope, sufficient.

Let us briefly sketch a character that is unfortunately a type of a large class of Medical Practitioners—a class to whom a benevolent fund, such as we advocate, would be an inestimable boon. As a general rule, the Medical Student has received a good classical education, and belongs to a respectable family. See him when he has passed the important ordeal that gives him a title to live by his exertions, and trace him for the first year or two of his career. He walks erect, well attired, flushed with high hope and expectation, and scarcely dreaming of the possibility of the want of success. A few years, however, too frequently exhibit a fearful change on his outward as well as inward man. Nature and the cloudless future before him have prompted him to enter upon new duties. Trusting to increased and more certain success, he has surrounded himself with rapidly increasing cares. He has become what is designated a family man. The hopes on which he built break down. He is willing to labour, but the opportunities are few that present themselves, while his remuneration is not only small, but even precarious. He is now at the full stretch of his means. The whole man gives evidence of it. His gait is no more bold and imposing; his garb, shorn of its gloss and newness, is ill-made and worn, while the care with which it is put on, and the solicitude to preserve it, render its defects the more apparent. The features, and the whole person, indicate the struggles and anxieties inseparable from his position. Without adding any darker touches to the picture, imagine the situation of such a man, and that of his family, when sickness overtakes him, and incapacitates him for the daily routine of his professional duties. Then it is that a fund to which he has a right, and on which he can with independence fall back, is an invaluable resource—a blessing which it is scarcely possible to overrate.

There are, as are shown above, three isolated and detached Medical Charity funds; but, excellent as they are, they are still insufficient for the great purpose; their range is but small, their field of operation restricted,—and this not for want of zeal and charitable feelings in their promoters and supporters, but that they have failed to carry the great body of the Profession along with them. Want of unity—that curse of our Profession—involves want of strength: the old story of the bundle of sticks repeated. To render these scattered and inefficient associations really effective and valuable, the Profession must strive, hand and heart, to consolidate and unite them in one great whole, which will enlist the sympathies and support of every member of the Profession.

We shall be delighted to co-operate with others in bringing some such proposal to bear, and thus provide in some degree for the pecuniary wants of the medical man when precluded by sickness from attending to the duties of his calling, as well as for his widow and children when death has deprived them of their support and stay.

Independently of the extensive circulation of our Journal, we shall adopt means to render these our views generally known through the country, in the anxious hope of obtaining for the furtherance of our purpose the assistance, not only of the Profession, but of society in general.

In the meantime, we shall be happy to receive suggestions on the subject, either for publication, or for private consideration; and should no plan which is likely to be available be forwarded to us, we will ourselves draw out a sketch of one for the consideration of the Profession.

We have only to add, that we shall not be found wanting in subscribing to the fund that may be raised to found and support so useful an Association as a MEDICAL PROVIDENT SOCIETY.

THE STATE OF PREVENTIVE MEDICINE IN ANCIENT AND MODERN TIMES.

MR. GRAINGER, in a Lecture delivered at St. Thomas's Hospital some two months since, which we reported, makes this remark: "It must, indeed, be apparent to all who have watched the progress of late inquiries, that the great questions which concern the welfare and happiness of the human family as to life and health are to be sought for rather in the way of prevention than of cure,—for the ravages of disease have been staid, not so much by cure as by prevention." This is a doctrine as old as Hippocrates, one which the civilized nations of antiquity believed and acted upon,—but which for more than fourteen hundred years was forgotten or exploded. In this, the nineteenth century, it has again been proclaimed, and, to a limited extent, believed; it is, however, yet winning its way, and will, at no distant period, be universally received as a most wholesome truth.

The modern practice of the healing art has been remarkably defective, inasmuch as it has been directed almost exclusively to the cure of diseases, and not to their prevention. A serious error has long existed in the minds of the Profession and the public as regards the mission of the Physician. This has been generally thought to commence when disease manifests itself in the human system; hence the subjects of medical study relate exclusively to those sciences which teach the structure and functions of the human body, and the most useful applications which can he made in particular diseases. This is *curative* medicine—a branch of the healing art which has made great progress in these modern times. *Preventive medicine*, however, has been greatly neglected in the schools, and instead of having progressed, is now far from being in that state of perfection which it had attained amongst the Greeks and Romans.

It has been the practice of some in the present day to deprecate the study of classical writers. Had the great doctrines, however, which the old Physicians first proclaimed been more generally known amongst us, the subject of hygiene would not have been so long neglected and unimproved. *Curative medicine* was brought into existence by the necessities of men. Hence the first Practitioners devoted themselves exclusively to it.

It was a mistake in the ancient classical writers to suppose that diseases were entirely the result of civilization. Those illustrious men depicted in glowing language the happy state of the primitive inhabitants of the earth, and the innumerable diseases which, like an overwhelming torrent, swept away myriads of the human race, when the luxuries of civilization were introduced. We have, however, on a former occasion, proved this to be an erroneous conclusion; for the more society is elevated, the greater will be the number of its members that will attain to a good old age. Civilization is but the carrying out of the best hygienic principles; and its apostles have been the members of the Medical Profession.

After curative medicine had emerged from its primitive barbarism, hygiene, as a natural consequence, became gradually incorporated with it, and the great Hippocrates actually doubted whether he ought not to consider it of higher value than the curative art. To him must be awarded the merit of having been the first systematic and scientific writer on this important subject; and some of his followers, who studied it closely, did not scruple to assert, that, being free from the doubts and difficulties which surrounded curative medicine, it was, therefore, superior to it. They even went so far as to maintain, that *this* was only a cunning device of scientific men to mislead the public, while *that* ought to be denominated the true healing art.

The hygieists, if we may so call those who practised preventive medicine, impressed upon the enlightened Republics of Greece and Rome the importance of their doctrines, and from the efforts of those physicians arose the splendid establishments called *gymnasia*. These institutions were originally intended to preserve the people in health, and to give them constitutions as robust as possible. A political necessity had, no doubt, much to do in advancing to so high a degree of perfection the science of hygiene; for, as the ancient mode of warfare required the exercise of high courage and great corporeal exertion, so the citizens of the illustrious Republics which successively governed the world, submitted to rules which were best calculated to preserve them in health, and to strengthen their physical powers.

When the sack of Constantinople by the Turks unbarred the doors of the splendid libraries of that city, and diffused Grecian literature through western Europe, medicine, with other sciences, begin to revive. It is singular, that the curative art engrossed entirely the attention of physicians, and to this day has maintained an ascendency in their minds. The noble relics of antiquity which meet us almost at every step we take, and which testify the high perfection the hygienic science had attained, amongst our Roman conquerors, have done little more than excite a useless curiosity.

It can hardly be credited, that there is scarcely a single Medical Corporation in Great Britain which examines Candidates as to their knowledge of preventive medicine; and hence, physicians of the present day are but impe-

fectly acquainted with its principles. The time has arrived, however, when they can no longer neglect them with impunity. The modern apostles of preventive medicine have proclaimed the fact, that the enforcement of hygienic rules can arrest epidemics, and annihilate many diseases. The public believe this assertion; and Governments are beginning to be influenced by it. It is a matter of necessity, therefore, that the Members of the Profession study assiduously this long-neglected science. Their honour, their usefulness, and their prosperity are connected with it; for who so fit to instruct the public on all that relates to the preservation of health, as those who have the care and treatment of the sick? Attention to hygiene will alone insure to Medical men the superintendence of the sanitary affairs of this kingdom; and if that important branch of education be neglected by them, we cannot wonder at their losing important situations and emoluments. If our Medical Corporations are really interested in the welfare of the Profession, they will forthwith institute examinations in Preventive as well as Curative medicine.

EXPERIENCED SURGEONS OF EMIGRANT SHIPS.

Some two or three years ago an awful mortality prevailed amongst the emigrants proceeding from different parts of the United Kingdom to the American shores. A species of typhus, which has been called "ship fever," was the disease which attacked those unfortunate human beings, and hurried thousands of them into an eternal world. In their affliction they were denied that aid which medical science could afford them; for, amid the raging of the fever and the agonies of death, no Physician was at hand to use efforts to alleviate their sufferings and avert the stroke of death; they were, in fact, sacrificed upon the altar of Mammon—a god as unrelenting as the ancient Moloch.

To save a few pounds, merchants freighted their ships with human beings without regard to their health and safety; for, had a proper concern been manifested on these points, not one emigrant vessel would have left our shores without having on board a regularly educated Medical Practitioner. Scarcely, however, was there a ship which was thus furnished, and we have little doubt that a large number of lives were lost from this circumstance.

Since then, vessels proceeding on long voyages have been professedly furnished with "experienced Surgeons;" but, in many instances, advertisements announcing this fact have been put forth merely to allure persons intending to emigrate. We have before us a letter from a gentleman who has had opportunities of witnessing the gross frauds which are practised in this way upon the public. Many persons, he tells us, are engaged as Surgeons who have no legal qualification. The Emigration Commissioners require candidates for the office of Surgeon-Superintendent of emigrant ships to possess either a Physician's or Surgeon's diploma, or the Apothecaries' license; but many private vessels, having frequently on board from 200 to 300 passengers, carry "experienced Surgeons" who never heard a surgical lecture, or performed any other surgical operations than those of extracting teeth and letting blood.

These persons are generally druggists' shopmen or apprentices, who, wishing to emigrate to some distant colony, think themselves fortunate in obtaining a free passage for their *professional* services. This sailing under false colours, however, is highly injurious to the younger branches of the Medical Profession, who are compelled, in consequence, to accept a very small remuneration if appointed to a ship, or to seek some other means of obtaining a livelihood. If the Australian colonies presented a good opening for the young Medical Practitioner, an engagement in an emigrant vessel, even at a small salary, would not be without its advantages to him. Those colonies, however, we learn, are already overstocked with Surgeons; and hence few now remain who have had ship appointments, but return by the most direct route to England. Even the pseudo-"experienced Surgeons," after finding their expectations disappointed in obtaining practice in the colonies, seek and obtain appointments in homeward bound vessels.

Our Correspondent gives us a case in point. The "Arbettor" left London about a year since for Adelaide, with a large number of passengers, in the medical charge of a chemist, who, again, in December last was appointed surgeon to the homeward bound barque "Competitor," at salary of 5*l.* per month, whilst "I, who had just arrived, as surgeon-superintendent of the Baboo, and wished to return in the Competitor, was obliged to pay 50*l.* for my passage. On reaching St. Helena, we learned that, on the day before our arrival, a surgeon had, with much difficulty, been found for a ship conveying liberated Africans to the West Indies, and he had been guaranteed a good salary. If our vessel had arrived twenty-four hours earlier, the appointment would have been offered to the self-constituted surgeon of our ship."

The interests of the Profession and of the public require that none should be eligible to those situations but properly educated Practitioners; and we are sure that an adequate supply can be found, if remunerating salaries were offered. Not only would the passengers, under these circumstances, have proper attendance in cases of sickness or accidents, but the members of the Profession at home would not be subjected to so much injurious competition.

To accomplish this, our Correspondent suggests, that all qualified Medical men who are desirous of obtaining ship appointments, should enrol their names in a list, to be kept at some public office in the City, to which merchants and the public may have ready access. We also recommend that the Government be immediately memorialized on the subject.

THE COLLEGE STUDENTSHIPS.

We learn from our advertising columns, that the Council of the Royal College of Surgeons has given notice of its intention to appoint, in June next, a Student in Human and Comparative Anatomy, and we are glad to find that the election is by *concours*. The candidates (who must be members of the College) are required to dissect a given subject in two days, and are subsequently to be examined on the nature of their dissections. These means we consider the best for discovering and rewarding the most worthy candidate, who will hold his appointment for three years, at the end of which time he will be Gazetted to an Assistant-Surgeoncy in the Army, Navy, or East India Company's Service. The salary is 100*l.* per annum.

Mr. John Quekett, so well known by his scientific microscopic researches, and the present Assistant Conservator of the Hunterian Museum, was a College student; two others have also distinguished themselves during the recent wars in India, by their unremitting attention to the wounded.

REPORTS OF SOCIETIES.

DEVON AND EXETER PATHOLOGICAL SOCIETY,

AT THE MEDICAL LIBRARY OF THE EXETER DISPENSARY.—APRIL 18, 1849.

Arthur Kempe, Esq., in the Chair.

The Secretary (Dr. Tuthill Massy) laid on the table two specimens of morbid anatomy taken from two patients who were under Mr. Lyddon's care.

One was a portion of the femoral artery, in which ossific deposition took place; the gentleman from whom it was taken had, during life, a constant cold foot.

The other was a strangulated *femoral* hernia, as it occurred in a young *man*, who would not submit to an operation; the adhesions to the fascia lata were beautifully exhibited, just at the neck of the knuckle of the strangulated intestine. The lower portion of the small intestine as it lay on the fascia lata, is greatly congested, but not gangrenous.

MEDULLARY UTERINE CANCER.

Dr. Tuthill Massy related a case of medullary uterine cancer, as it occurred in Sarah Hill, aged 66, the mother of three children. She had been a patient at the Exeter Dispensary for two years and a half; for the last year she had a constant discharge of dark grumous blood from the vagina, and for the last five months a continued pain in the right leg, extending from Poupart's ligament downwards to the knee.

On the 15th of February, the pains in the region of the pelvis became excessive; large clots of blood escaped from the vagina; the fetor of the urine and of this bloody discharge was bitterly complained of by the nurse.

Saturday, the 3rd of March, she appeared sinking from loss of blood and the great pain; her complexion had a greenish yellow tinge.

Monday, the 5th, she was greatly improved in spirits and in the tone of her voice; the bloody discharge had ceased on last Saturday afternoon, and did not again return.

March the 10th, she died at four o'clock, p.m. Her intellect was clear to the last, yet for the seven days previous to her death the urine and fæces passed off involuntarily. To within a few days of death her appetite continued good; all through she could eat a hard dry crust of bread.

Treatment.—The usual remedies for uterine cancer were given,—anodynes internally, lotions of chloride of soda through the vagina and to the painful leg; belladonna liniment.

Autopsy twenty hours after death.—Face collapsed and wrinkled; chest and arms thin; the mammary glands absorbed; abdomen and legs, full, fat, and plump; a section through the abdomen showed a layer of fat.

Uterus.—The external surface is divided into a number of projecting lobes, which are soft to the touch. The lining membrane is removed, and in its place are *dull white* granules, which readily break down under the knife; the pressure causes a thick pulpy matter like pap to ooze out of the encephaloid structure.

Right Ovary—adhered to the inguinal region, pressing the nerves and blood-vessels as they passed under Poupart's ligament, and fully accounting for the continued pain in the femoral region. The ovary, in part, was thick and soft; in other parts, thin and fluctuating; a section caused an ounce of pulpy matter to escape.

Left Ovary—was larger than an orange, irregularly round and lobulated, and evidently filled with fluid; a section allowed a fluid (resembling raspberries and cream when mixed) to pass out. The walls of this cavity were irregularly thickened; one part was quite thin, the serous covering only visible; this, no doubt, would have shortly given way, and the fluid would have escaped into the peritoneum, causing pain, inflammation, and rapid death; in other parts, it was three-fourths of an inch in thickness, but very soft, pale, and curdy.

These ovaries had but their usual attachment by the broad ligaments, no disease intervening, except here, where the left Fillopian tube adhered to the left ovary.

Vagina—is softened, and its connexion with the uterus is undefined; soft cerebriform masses unite it with the bladder in front, and with the rectum posteriorly.

Bladder.—Neck and urethra are engaged in the disease.

Rectum.—On the mucous membrane there are five superficial oval ulcers; a section through them brings this *dull white* brain-like matter into view.

This dull white matter is deposited between the folds of the peritoneum, in which the sigmoid flexure of the colon is held; in fact, the entire of the viscera of the pelvis is filled with this disease, and the textures are quite disorganised by the medullary lesions.

Stomach.—Natural.

Liver.—Healthy, with the exception of a white rim along the thin edge, fully an inch wide, and apparently caused by the great loss of blood. The gall-bladder was filled with green bile.

Right Kidney.—Smaller by half than usual, and it contained a few hydatids.

Left Kidney.—Twice its proper size, feeling soft and flabby, and in the first stage of Bright's disease.

Both were remarkably pale.

A section of the left ovary, under a microscope of half-inch power, exhibits semi-opaque vesicles, irregularly oblong, having two shades of green traversing their circumferences,—the external, or pea-green, being the lighter shade.

Could this green tinge have any link with the greenish-yellow complexion?

The blood globules were not examined.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Meeting of the 1st of May.

A Special General Meeting of this Society was held at its Rooms in Berners-street, on Tuesday afternoon last, pursuant to a resolution passed at the last Annual Meeting, to discuss the propriety of agreeing to a recommendation of the Council to obtain, at a rent of 210*l.* per annum, the whole of the house in which the Society at present holds apartments. The chair was occupied by Dr. Addison, President of the Society.

The Secretary having read the Circular convening the meeting,

Mr. Phillips, Treasurer, said, it would be necessary that the meeting should be apprised of what the Council had done, in order to obtain suitable premises for the Society, and the reasons by which they were influenced in making the recommendation which was to be the subject of discussion. Considerable exertion had been made for the purpose of determining what was best to be done in the matter. So long ago as 1847 the matter came under the consideration of the Council, with reference mainly to two points: first, whether additional accommodation could be obtained in the premises they now occupied; and, secondly, whether the present meeting-room should be enlarged. A Committee was then appointed to make the necessary inquiries. They found that Mr. Scott, their immediate landlord, was prepared to dispose of his interest for about 600*l.*, and that the other tenant might probably be induced to retire for a fair consideration. It was found, that about 500*l.* would be required to put the premises into tenantable repair, and 600*l.* for enlarging the meeting-room. Seeing that the unexpired term of Mr. Scott's lease was only twelve years, and that at the end of that time the original landlord would probably require an increased rent, it was not thought advisable to adopt this course. It was afterwards thought desirable that means should be taken to find some premises more eligible than those which they now occupied. From that time to the present every inquiry had been made, but no better premises had been found. Many difficulties in connexion with removing were seen, and the conclusion finally arrived at was, that it was not desirable to move at present. On further inquiry, it was found that the present holdings in the house in which the Society now occupied apartments, were terminable at Michaelmas, 1850; and that, after that period, the whole of the premises could be obtained at a rent of 210*l.*, with rates and taxes amounting to about 60*l.* This amount might, if necessary, be lessened by letting the stables at a rent of 35*l.* per annum, and probably the first floor, which might realise 100*l.* a year. If these were let, the Society would pay 80*l.* less than they at present paid for their apartments; if not, the rent would be 18*l.* more. If, however, the Society placed itself in Mr. Scott's shoes, it would be liable to repairs; these had been estimated at 500*l.*, but Mr. Scott believed they would amount to much less, and was prepared to make an allowance, if they should exceed 300*l.* Mr. Pownall, the architect, had advised the Society to accept Mr. Scott's proposal; and, considering the difficulty of finding suitable premises elsewhere, the Committee appointed to inquire into the matter recommended the Council to act upon that recommendation. Inquiries had been made by the Committee of Mrs. Rankin, under whom Mr. Scott held the premises, whether she would grant an extension of the lease on reasonable terms, but her views were so out of the way, that the Committee could not recommend the Council to fetter themselves with any arrangement with her. It had been represented by some, that there were houses to be had which would be more convenient; the Council, however, had used all diligence to find such, and had not succeeded. There were very many houses to be had, but none of them afforded such accommodation as the Society needed. The situation of the Society's Rooms in Lincoln's-inn-fields was a central one, but it became a matter of complaint, that the great bulk of the Fellows were to be found west of that locality, in consequence of which the Society removed to the premises they now occupied; many of the Fellows, however, were now north-west, and it might probably be found convenient to follow them thither, so that it would not be prudent for them to burden themselves with a very long lease. To show that the removal from Lincoln's-inn-fields was expedient was evident from the fact, that, at the time the Society left, there were only 132 resident members, but the number at the last annual meeting was 284. Mr. Phillips concluded by moving that the following recommendation of the Council should be agreed to:—"That it is expedient to enter into arrangements for the purpose of obtaining, at a rent of 210*l.* per annum, the whole of the house in which the Society at present holds apartments."

Dr. Wilson seconded the motion.

Dr. Webster said, he was glad the subject had been left over for discussion at the present meeting, as the Fellows had had time to consider the matter, and come to a decision upon it. Since the last meeting he had thought a good deal on the subject. He had then great doubts as to whether the Society ought to remain where it was, and still greater as to the propriety of entering, at present, into a long lease. Some important facts were stated by Mr. Phillips, but still, he confessed he was decidedly against remaining in Berners-street. He considered that the locality was by no means a convenient one for the Fellows, as it was in the first instance; and, from what Mr. Phillips had stated, he concluded that, in a few years, it would be even more inconvenient than at present. Besides, if the money proposed to be expended was laid out, he did not think such accommodation could be obtained as the Society required. Their present meeting-room was very badly ventilated—(hear)—and exceedingly disagreeable. They ought to have something more than a dull, heavy room to assemble in. If they took the lease upon the terms stated, they would be compelled to remain. His feeling was to enter into no additional terms. He had all along thought that a more central position for the Society's rooms ought to be chosen. Charing-cross, Cavendish-square, or Hanover-square would, he thought, be much more eligible situations than Berners-street. He should feel disposed to give Mr. Scott notice that they would remain as his yearly tenants, but not to take the lease from him or any one else beyond 1855. In time, perhaps, the Society might have accumulated sufficient money to move elsewhere, and build premises for themselves. The Government, he hoped, might in future years be disposed to patronize Societies of such a nature, in which case they might probably find them accommodation in some public building, or at any rate grant them facilities for obtaining suitable premises. He should move, therefore, as an amendment to Mr. Philips's motion,—"That it is not expedient to enter into any new lease with the landlord respecting the present premises."

Dr. Roberts said, that as he perfectly agreed with what had fallen from Dr. Webster, he should have much pleasure in seconding the amendment.

Mr. Charles Hawkins hoped the Fellows would well consider the subject, before they came to a decision upon it. He did not see how the Society could be at all improved by the adoption of the Council's recommendation. The accommodation they now had they possessed till 1855; and all that the Council, as it appeared to him, proposed to do was to add eleven years to the term of the present lease. By doing this he believed they were taking upon themselves all the inconveniences of a lease without any additional advantages to the Society. At present they paid 217*l.* rent without rates and taxes; by the Council's proposal, they would have to pay 210*l.* with rates and taxes. The expense required to put the house into repair would be 600*l.*, and Mr. Scott would require 600*l.* more to give up his interest in the lease.

Mr. Phillips: Mr. Scott does not require anything under this proposal.

Mr. Hawkins continued: The fag end of a lease was a serious thing to take upon them; and as it was only for eleven years, he did not suppose the Council would recommend the Society to lay out 600*l.* in the extension of the present meeting-room, which was the principal thing they now required. If the Society took the lease for this term of years, they might be obliged to leave it at the expiration of that time, if they could not come to terms with the original landlord. He did not see what additional convenience would be secured by holding the upper part of the house. It was impossible for them to go to Charing-cross or the neighbourhood, for the rent of premises there would of itself swallow up their whole income. Their present situation was not a bad one; and it was not possible for the Society to be continually moving to fashionable localities; if they did so, they would never be settled. The best plan, he thought, would be to enter into some arrangement at once with the original landlord for a long lease, in which case it would be worth their while to expend 600*l.*, or even 1,000*l.*, in enlarging their present room.

Mr. Phillips said, it was felt by the Council that it was hardly advisable to make an outlay of 600*l.* for so short a period as eleven years. There was no reasonable doubt, however, that an extension of the lease might be obtained. When he saw the solicitors of Mrs. Rankin (who held the property under the Berners' estate), they seemed to think that the Society was "squeezable," and that they could get what rent they pleased; but Archdeacon Berner's solicitors said, that the rent at present paid was unquestionably sufficient. The sum received by Mr

Rankin from Mr. Scott was 160*l.*; but the Society had been asked 220*l.* It was thought advisable not to make any immediate overtures to Mrs. Rankin, or to betray any signs of anxiety about the matter, as it seemed pretty clear that she would be willing to take a reasonable rent ultimately. It was said, that the extent of Mrs. Rankin's lease was forty years, but he had reason to believe that it was not so long. If the Society had the whole house, they would not be annoyed by the nuisance to which they were now at times subject from other tenants. If the house was their own, they could admit what tenants they pleased. The managers of the Berners' estate had told him that they could not then enter into any arrangement with regard to the extension of the lease, but that they should be glad for the Society to remain as yearly tenants, and that none but reasonable terms would be offered. They promised to furnish the Society, at any time, with a letter approving of an enlargement of their room, so that no difficulty should be felt in the matter on their account. It had been suggested that the room should be one in which the Fellows could meet together as in an ordinary meeting room; but, it was also thought advisable that there should be a room in which they might sit down and read without interruption; and it was felt, that if further accommodation was obtained in the house, such a room might be secured. Other uses had also been suggested to which the premises might be supplied.

Mr. Hawkins thought if Mrs. Rankin's lease could be obtained, they might, with safety, enlarge the room. He should be happy to vote for the resolution if accompanied by the following proviso: "Provided the Council are enabled to make such arrangements with the original landlord as will justify them in increasing the size of the present meeting-room."

Dr. Webster said, if the Society had tenants of its own, they could not so well complain of them as if they were tenants of other parties. Besides, he did not think it respectable that the Royal Medico-Chirurgical Society should let lodgings! (Laughter.) And if they did turn the premises into a lodging-house they could not find fault with their own tenants. It had been said, that the Council had done their best to procure premises elsewhere; but he believed no advertisement had been inserted in the public papers. If this were done, he had no doubt a suitable spot might be found.

The Chairman was about to put Dr. Webster's amendment, when

Mr. Wood said, they were not yet put sufficiently in possession of the facts of the case to enable them to come to a decision. Until they knew what the Council proposed doing, and what money they intended to expend, they could not properly deal with the question.

Mr. Arnott explained, that the Society's immediate landlord was Mr. Scott; and that he held under Mrs. Rankin, who had a lease under the Berners' estate. A part of the house was let by Mr. Scott to the Society, and a part to other tenants. The Society had, in consequence, been subject to some nuisances; and the existence of these, together with the fact that additional accommodation was required, had brought the matter under the consideration of the Council. If they wanted further accommodation before 1855, they would have to get a further lease; if they were contented to remain, with their present room, till that period, they could do so. One reason why the matter had been delayed, was that the members at large might have an opportunity of considering the subject. If they were content to remain as they were, no amendment was necessary, as they had only to negative the proposition made by the Council. If they took Mr. Scott's lease, they took it till 1861—the length of his term; they could not, however, obtain possession of the whole house till Michaelmas, 1850. At present they paid 210*l.* per annum; by having the whole house, they would pay, including rates and taxes, 270*l.* The difference might be lessened by letting the stable for 30*l.* a year,—notwithstanding the allegation that it was unbecoming in them to do so. ("Hear," and laughter.) As to their having the tail of a lease, any person might understand what that meant, and he could not see what difficulty there was connected with it. There might be some expense incurred in making repairs and alterations; and if the sum estimated (500*l.*) had to be expended, what would that signify, if they could have a good house? But he did not think the alterations would cost anything like that sum. At the end of the present lease, Mrs. Rankin would no doubt be as glad as other people to get good tenants, and would willingly grant them an extension on reasonable terms. Mr. Scott was willing to assent to these terms now, but were they sure that he would do so a few years hence, when the Society would be more pushed than at present? He thought the best plan would be to adopt the proposal of the Council. Then, at the end of the eleven years, they must, if possible, deal with Mrs. Rankin; and if they could not, their only alternative would be to leave.

Dr. Webster's amendment was then put, but only five hands were held up in its favour. It was consequently rejected.

Mr. C. Hawkins said, if the Council would do all they could to get possession of the original lease, with a view to extending the room, he would not press any amendment, but would leave the matter in their hands.

Mr. Phillips said, the first matter was to get possession of the premises. The Council did not wish to fetter themselves with any agreement as to the enlargement or non-enlargement of the room.

Dr. Wilson thought, if it was known that they were so anxious to hold the premises, at the expiration of the eleven years, Mrs. Rankin might be induced to ask exorbitant terms. He thought it best to place confidence in the Council, and allow them to pursue their own course.

Mr. Hawkins moved the addition to the resolution stated above.

Mr. Atkins seconded Mr. Hawkins' amendment.

After a few words from Mr. Phillips and Dr. Webster,

Mr. Hawkins said, he would not press the amendment if Mr. Phillips would pledge himself, on behalf of the Council, to secure the original lease and extend the meeting room; but Mr. Phillips declining to do so, the amendment was put to the meeting.

The room having been divided, there were found—

Against the amendment .	32
For the amendment . .	29
Majority against the amendment,	3

The amendment was, therefore, rejected. The original resolution was then put, and carried. The meeting terminated shortly after five o'clock.

REVIEWS.

On Cancerous and Cancroid Growths. By JOHN HUGHES BENNETT, M.D., F.R.S.E., Fellow of the Royal College of Physicians, Professor of the Institutes of Medicine, and one of the Professors of Clinical Medicine in the University of Edinburgh. With one hundred and ninety Illustrations, copied from nature, and drawn on Wood by the Author. Edinburgh: Sutherland and Knox. London: Simpkin, Marshall, and Co.; and Samuel Highley. 1849.

Notwithstanding the many admirable treatises which have been issued from the Press on the subject of cancer, there can be no doubt that practical men still require a great amount of information to render their treatment, in many cases of it, more precise and exact. The Author of the above treatise has undertaken the difficult task of carefully uniting clinical facts with *post-mortem* appearances, and a minute microscopical examination of the morbid growth in a great number of cases. He has given us details of fifty-six of these, profusely illustrated with admirable woodcuts, drawn by himself. The care with which this part of the work has been accomplished, and the evident labour it has cost, may be judged of by the following manner in which such growths should be examined, which we quote entire as likely to be useful to our readers. It forms the subject of the foot-note on Pp. 1, 2:—

"The following is the method which, for some years, I have employed in the examination of morbid growths, and which I recommend to the young pathologist. The specimen should always be recent; the addition of alcohol causing coagulation of the albuminous compounds, and altering the form of the corpuscular elements.

"In the first place, the external physical characters of the growth should be accurately examined, and as much learned of the history of the case as possible. A section should then be made, and the appearances of the cut surfaces carefully examined. These should be squeezed, to see if they yield any fluid; if not, the surface should be gently scraped. A drop of the fluid or pulpy substance so obtained, should now be placed between glasses and examined with an achromatic microscope under a power of 250 linear diameters.

"After the natural appearances of the more fluid parts have been observed, water should be first added, then acetic acid, and the effects of each re-agent studied. Water generally causes the cell formations to enlarge by endosmosis, and enables the manipulator to separate coherent masses, and examine each corpuscle perfectly isolated. It is only in this way that the numerous molecules and granules floating in the blastema can be separated from those within the cell, which now may be seen revolving in the fluid with its contents. Acetic acid has the remarkable property of dissolving and rendering very transparent many of the albuminous compounds. The walls of most recent cell formations are, in this way, rendered transparent, or caused to disappear, and the nucleus, which was formerly obscured, is rendered clear and well defined. The action of acetic acid on cell structures is of the utmost importance in a diagnostic point of view, and the having omitted to describe its effects has vitiated the account of many otherwise good observations. I would recommend the young pathologist to repeat these demonstrations several times before terminating this part of the inquiry, and, further, to study the effects of ether and of liquor potassæ, diluted with an equal part of water.

"In every case, whenever the cut surface of the tumour presents differences in structure, colour, or consistence, the same manipulations and observations must be repeated on the fluid or pulpy substance from each altered portion.

"Having now examined the fluid parts of the growth, the solid parts must be investigated. For this purpose a thin slice should be removed, placed between glasses, inspected under the microscope, and in like manner successively treated with water and acetic acid. A thin slice may be obtained with a sharp knife, or a pair of curved scissors; but by far the best means is the double-bladed knife of Valentin. This instrument, indeed, may be considered almost indispensable to the histologist, especially where large sections are required, and where it is of importance not to derange the relation of the elementary structures to each other. A transparent section thus obtained, enables the observer to see the fibrous stroma of the growth, the arrangement of the ultimate filaments, the relation to these of the cells, granules, molecules, or mineral particles he has previously examined; the arrangement of the blood-vessels, &c. &c. Several sections should always be made, and attentively inspected, from various parts of the tumor; of course taking care to include in these every variety of appearance and structure it may present.

"The observation is now complete. To keep a record of it, however, it is necessary that a note be immediately taken of the appearances observed, with and without re-agents, and that the different structures be accurately drawn. This requires some little skill in drawing, and especially in copying from the field of the microscope. I cannot, however, too strongly recommend the early and constant practice of drawing what is seen, not only because mere words often utterly fail in giving a correct idea of the object described, but because such practice necessitates a much more careful examination of the object itself."

Many of the cases are exceedingly valuable in a practical point of view, and contain descriptions of several morbid growths, the minute structure of which is now described for the first time. We despair, however, without the illustrations which accompany them, of conveying to our readers an accurate idea of their value and importance; but strongly recommend a perusal of this, which constitutes the first part of the work, to all who are interested in pathology and practical surgery.

In the second part of his treatise Dr. Bennett gives a systematic account of cancer, partly founded on his own observations, and partly on those of other writers. He tells us *in limine* that we are not to attach too much value to the microscope as a means of diagnosis, for he says, in the Preface, that this instrument *alone*, "that is, independently of all other kind of observation, can seldom determine, in the living subject, the presence or absence of cancer. At the same time he feels himself bound emphatically to declare, that he thinks it capable of being as serviceable to the surgeon in cases of morbid growth, as the stethoscope is to the physician in cases of diseased heart or lungs. Neither instrument is infallible; both require to be studied in an especial manner; both demand long practical experience and judicious reasoning power; and both require to be conjoined with all the aids to be derived from other modes of observation. With the stethoscope, it is not that the crepitating râle in pneumonia, or the mucous râle in bronchitis, differ from similar râles which accompany tubercular disease; but that these signs, *conjoined with other symptoms*, clearly establish the diagnosis. So, likewise, it is not the recognition, by means of the microscope, of certain cells and fibres, which will enable us to assert with certainty the existence of cancer; but that their detection in particular places and accompanying peculiar forms of growth, permits us to do so. In proportion as our knowledge of morbid anatomy advances, instrumental assistance becomes the more valuable for the purpose of diagnosis; and it is now manifest that, to this end, a microscope is as necessary to assist our sense of sight as is a stethoscope to assist our sense of hearing, or a probe to assist our sense of touch."

These views sufficiently defend the Author from the charge of being exclusive in his method of examining this subject. The second portion of the Work is divided into,—1st, Histology; 2nd, Chemical Composition; 3rd, General Anatomy; 4th, General Pathology; 5th, Statistics; 6th, Diagnosis; 7th, Prognosis; and 8th, Rational Treatment.

It would exceed our limits to follow the Author through each chapter *seriatim*; but we can confidently say, that no Work hitherto published on this subject contains researches so accurate in themselves, so important to science, and the results of which are so likely to improve the treatment of these important diseases.

The Author calls all growths cancerous which are composed of nucleated cells, generally called cancer cells, infiltrated among a fibrous tissue. They comprehend those hitherto denominated scirrhous, or hard; encephalomatous, or soft and colloid, or glue-like cancers.

He uses the term cancroid to denote those growths which have a general resemblance to the others, but which, instead of possessing this structure, are fibro-nucleated, epithelial, fibrous, cartilaginous, fatty, or tubercular.

It is very evident that if forms of tumor could with certainty be diagnosed from each other, a considerable advance would be made in our knowledge; and assuredly, it is only by inquiries such as those now published by Dr. Bennett, that this can ever be accomplished. No doubt, as he states, many inquiries, and many records of cases will be required before the microscope can be made as useful for this purpose, as the stethoscope is for the diagnosis of different thoracic diseases; but, the author, if he has not completed, has, at all events, furnished most valuable materials in furtherance of this end. Numerous cases are recorded, where fibrous, enchondromatous, and epithelial growths, were mistaken by experienced surgeons for cancer; and others where the doubts which existed, as to the nature of the lesion, were removed by a careful and minute examination. The value of such observations must be obvious. Under the head of prognosis the author brings forward various facts and arguments to show that cancer is not necessarily fatal: that it, like other forms of exudation, may undergo calcareous and fatty degeneration, and may be permanently eradicated from the system by excision.

He dwells on three points in the treatment; 1st, Means of retardation and resolution; 2nd, Means of extirpation; and 3rd, Means of prevention.

Under the first head, he points out that all those circumstances which retard cell growth in the animal and vegetable worlds, are those best adapted to check the growth of cancer; and shows the best means, which experience has proved to possess this power, to be the application of cold, keeping the part dry, and the employment of pressure. Under the head of means of extirpation, he is a strong advocate for early excision, which he thinks should be performed so soon as it becomes evident, that preventive means have failed to arrest the progress of the tumor. Even in advanced cases he defends excision, certainly as a palliative as well as a curative measure, and says at p. 245,

"The practical rule, then, which pathology and experience unite in causing us to adopt, seems to be this, *that so long as a cancer remains fixed in a part which is capable of being removed, and the strength of the patient is not too much reduced, so long is the surgeon warranted to interfere.* If this applies to cancerous, it does so with tenfold force to cancroid growths, which everything that we know warrants us in asserting are much less fatal and malignant."

Under means of prevention the Author ventures on some speculations which are highly ingenious and deserving of attention. He suggests, that the course of cancer is directly opposed to that of tubercle; that while the first occurs in advanced age, in fatty and robust constitutions, and is a disease of the secondary digestion; the latter is peculiar to young persons, more or less emaciated, with deterioration of the primary digestion. And he concludes by stating, that, in the first class of affections, fatty matters, and articles of diet, which require activity of the nutritive functions to digest perfectly, are contra-indicated; while, in the latter, good diet and oleaginous food are the most useful remedies. But there are cases in his opinion "of tubercular disease with tendency to local fatty accumulations, in which oil is injurious; and there are also cases of cancer, with emaciation from want of assimilation, in which it is beneficial."

In conclusion we may remark, that the evidence of unwearied research, combined with the admirable illustrations of his subject contained in this volume, reflect the highest credit on the talent and professional enthusiasm of the Author, and render it the most useful and complete work on Cancer which has appeared in our language.

ON THE TREATMENT OF STILL-BORN CHILDREN.

[To the Editor of the Medical Times.]

SIR,—In the *Medical Times* of the 14th inst., Mr. J. Ogden Fletcher of Manchester, states, "He has for a long period been in the habit of ligaturing the cord before the complete birth of the child in breech and feet presentations; sometimes even before the pulsations were obliterated, believing that the child, in these cases, dies from hæmorrhage into the placenta, and that out of thirty-seven cases that he had treated in this way, *two children only have died.*"

He appends this:—"P.S. I do not claim originality for this plan of treating breech and feet presentations; but, as it merits greater publicity than it at present enjoys, I have ventured to forward it to you for for your consideration; not being able to find its author, ignorance has prevented me from doing him justice."

I conclude Mr. Fletcher alludes to a little work, I published in 1847, entitled "An exposition of the Chief Cause of Mortality in Still-born Children," which was favourably reviewed in the *Medical Times* of the 5th of June of that year.

I have there stated, at page 39, the evidence which I have brought forward, tends to show that the frequent death of the infant in preternatural deliveries, arises from syncope, and not from asphyxia; in fact, from the want of compression of the umbilical cord, and not from the dreaded compression of it. The premises are these:—Just before the after-birth is thrown off, it is at its maximum of contraction, and, therefore, preventing the escape of blood from the infant; and immediately afterwards, at its maximum of expansion, or favouring the escape of blood from the infant.

This is a matter of little moment in the natural delivery, because the new life that is set up, the moment the head is born, encourages the new and discourages the old circulation; but it is all-important in the preternatural delivery, for it then acts as a moist sponge would act when released from the hand and placed in contact with water. It is from this congestion in the after-birth that I believe the death of the infant occurs within the space of time at which the practice of our best accoucheurs has fixed it.

It has been shown by Winslow and other anatomists, that, owing to the peculiarity of the fœtal circulation, as respects the eustachian valve, the foramen ovale, and the canalis arteriosus, the blood reaching the heart by the inferior cava, and, consequently, that of the umbilical vein is mainly directed to the head of the fœtus. Its brain is, therefore, receiving blood of the best quality, and in the largest quantity. In the cases to which my observations refer, the supply of blood sent to the heart by the umbilical vein, is quickly and almost completely cut off. The case of the fœtus in this state is worse than if both carotids were simultaneously tied, the supply by the vertebrals being also taken away. It has often been shown, by direct experiment, that suspending the supply of blood to the brain by these four channels, for a few seconds only, is sufficient to produce immediate suspension of animation, which no means hitherto resorted to have been able to restore. This fact was demonstrated in the most striking manner by the late Sir Astley Cooper, who finding, that in the rabbit, the vetebrals as well as the carotids, can be compressed with the fingers, produced almost instantaneous death by this means. It is obvious, that the early application of a ligature to the umbilical cord must not merely prevent the accumulation of blood in the after-birth, but tend to maintain the supply of blood to the brain, and promote the course of circulation proper to extra-uterine life. The Medical Profession may be able to test my views, by careful attention to the duration of life in all cases of detention of the head in preternatural deliveries, to the condition of the infant as to asphyxia and syncope, to the state of the after-birth, as to congestion or the reverse, and they will then be able to decide, whether or not I am right in concluding, that the after-birth is separated as soon as the breech is expelled, and justified in compressing the umbilical cord before the delivery of the shoulders and head.

I beg to express, Sir, through you, my best thanks to Mr. Fletcher for having placed on record, in your valuable Journal, the benefit of his experience on the early application of a ligature to the funis in preternatural presentations, especially as it may induce other accoucheurs to state their opinion upon this important point in obstetric science.

I wrote, in 1847, in the preface to my work, that "several years of public and private practice as an accoucheur had enabled me to watch the different phenomena which presented themselves to my mind, under nearly the same set of circumstances. The period which had elapsed from the first moment I doubted the supposed cause of death in preternaturally still-born children, in which the ablest accoucheurs of the day had implicit belief, had afforded me ample time to put a conscientious value upon the conclusions at which I had arrived, and thus enabled me to record my firm conviction, that a large amount of infant life would be saved by adopting the practice which I suggested."

I can only say, in conclusion, that a further experience of two years fully justifies these remarks, and that the result of my own practice during that period is quite as successful as that of Mr. Fletcher.

I am, Sir,
Your most humble, obedient servant,
RICHARD KING, M.D.

17, Saville-row, April 24, 1849.

TREATMENT OF ENLARGED SPLEEN.

[To the Editor of the Medical Times.]

SIR,—Dr. Twining, of India, used the following prescriptions for the cure of enlarged spleen; I presume they are what "N. W. H." asks for in No. 498 of your Journal:—

℞ Pulv. rhei., jalapæ, calumbæ, zinziberis; potassæ bitart. aa. gr. v.; ferri sulphatis, gr. ij. M. fiat pulvis.

℞ Pulv. rhei., jalapæ, calumbæ, zinziberis; potassæ sulphatis, aa. ʒj.; ferri sulphatis, ℈ss.; tr. sennæ, fʒss.; aq. menthæ piper., fʒixss. M. capiat fʒvj. ad fʒj. bis vel ter. die.

I am not acquainted with any *specific* for enlarged spleen not connected with ague; but, if your Correspondent will refer to the third volume of the "Medico-Chirurgical Transactions," he will find a case of enlarged and painful spleen, apparently from

inflammation, cured by daily doses of aloes and antimonial powder combined into pills, and salines with sulphate of potash.

An infusion of cascarilla with soda and aloetic wine was tried for a short time, but was replaced by the saline mixture and pills before mentioned.

The principle of this treatment agrees closely with that employed by Dr. Twining.

I am, Sir, your obedient Servant,
S. Wm. J. Merriman, M D.

34, Brook-street, Grosvenor-square,
April 26, 1849.

HÆMORRHAGE ARRESTED BY ELEVATING THE ARMS.

[To the Editor of the Medical Times.]

Sir,—A number of your Journal, the date of which I forget, but I think published some five or six years ago, contains the account of a case of epistaxis, occurring in the practice of Mr. Davies, of Haddenham, successfully treated by raising the arms (while standing) above the head, in an upright position. I have since treated many cases in the same manner, and with invariable success, until about three months ago, when I was called to a woman who had been bleeding profusely for four hours. I tried Mr. Davies's plan, which arrested the hæmorrhage while the posture was preserved, but the slightest effort at vomiting, or cough, immediately induced it. I determined to plug forthwith, and was all ready to begin, when a by-stander asked me if I would object to try a plan he had seen practised by an eccentric old surgeon some sixteen or eighteen years since, and which I have not seen noticed by any author. The patient was seated on a chair, between two tables, on each of which a deep jar containing cold water was placed. The arms were then raised as high as possible, and the hands and forearms plunged into the water up to the elbows. The effect was instantaneous; she was kept in the position for twenty minutes, when the arms became painfully benumbed. She was put to bed, and had not another bad symptom. The bleeding returned at intervals of one or two days, but was immediately checked by the same process. I found much difficulty in treating the case narrated by Mr. Davies's plan, owing to the patient's fainting three or four times. I have since tried the same plan in two cases, not so severe, and with immediate success.

Yours, &c.,
T N. Meggison, M.D.

Wickham, April, 1849.

[This method of stopping hæmorrhage by elevating the arms, we consider to be most efficacious, as we have seen four cases in which dangerous epistaxis was speedily arrested by it. The plan of the "Old Surgeon," to which Dr. Meggison adverts, is certainly to be preferred.—Ed. *Medical Times.*]

ANCIENT FEMALE MEDICAL PRACTITIONERS.

[To the Editor of the "Medical Times."]

Sir,—In the *Medical Times* of April 21, there is an editorial article, entitled, "A Revolution in Prospect," in which reference is made to the practice of physic amongst the Greeks and Romans. It may not be uninteresting perhaps to your readers, to be informed that, amongst the Athenians, in the early period of their history, it was forbidden by one of their laws, that women or slaves should have any concern in the study or practice of the healing art. This proving fatal to many women, whose modesty suffered them not to entrust themselves in the hands of men, one *Agnodice* disguised herself in man's clothes, and studied physic under a certain professor called Herophilus, where, having attained to a competent skill in that art, she revealed herself to her own sex, who agreed with one consent to employ none beside her. Thereupon, the physicians, enraged at their want of business, indicted her before the court of Areopagus, as one that corrupted men's wives. To obviate this accusation she discovered her sex; but the physicians prosecuted her with greater eagerness, as violating the laws, and encroaching upon the men's prerogative. To prevent her ruin, the principal matrons of the city came into the court and addressed themselves to the judges, telling them, "That they were not husbands, but enemies, who were going to condemn the person to whom they owed their 'lives.'" Upon this, the Athenians repealed the old law, and permitted free women to undertake the practice of medicine.

I am glad the American lady was not compelled, like her Athenian predecessor, to have recourse to "inexpressibles," in order to accomplish the object she had in view; and I think the modern physicians will be too gallant to persecute "Domina" Blackwall for attempting to obtain a share of the honours and emoluments of the Profession.

I am, Sir, yours respectfully,
M. B. Oxon.

TO THE POOR-LAW MEDICAL OFFICERS OF ENGLAND AND WALES.

Gentlemen,—Several of the contributors to the fund for defraying the expenses incidental to the proceedings of the Committee of Poor-law Medical Officers, have expressed their wish that the names of those gentlemen who have subscribed should be printed, in the hope of others being thereby induced to contribute.

We have reason, however, to know, that other gentlemen would wish their names *not* to appear in print.

Under these circumstances the Committee refrain, at present, at least, from printing a list of the names of the subscribers.

At the same time that the Committee desire to express their thanks for contributions received, they beg to state, that there being 2,914 Poor-law Medical Officers, they have received 243 subscriptions only, since the meeting on the 19th February, and of these several were from gentlemen who had subscribed once, and in one instance twice, before.

It is hoped, therefore, that those gentlemen who have, as yet, contributed nothing, will not consider themselves as excused from assisting, in however small a degree, the fund for the purposes already stated.

I have the honour to remain, Gentlemen,
Your very obedient Servant,
Thomas Martin,
Treasurer to the Committee.

Reigate, April 30, 1849.

UNIVERSITY COLLEGE.

The distribution of prizes in the Faculty of Medicine at University College for the winter season took place at three o'clock on Saturday. Mr. Hume, M.P., presided, and was supported by the Earl of Fortescue, Baron Goldsmid, Mr. Wood, Chairman of Inland Revenue, Mr. H. Warburton, and other members of the Council.

Dr. Grant, Dean of the Faculty, read the Report for the past session. It stated that there had been a diminution in the number of students for the last half-year. The number of students for the past year ending July, 1848, including both the winter and summer terms, was 315; and for the half-year ending in April, 1849, the number was 262. The receipts from students' fees, &c., were 7,485*l.*, and the gross receipts for the College, including both faculties, amounted to 16,302*l.* The new students in the faculty of medicine for the last session were 62, compared with 92 and 79 in the two preceding sessions.

The Chairman briefly addressed the assemblage on the origin and progress of the College since the laying of the first stone in 1827, by His Royal Highness the late Duke of Sussex. He had the satisfaction to think, that of the twenty-four members who formed the first Council at that period—now twenty-two years ago—ten were still alive and able to bear witness to the great success that had attended their labours in the cause of truth and knowledge. The hon. gentleman concluded by stating, that he did not at all share in the rather desponding tone in which the Dean had alluded to the diminution in the number of students during the past session. On referring to the returns for former years, he found that there had been at all times an ebbing and flowing, as it were, in the number of students, and he believed that the smallness of the present number, which might be accounted for in many ways, would be only temporary. The faculty of arts,—the other branch of the College,—was progressing most prosperously; and the completion of the new buildings and the proposed extension of the library would, he was convinced, be followed by a corresponding improvement in the general condition of the College.

The following is a list of the prizes:—

General Proficiency.—Prize of 40*l.*—William Bayldon, of Royston.

Comparative Anatomy.—Gold Medal.—Henry Briggs, of Halifax.

Medicine.—Gold Medal.—J. Russell Reynolds, of Halstead. Silver Medals.—Duncan Smith, of Sandwich, Kent, and John P. Langham, of Forest of Dean (equal).

Anatomy and Physiology.—Gold Medal.—Stephen M. Webb, of London. First Silver Medal.—J. Watkins Williams, of North Wales. Second Silver Medal.—T. George Fitzgerald, of London.

Chemistry.—Gold Medal.—James Rigby, of Stockport. First Silver Medals.—Henry Thompson, of Framlingham, and W. J. Russell, of Gloucester (equal). Second Silver Medal.—Wilson Fox, of Wellington.

Anatomy (Senior.)—Gold Medal.—Henry Thompson. First Silver Medal.—Nathaniel P. Betts, of London. Second Silver Medal.—Thomas G. Fitzgerald. (Junior) Silver Medal.—J. W. de Tunzelmann, of Bath.

Materia Medica.—Gold Medal.—James Roche, of Fermoy. First Silver Medal.—Henry Simpson, of Chester. Second Silver Medal.—Robert B. Morgan, of Bramford.

Midwifery.—Gold Medal.—J. Russell Reynolds. First Silver Medal.—Richard Lee, of Barnsbury, Islington. Second Silver Medal.—S. M. Webb.

Surgery.—Gold Medal.—William Squire, of Silso, Bedfordshire. First Silver Medal.—N. P. Betts. Second Silver Medal.—C. J. Shearman, of Rotherham.

Dental Surgery.—Silver Medal.—Duncan Smith.

Fellowes Clinical.—Gold Medal.—Henry Briggs.

Pathological Anatomy (1848).—Gold Medal.—William Bayldon.

Botany (1848).—Gold Medal.—Henry Briggs. Silver Medal.—G. W. New, of London.

Medical Jurisprudence (1848).—Prize.—William Squire.

CERTIFICATES OF HONOUR.

Comparative Anatomy.—2, James Rigby.

Medicine.—4, Philip Henry Tribe and N. P. Betts (equal); 6, George William New; 7, James Rigby; 8, George Hewlet Bailey; 9, Edward E. Earle.

Anatomy and Physiology.—4, Joseph S. Gamgee; 5, Charles W. Hammond and John B. Scriven (equal); 7, George F. Burder; 8, Richard Lee; 9, Mark E. B. Nicholson; 10, E. Ashton; 11, Paterson Allen.

Chemistry.—4, Edward W. Tarn; 5, Frederick John Thomas; 6, J. H. Trouncer; 7, J. W. de Tunzelmann; 8, Henry Richmond; 9, Henry E. Roscoe and Charles J. Tuffnell (equal); 10, William Kenrick; 11, George Legg; 12, Richard Starkie; 13, George G. Beazley; 14, Alfred E. Fletcher.

Anatomy.—Senior Class.—4, William George Bascot; 5, William Adams; 6, Duncan Smith; 7, John B. Scriven; 8, Charles Young; 9, Charles W. Hammond, Junior Class.—2, Wilson Fox; 3, John T. Gabriel; 4. Edwin J. Miles; 5, Thomas A. Bottomley; 6, David D. Davies; 7, Thomas Hillier and Frederick John Thomas (equal).

Materia Medica, and Therapeutics.—4, John Henry Bartlet; 5, Francis Martin; 6, George W. Nicholas.

Midwifery.—4, N. Clement Wood; 5, N. P. Betts; 6, George W. New and James Rigby (equal); 8, Archibald P. Childs; 9, William Adams; 10, Philip H. Tribe; 11, Trevor Morris; 12, Paterson Allen.

Surgery.—4, Duncan Smith; 5, J. R. Reynolds; 6, George W. New; 7, John P. Langham; 8, Henry G. Wright; 9, George Thomas Jones; 10, George H. Bailey.

Dental Surgery.—2, William Squire.

Botany, Senior Class (1848).—3, Charles France; 4, J. Russell Reynolds; 5, John B. Scriven and Richard Mee (equal); 6, George Barnes; 7, John Coghlan.

Medical Jurisprudence (1848).—2, Henry Briggs; 3, Henry G. Wright; 4, John Turle and John Buncombe (equal); 5, Henry D. Smith; 6, Richard Lee; 7, George T. Jones; 8, George W. New; 9, George Webster.

GOSSIP OF THE WEEK.

APOTHECARIES' HALL.—Names of gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, April 26th, 1849.—John Candler, Walpole, Suffolk; Robert Coane Roberts Jordan, Teignmouth; John William Trotter, Durham; William Palmer Steele, Abergavenny; John Horsley White, Wolverhampton; William Annable Skinner, Headcorn, Kent; Thomas Henry Waterworth, London; William Henry Tinney, Ottery St. Mary, Devon; John Wood, Bradford; George Hatt Cook, Tetbury; John Gaman, Hambledon, Hants; Henry Wellings, Royal Navy; and for an Assistant, William Evans, Glamorganshire.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 27th inst.:—Messrs. Richard Eaton Rusher, Oxford; Frederic John Earle, Winchester; Charles Newth Foote, Sheffield; Thomas Bacon Phillips, Knightsbridge; James Warnes Saunders, Norfolk; Thomas Smith Rowe, Margate; John Woodman Smith, Inverness; Charles Welch, Cambridge-road, Mile-end; and James Henry Lakin, Tamworth, Staffordshire. At the same meeting of the Court Mr. Francis Anderson passed his examination for naval surgeon; this gentleman had previously been admitted a member of the College, his diploma bearing date August 12, 1842.

WAR OFFICE, April 27.—40th Foot—Acting Assistant-Surgeon John Coghlan Haverty to be Assistant-Surgeon, vice Kingdom, appointed to the Staff. Hospital Staff.—Staff Surgeon of the Second Class Richard Dowse to be Staff Surgeon of the First Class, vice William Birrell, M.D., who retires upon half-pay—Staff Assistant-Surgeon Simeon Henry Hardy, M.D., to be Staff Surgeon of the Second Class, vice Dowse promoted—Assistant-Surgeon Edward William Clemishaw Kingdom, M.D., from the 40th Foot, to be Assistant-Surgeon to the Forces, vice Hardy promoted.

COMMISSIONS SIGNED BY THE LORD LIEUTENANT OF GLOUCESTERSHIRE.—Royal South Battalion of Gloucester Light Infantry Regiment of Militia: Assistant-Surgeon, G. Tate, to be Surgeon, *vice* Wilton, resigned. W. Philpot Brookes, M.D., to be Lieutenant and Assistant-Surgeon, *vice* Tate, promoted.—*From Friday's Gazette.*

OBITUARY.—On the 22nd instant, at Kew, Edward Scard, Esq., aged 41, Household Surgeon to His Royal Highness the Duke of Cambridge, and Magistrate for the Counties of Middlesex and Surrey. At Bagnor, North Wales, Mr. John Roberts, surgeon. On Monday, the 16th inst., at Lisburn, Ireland, of disease of the heart, aged 66, Thomas Hancock, M.D., formerly of Liverpool, and of Finsbury-square, London. On the 21st inst., aged 40 years, Mr. John Coley, jun., surgeon, of Bridgnorth. On the 23rd inst., aged 72 years, Mr. W. Warden, M.D., Surgeon of Her Majesty's Dockyard, Chatham.

THE COLLEGE LECTURES.—The course of twenty-four lectures, at the College of Surgeons, by Professor Owen, on the "Generation and Development of Invertebrated Animals," was brought to a close this day, (Saturday.) On Tuesday Professor Paget will commence his course of six lectures on the "Processes of Repair and Reproduction after Injuries."

HANWELL LUNATIC ASYLUM.—It is not generally known, that the valuable annual course of clinical lectures by Dr. Conolly, on the "Treatment of Insanity," are now being delivered by that gentleman, *gratuitously*, to the members of the Profession on producing their cards. These lectures commenced on the 14th ult., and will be continued every Saturday, at two o'clock, until June 2nd, including two lectures by Dr. Hitchman, one of the resident medical officers, on the "Morbid Anatomy of Insanity." Visiters can reach the Asylum in time for lecture by proceeding from the Great Western Railway Station, Paddington, by the half-past one o'clock train.

SUSSEX COUNTY HOSPITAL.—At the General Meeting of the Board of Governors of this Institution, last week, Dr. Hall, one of the physicians, tendered his resignation, which was accepted with great regret. Mr. George Royde has been elected Honorary Surgeon to the Brighton Dispensary.

HOSPITAL FOR CONSUMPTION AT BROMPTON.—The anniversary festival of this Charity took place on Wednesday at the Albion Tavern. Mr. Disraeli filled the chair, and among the guests present were M. Guizot, Lord Feversham, Sir John Pakington, M.P., Mr. Christopher, M.P., the Hon. Mr. Melville, the Hon. Mr. Monson, the Rev. Robert Montgomery, Dr. Forbes, and Mr. Philip Rose. About 200 gentlemen sat down to dinner. So great was the interest taken by the fair sex on the occasion that a new gallery had to be erected for their accommodation.

MANSLAUGHTER BY AN ILLEGAL MEDICAL PRACTITIONER.—A Coroner's Inquest was lately held at Liskard on the body of Henry Culshaw, a builder, who died suddenly on Friday week. The deceased was much addicted to drinking, and suffered from *delirium tremens*. On the day of his death, early in the morning he was intoxicated, and towards noon appeared very ill. A Mr. Goldsmith saw him, and sent a grain and a half of morphia, to be taken immediately. In a short time after taking the powder the patient was found lying in an out-house in a state of insensibility. Another surgeon was called in, but the man never rallied, and died in a few hours afterwards. A *post-mortem* examination was made by Dr. Donlevey and Mr. Nesbitt, and the jury ultimately returned a verdict of manslaughter against Mr. Goldsmith. The Coroner, in his address, said that he had had something to do with Mr. Goldsmith before, and that it was exceedingly improper that such a man should tamper with the lives of Her Majesty's lieges.

MORTALITY TABLE.

For the Week ending Saturday, April 28, 1848.

CAUSES OF DEATH.	Total.	Average of Five Springs.
ALL CAUSES	1058	963
SPECIFIED CAUSES	1041	959
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	233	198
SPORADIC DISEASES:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	43	48
Tubercular Diseases	197	200
Diseases of the Brain, Spinal Marrow, Nerves, and Senses.....	127	123
Diseases of the Heart and Blood-vessels.....	42	34
Diseases of the Lungs, and of the other Organs of Respiration	194	131
Diseases of the Stomach, Liver, and other Organs of Digestion	65	62
Diseases of the Kidneys, &c.	6	11
Childbirth, Diseases of the Uterus, &c.....	9	8
Rheumatism, Diseases of the Bones, Joints, &c.....	4	8
Diseases of the Skin, Cellular Tissue, &c.	1	1
Malformations	1	3
Premature Birth.....	16	21
Atrophy	22	17
Age.....	44	50
Sudden	14	11
Violence, Privation, Cold, and Intemperance	23	33
Causes not Specified	17	4

TO CORRESPONDENTS.

In consequence of Mr. Wardrop's absence from town, we are unable this week to publish the usual number of pages of his work on "Diseases of the Heart."

"Dissector, London Hospital," complains of the limited supply of subjects for the students in the dissecting room of that Institution. He says that many pupils have scarcely dissected at all during the present session, some only an upper or lower extremity. Unless some method be adopted to afford a better supply, the majority of the present race of students will be but very inferior anatomists.

We have been favoured with a view of a medal, struck in commemoration of the wonderful cures effected by a certain self-dubbed Baron, with a whole alphabet of letters after his name. The impudence of this quack is astounding, for notwithstanding the repeated exposure of his tricks, he still boldly publishes his wonderful cures, and, according to our correspondent, is carrying on a thriving business in the metropolis. The law ought to be sufficiently strong to put down such impostors.

"Theta."—We do not consider the disease contagious.

"TO THE EDITOR OF THE MEDICAL TIMES.

"Sir,—Passing by a druggist's shop in Oxford-street the other day, I read the following advertisement in the window: 'A Member of the Royal College of Physicians of London in attendance every morning from ten to twelve o'clock, to give advice gratis to the poor.'

"Yours truly, "ANTI-HUMBUG."

The per centage system is highly injurious to the Medical Profession, and we shall not fail to use our best efforts to put it down. We are disposed to think, that the announcement is only a trap; if, however, our correspondent can ascertain who "the Member" is, we will give him all the publicity he deserves.

"Argus" does not see both sides of the question.

"A disgusted Naval Surgeon" says that, "after serving five years as assistant in active service, I was in hopes of obtaining promotion. I have been doomed, however, to disappointment. I felt that, under these circumstances, it would be derogatory to my professional and private character to remain any longer in the service. It is right that our young medical brethren should know that, if they enter the Navy, they will be doomed to indignities to which the men before the mast are not subjected."

"A Student of University College."—The promised communication will be acceptable.

"Anglican."—The Officieres de Santè are men of inferior medical education, and it was proposed in the French Medical Reform Bill of 1847, to abolish the order. The Bill, however, did not pass into a law.

"An Extra-rubem Licentiate of the College of Physicians."—There is no prospect at present of a new charter being granted.

"Paul Pry."—We have heard it whispered that an effort is being made to exclude from the Council of the Royal College of Surgeons gentlemen who are not Hospital Surgeons.

"M.D."—The work is published by Mr. Highley, Fleet-street.

"Juvenis."—The Apothecaries' Act makes 5 years' apprenticeship indispensable. This "clause," however, is frequently evaded by fictitious indentures.

"A Poor-law Surgeon."—Received.

The Halifax Petition shall appear next week.

"TO THE EDITOR OF THE MEDICAL TIMES.

"Sir,—I noticed in a paragraph of your last week's Number, that arrangements are in progress to insure a daily return of the prevailing winds. I venture to hope, that your writer's arrangements may either be set aside, or somewhat southerly modified; for, although a daily return of these winds might produce pleasure and profit to you medical gentlemen, in the shape of interesting cases of rheumatism, colds, catarrhs, and the like; to the great mass of the people they would, I fear, prove as unacceptable as they would to your constant reader,

"ZEPHYR."

"D. P. D., Ireland."—We do not know of any such provision.

"Mr. R. J. Snape's" case of Poisoning by Cayenne shall receive an early insertion.

We should feel obliged by "A Fellow of the College of Physicians" calling on the gentleman to whom his note was addressed.

"Mr. J. Ogden Fletcher, Manchester," received.

"M.D."—We cannot answer the questions of our Correspondent.

"M.B."—Such person is a qualified medical practitioner in Scotland, but in England he is not a legally qualified one His testimony will be received, however, in a court of justice.

"M. D. Lond, and a General Practitioner," writes, "Your Correspondent 'V. V.,' in your Journal for March 31st, has confounded the University of London with the institution in Gower-street, formerly dignified by the title of 'the London University,' now properly reduced to University College. The mistake into which 'V. V.' has fallen is unfortunately too prevalent in the minds of even professional men, for the dignity of the University. I must positively contradict the assertion, that the Graduates of the University are anxious for the incorporation of the general practitioners with the University. On the contrary, we are most anxious that nothing of the kind be done."

"Mr. T. D. Martyn, St. Columb."—The communication shall receive an early insertion.

"A Stickler for Right" says,—"Your correspondent, signing himself 'A Subscriber,' is, I think, unfortunate in his illustration from the Peerage, as to the rights of M.B. to be called doctors, in any book of heraldry to which you are referred. I will defy him to any direct proof of his assertion, while the indirect (the very and only proof used by him) tells against his own reasoning. Sons of marquesses and earls are lords by courtesy, barons sons not: hence the example of degrees of honour in heraldry will serve for our guidance in degrees of distinction and learning in physic.

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ORIGINAL LECTURES.

LECTURES ON FEVER.

BEING AN ATTEMPT TO DEVELOPE MORE DEFINITE VIEWS OF ITS NATURE AND TREATMENT, BY THE CONSIDERATION OF THE PHENOMENA, AS OBSERVED IN THE PRACTICE OF MEDICINE AND SURGERY; BEING IN CONTINUATION OF "MEDICINE AND SURGERY ONE INDUCTIVE SCIENCE."

By GEO. MACILWAIN, F.R.C.S., Author of the above-mentioned Work, "Unity of the Body," "Tumors," &c., &c., &c.

LECTURE VIII.

(Continued from p. 485.)

Symptoms not to be relied on as exponents of the real condition of Organs—Fallacy of restricted modes of Inquiry—Tabular form recommended—of Causes—of the Synthetical Argument—of Treatment—of General Treatment—of Special Treatment—Apology for a Surgeon on such a subject—of primarily and secondarily affected Organs, &c.

Our sixth proposition affirms "that the symptoms will not alone allow us to ascertain the real condition of organs; that the symptoms are very commonly placed in *one organ*, while the cause is *in another*, and that the evidence required is to be sought in the previous history of the patient, and the relative conditions of the secretions, &c.

The true explanation of the necessity of the inquiry above stated, is to be found in the series of facts, comprised under the various phenomena of sympathy; and through which I have endeavoured to demonstrate a beautiful and conservative law in the body, evinced in a constant tendency to place the processes of disease from the more to the less important organ. This has been sufficiently dwelt on in the "Law of Inflammation," and some of the phenomena have been noticed by Mr. Hunter, but without any application of them. To prevent misconstruction, I would observe that the student must not imagine that I wish to speak lightly of symptoms, or of *any* mode of investigation. It is of the too exclusive reliance on any *one* mode, that I would urge the fallacy and danger; and which (as he will probably have too many opportunities of observing) deprives the practice of many clever men of that precision in prognosis, and that approach to uniformity of result which, I believe, is already in our power. One man seems to have an absorbing idea of the importance of some particular organ, another of some particular remedy, —another relies too much on auscultation, and so on. Of the fallacy of all modes adopted in this spirit, there is no man of experience who has not seen melancholy illustrations. Had I space for it I am certain there is not an organ in the body in relation to which I could not mention many examples, showing what obvious facts escape men whose views are warped in particular directions. Who has not seen mistakes in auscultation, for which this method certainly could not be held fairly answerable?—of this I have seen such melancholy results, that I shall, if I have space, again refer to the subject.

As to the proposition before us, all men who have examined many bodies must have seen how numerous the instances have been in which morbid appearances have been found of which the symptoms afforded no indication, and for which the attendants during life were wholly unprepared. Less frequently, but by no means uncommon, is it to find organs free from disease, which had been pronounced to be unsound. I have seen this in a chest where a diligent and (as reputed) skilful auscultator had pronounced hepatization of the lung, when both organs were quite sound, and in which, as was practically demonstrated, a more enlarged investigation had easily detected and predicted the error. I wish the student to bear well in mind, that very severe *symptoms* are perfectly consistent with a structurally sound condition of an organ,—and that a very unsound organ, which it is of the utmost importance to detect, and upon knowing which, the success of his case will turn, may exhibit no *symptoms* at all. E. G.—A perfectly sound liver may not secrete, or it may secrete, a very morbid character of bile; it may feel full and enlarged, or be exquisitely tender. On the other hand, a very much diseased liver may pour forth, bile not distinguishable from healthy secretion; it may even be torpid, and yet act on very slight stimulation; it may evince no ascertainable hardness, enlargement, or diminution. The secretion from organs is sometimes, a very uncertain indication of their real condition. Large quantities of morbid (so-called) secretion *may* be constructive evidence of *healthy* power, as compared to other organs; and I long ago hinted that diabetes seems frequently, at least, an indication that the organ which has been supposed to have been most diseased, is, in fact, the one in which the function is least impaired.

Now, similar remarks on the fallacy of *symptoms* might be made in regard to other organs; but, you cannot say this in regard to *injurious influences; their* effects are much more certain and definite, and more uniform also. I mean, that if the history of a patient shows that the influences to which he may have been exposed, whether of habits of life, climate, occupation, and so on, are of an injurious tendency, you can generally predict, with considerable accuracy, whether they have induced structural changes or otherwise, especially if you conduct your inquiry in a moderately comprehensive manner. In this way you will often have opportunities of discovering for yourselves the fallacy of more limited modes of investigation. To facilitate such inquiries, I recommend the adoption of tables, which may be a little varied in adaptation to the disease investigated, and the points on which our induction may have been hitherto most defective. So long as they are sufficiently comprehensive, the *form* is, of course, not material. I here give you one adapted for fever, which you can arrange in any other form you may prefer. It has been objected, that the mode I recommend of investigating diseases is too laborious, —that it occupies too much time, &c. In the first place, I would observe that, a very few minutes will, in most cases of fever, do all that you require. You will generally have an opportunity of getting at the previous habits of the patient from some one about him. His symptoms are, of course, obvious. The *general* treatment of all fevers is sufficiently analogous, (as will be more particularly described presently,) to give you plenty to direct at the time; and you can turn the facts you elicit over in your mind when you have a few minutes alone, in the interval before your next visit, to determine that to which your energies should be directed; viz., the *special* treatment of the case.

TABLE OF RECORD FOR FEVER.

Former life as ascertainable.	Name, age, occupation, present and former.	Temperament.	Spleen.	Treatment.
	Born, residing.	Premonitory symptoms, if any.	Bowels.	General.
	Water, soil, sewerage, or other local peculiarity.	Mode of access, type, alleged duration.	Respiratory organs.	
	Climates.	Symptoms referring to brain	Skin.	Special.
	Mode of life.		Circulating organs.	
	Moral causes, diseases, accidents.	External Senses.	Urinary organs.	Charges of function and symptoms during treatment as bearing on causation.
	Treatment.	Medical Sporalis.	Genital organs.	
	Parents.	Stomach, tongue.		
	Brothers and sisters.	Liver.	Result of Chemical Analysis or Tests, if any.	
	Other relations in blood.	Pancreas.		

N.B. This Table should be on a folio sheet of paper with the fly-leaf for observations.

I regret that I cannot pursue further the subject of the entire inefficiency of the evidence afforded by symptoms *merely*, but my limits hardly enable me to do more than to touch on many subjects which should be most thoroughly discussed; as we must hasten to the practical application of our views. We must, however, say a few words on the causes of fever, in relation to the whole argument, and on the test of our *analysis* of the subject, offered by the *synthetical* argument.

Now, as to causes, we have seen that no cause, ordinarily so called, will answer to the definition proposed in the outset of our inquiry; a definition, remember, not peculiar to these lectures, but one recognized in every other science, however it may be sometimes disregarded in medical writings. We have also seen that nothing proves practically a cause of fever, unless it combine a previously disordered state of body, or simultaneously impose such a condition, at the time of the occurrence of fever, by the gravity or generally disturbing force of the injurious influence which immediately excites it, such as great and sudden chemical or mechanical forces, &c. All this becomes very intelligible when the true nature of fever is considered; for I need scarcely say, that the idea of a cause which sometimes produces its effect and sometimes not, like many which have been so called, is abstractedly unintelligible; but when it is understood that the so-called *cause*, although it *frequently* meet and combine with the *other* elements of fever, does of itself *necessarily* constitute only one of them, the difficulty is at once explained, and a practical hint of the greatest importance at once developed; for in thus exposing, link by link, the chain of phenomena, we multiply our power of breaking its continuity, and in thus preventing those phenomena, which, together, constitute what we call fever;—of this, more in the sequel. Another point in the argument must also be borne in mind if you would understand even the *real* causes of fever in their practical operation; but this, also, is not only consistent with our views, but, in fact, a very lucid demonstration of the truth of them,—viz., that which asserts that fever is only *one phase*, as it were, of the law by which the body deals with *injurious influences;* and it is very necessary that we should be clear on this point, in order that the true force of our next point, the synthetical argument, be understood, and the true nature of that state in which the whole phenomena may be said to culminate, that is a state of "minus power" be appreciated. I may, for example, have a scratch on a finger, with a disordered state of body, but which shall fester and heal; I may have a disturbed state of organs and an erroneous diet, and I may have eruptions on the skin or boils; a man may be out of health and exposed to noxious effluvia from marshes or dissecting-rooms; he may be far from well; his secretions may be greatly disturbed, but he may not have fever; and yet he may be said to combine the *real causes*. This would be, indeed, a paradox, were fever an entity; but as fever is only *one phase* of that law by which the system deals with injurious influences, it is no paradox at all; it is simply, that the interferences are different in the various cases; because, in the cut finger, in the cutaneous or subcutaneous affections, in the tumor, and, as has been abundantly shown in the law of inflammation, in many other instances, we have a disordered state of body, the superaddition of an injurious influence; but still, not fever, as it is *usually understood*.

The fact is, that to evolve *what we call fever*, there must be a certain *relation* between the *injury* and the *power*, and this is merely a question of *degree*, just as is truly the disturbance of a cut finger which festers a little, and any of the more rare extensions of this into any dangerous or destructive degrees of constitutional disturbance; so in a febrile disturbance following intemperance, or other injurious or disordering ingesta, we are not accustomed to call it fever; but the only difference is, that it is simply more or less a faint type, that of which fever, commonly so called, is the more unequivocal development. I cannot here retrace or repeat all that I have said in developing the "Law of Inflammation;" you must study the whole of the argument, if you wish to get the *proof* of *all* the relations; but it is necessary to be clear on this point; wherefore, in the synthetical argument we shall endeavour to keep as close to the chemical illustration of that term as we can. If a chemist

required to educe a *particular effect* from his synthesis *over and above* the fact of combination, he must take his experiment in a particular form. Suppose he be required to prove synthetically the composition of oxyde of iron; why, he knows that he can bring these elements in contact in various ways which do not in the least affect the result; but if he wishes to do it so as to *demonstrate* the fact, he can hardly do it but by means essentially artificial, such as bringing pure iron and pure oxygen in contact. Now we require no more in regard to fever in order to carry out our synthetical proof. To get the elements of fever to combine with that kind of light or demonstration which the actual presence of fever alone gives, we must bring the elements together in a particularly pure and decided form. We must take a very pure and unequivocal case of *disordered* organs, and we must take an equally decided specimen of injurious influence from without, and then we shall hardly ever fail; but if we do less than this, seeing that the event *fever* is really a question of *power*, we are never certain that it may not occur in some mixed or equivocal form; presenting, in fact, some other *phase* of the law. Therefore suppose I take the intemperate, the diseased, and expose them to injurious influences of an exalted kind, which usually favour the occurrence of fever; in some (*perhaps the majority*) I get it, and of a decided type; but in some it does not occur; but if, in any, I inflict serious local injury,—if *I call for power of extensive repair*,—I get fever with certainty. But the very utmost exposure to all sorts of injurious influences shows, I think, that the *state of the organs* produced is the link essential; for certainly, as regards external influences, it is marvellous to see what one man (perhaps in a million) will get through, not perhaps without fever, but without that degree of it, that, confident in the general strength of our argument, we should accept as a successful demonstration. I recollect, for example, a man an habitual dram drinker—and this will show you that I have not been inattentive to apparent exceptions—with a compound dislocation of his ancle, which, before I saw it, had had the external wound sewed up! and which had been followed by erysipelas and partial gangrene. Yet this man did well on the stitches being removed and other treatment; he had loaded liver, but, so far as I recollect, not much fever. I have somewhere mentioned the case, but cannot find it to refer to. Diseases of the urinary organs afford us, I think, beautiful specimens of the synthesis we seek. A man, we will suppose, who has resided long in hot climates, has disease of his urinary organs requiring the use of instruments. Now, as the rule, we know with great certainty two very important facts which exemplify, as by a crucial experiment, the relations I would illustrate. If I acquiesce in his wish that his bladder should be at once examined, unguarded by any other conditions, I am almost certain of inducing a paroxysm of intermittent; if, on the contrary, I precede the examination by endeavours to put his organs into a condition of equilibrium, and superadd to these certain protections to his skin in particular, I am as certain of no such result following the examination. Sir Everard Hume remarks on this in connexion with diseases of these organs. Again, the patient having resided in a hot climate is not at all *essential*; the *disorder of organs* by which it is usually followed, is the required condition; for this present, we do not require that a man should have resided in a hot climate, though, perhaps, a certain sensitiveness of skin may, *cæteris paribus*, render him the more certain instrument for the demonstration. In almost all these cases, too, you get intermittents, which is a thing to be noted, especially with reference to those organs which appear most to suffer in hot climates, viz., those connected with the portal circulation. Now, this is just synthetically what, in our analysis, we saw in small-pox; only here you see the external influence, (the bougie,) involves no poison, is, in that sense, as one would say, innoxious, representing no mechanical or chemical force *ordinarily* so called. In small-pox, on the contrary, the external influence is a *virulent poison*, and the state of the constitution, even before you begin your preparation, selected from the most healthy, that is to say, already representing the zero of that element, (represented by a disturbed state of body,) and yet a state which is really *proved* to be what I represent it, that is, more or less out of balance; because you dare not inflict the disease, without the adoption of measures which constitutes, in fact, at once a tacit admission, and direct demonstration of the fact. So that, taking, as I do here, the cases as unlike as we possibly can imagine: the one purely surgical, (as the conventionalist would say; the other as purely medical,—the one involving a virulent poison; the other no poison at all, and so slight (as representing the injurious influence from without,) as hardly realising the idea we attach to the term,—we get exactly the same order of results, the same indication that the ordinary elements are those which I have represented; and that the truth which it is essential in us to ascertain and develope, is, the actual state of the body. The very same demonstration might be continued through a multitude of exactly similar cases. We must, however, proceed with our work. I am fully aware of the labour of a long inductive argument, and, indeed, the absolute impossibility of arranging the facts and arguments *in extenso*, obliges me to select, abridge, and compress the whole as well as I can in a comparatively short practical compendium. You recollect we began by stating, that if our argument were sound, the treatment arising out of it ought to be the *correct* treatment, and ought to be consistent with whatever actual experience *had sanctioned*, and that, however abundant the apparent contradictions of experience, there ought to be nothing irreconcileable with, or contradictory to, our views.

To bring this to the best practical test, I shall at once enunciate what I consider to be the true treatment of fever, and shall then proceed to show its *oneness*, if I may so speak, whether deduced from one source or another; that is, from our own arguments, or from the positive facts of experience, so far as they affect the matter or the present state of practice.

Now, in all fevers, the most teaching mode is, to divide the treatment into the general and special. The former applicable to all fevers whatever, the latter infinitely varying, not only in different fevers as they are called, but in *individual cases* of the *same fever*. Of general treatment I would first observe, that in all fevers the first great principle to recollect is the *œconomy* of power. No principle is more presiding than this, whether we regard the general or special treatment of the case. As the organs of the body are not in a state to *give* power by any new accession, we endeavour to observe the most rigid economy in its expenditure. We keep the body still, all exertion, of mind as well as body, is avoided; we shut out all excitants,—light from the eye, noise from the ear;—mental impressions of all sorts except those derived from hope and cheerfulness, and kind and easy attention should be avoided. All those inordinate exhibitions of affection which are sometimes seen in private practice, however natural and pleasing, should be forbidden, and the injurious excitement they produce stated. Everything that can possibly vitiate the air of the apartment should be carefully removed, and the most ample ventilation, which does not involve a blast of air directly on the patient, elaborately secured. To this end, the immediate removal of all excretions is essential, and the exclusion even of food ordrink not immediately wanted is desirable. The air of the apartment should be moderately dry, —an atmosphere overcharged with moisture greatly increases the difficulty of extrication of heat from the body, whether by the skin or lungs, and hence, in damp climates or situations, it may be very useful to have a little fire in the room, when it may not be required either for temperature or ventilation.

A temperature neither absolutely warm nor excessively cold is the best; extremes are dangerous or pernicious. Heat produces excitement; excessive cold may, in spite of obvious precautions to the contrary, depress the action of the skin, of all things the most desirable to encourage. The air of the room should be sufficiently cool, to require that the patient be moderately well-covered. The cooler in reason the air he breathes the better, but anything that chills the skin, is, as general treatment, improper, and belongs to the special treatment of individual cases. A little diluent may be allowed; plain water, or toast and water is the best; but even here anything like excess should be avoided. The manner of the medical or other attendant should be unconstrained, cheerful, and quiet, but conversational tone is the best, all whispering, unless it be when a patient may be asleep, is objectionable. During shivering, extra clothing may be applied, but during the hot stage or even the sweating, the clothing should be sufficient, but not oppressive, as it produces excitement and fatigue. In almost all cases, it will be proper to evacuate the alimentary canal by some mild but secure aperient, which acts on the liver and bowels, unless those organs be already acting when you first see the patient. We now come to the special treatment, and here I ought, perhaps, to say something apologetic for a surgeon venturing to talk of the treatment of fever; I hope, however, in one way or another, throughout Europe, and certainly in America, there are sufficient supporters of the view, that medicine and surgery, to be anything at all scientific, must be "one inductive science," to render any apology unnecessary. Entirely repudiating, as I do, any idea of knowledge not derived from *general* views of pathology, I might be satisfied in observing, that I only exercise that which I concede to all others, viz., the right of fearlessly examining every subject, and as fearlessly expressing the result of my examination. If, what a man says or thinks be true, in this way the world most quickly derive any benefit which may accrue from it. If it be untenable or erroneous, there are always plenty to point it out, and to check the dissemination or the influence of what is erroneous or mischievous. Still I see nothing objectionable, in stating, that you have had opportunities of practically examining the subject of which you treat, or that you have made some use of them. I may, therefore, observe, that at a very early age I became invested with very extensive opportunities of observing fever under a great variety of phases both medical and surgical in the worst neighbourhoods in London; and that for many years, although my position as consulting surgeon to the Institutions did not oblige me to attend the patients, yet, that I made a point of examining the bodies of all those who died to whom I could get access. I even, for a time, became the acting surgeon to the London Fever Hospital, but this I was obliged to relinquish, from the requisitions on my time being greater than my other engagements allowed. Besides these, I could state many other opportunities, but I hope that I have, in the "Law of Inflammation" and otherwise, done at least enough to show that it was obviously improbable that one whose whole professional life has been more or less devoted to carrying out the view that medicine and surgery are one inductive science, should have failed to investigate, to the best of his power, such salient subjects as fever and inflammation.

It is, then, in the *special* treatment of fever that it appears to me that the practice which I have observed seems most to require force, definiteness, and discrimination, and it is here, I think, that the truth and practical value of any principles will be best tested and demonstrated. That man who has most tact and experience will, no doubt, evolve the most benefit from any views; but still I believe the path which conducts us to the truths of nature to be so disposed, that industry, diligence, and freedom from preconceived opinion, go a long way in equalizing the power of discoverng it. I shall endeavour to unfold the matter to the student in the plainest way I can. Having determined your general treatment then, your next view is to develope the real condition of the patient, and to remember that economy of power is the presiding principle. That the proximate depressors of power are a state of organs in which their circulation and their secretion is out of balance, and some influence from without, the nature of which may be unknown to you, but

which the course of all fevers shows you *in the recoveries* at least, to be undoubtedly a *resistable* influence. Now you cannot, in one fever in a thousand, at once give power, in a positive sense; and, therefore, your only mode of obtaining the maximum of power is by removing all influences capable of depressing it, and especially in adjusting all states of organs in which the functions are deficient or excessive. It will be very useful to determine whether the injurious influence from without, or that element which I have described, as represented by the person's state of body be the more dominant. In surgical cases this is very simple to any man of ordinary discernment; in *medical* cases it may be much more difficult. Let me explain. In surgery we know the external influence, and we know, that so far as *it* is concerned, we have a fever of simple form, determined type, and so on. If we get a typhoid fever from a scratch, (to take an extreme case,) we do not hesitate to refer it to the state of the body; and so on of intermediate cases. There will, doubtless, be, frontier instances, where the injury *ab extra*, and the previous state of the body probably contribute in tolerably equal proportions. In medical cases, the external influence, as regards its share in the matter is, of course, less appreciable; but, in epidemics, it may be gathered, with sufficient approximation, to be of great practical utility. If there be a prevailing epidemic, of a powerless kind, and that be its *general* type, you safely adopt a treatment of which a vigilant observance of the time when you may begin to stimulate or support your patient should preside over your adjustment of the conditions of the various organs. In seeking for the actual state of the body previous to the occurence of the fever, the patient's usual habits of life, and those various circumstances noticed in the Table, will be your chief guides. When you have them, and have calculated the effects which they have probably produced on the organs, you will with the symptoms have all the means most material to your forming an opinion. If one organ have been acting inordinately for some time, and you cannot discover in the patient's habits any unusual exposure to any influence, ordinarily affecting that organ, you may be tolerably sure that it is *not* the organ primarily affected, but that it is acting in *compensation* for some organ that has not been executing its function. (a)

The kidney, in this way, will sometimes exhibit a morbid liberality of secretion, without at all coming within what would usually be considered diabetes, and the next thing will be to determine for what organ it has been thus acting. This will, of course, depend on the injurious influences to which a patient may have been exposed. Suppose, for example, that I learned that a fever patient had an irritable state of the kidney before his attack of fever, and that so far as the evidence went I could not glean that he had been subjected to any external influences of diet, or habits ordinarily acting directly on that organ, but that he had been to such as ordinarily disturb the liver. Then I should say you would, in practice, be most probably right in regarding the liver as the primarily affected organ, although there had *not been*, nor *now was*, any symptom pointing especially to that organ. So of the stomach or skin, if the injurious influences of previous habits had appeared to be such as usually depress or otherwise disturb these organs, I should reason in the sametmanner. In fact, the symptoms are valuable if taken with other things; *alone* they are fallacious guides. They will, for example, frequently tell you what is the state of a particular *organ*, or particular membrane, as inflamed or otherwise, and so on, but they are, except in extreme cases, no safe exponent of that which it is of all things most desirable to know, viz., the actual power of the patient, and the real *causes* of the symptoms; they being, in fact, obviously effects. For example, you may have symptoms of inflammation, but it does not at all follow that you dare institute the conventionaltreatment for inflammation as a cure for fever. In some cases you may save your patient by the timely abstraction of a small quantity of blood; in other cases you will as surely sink him by the very same measure. If you have fever complicated with pneumonia or pleuritis, is your treatment to be the same? I can tell you that if you rely on symptoms that you will obtain very different results in apparently similar cases. If, for example, some chest affection be a secondary affection, and the state of the liver be the primary, and especially if to this be superadded any change of structure, you may sink your patient even though you obtain only a very few ounces of blood. The real element of weakness here is the congested or diseased liver, and if you can get an ounce or two of bile it will relieve him more than ten times the quantity of blood. In such a case power is obtained by the extraction of a poisonous excretion, not by that of the vital fluid. In the latter case, you *may* leave the poison (bile) untouched, whilst you have diminished the power of your patient, the only means by which the bile can be secreted. In such a case what you want is secretion, and in some cases the mode of getting it *may* involve depletion; but whenever determined on, it should be conducted with the utmost attention to the conditions which alone justify or require it. With this and other parts of the treatment we will proceed in the next lecture, which with one more will include all that my limits allow me to add on the points which yet remain to be considered.

(a) Under these circumstances, and in the presence of what we call disease, inaction is, in my experience, as regards causation, the mark of a *primarily;* overaction, that of a *secondarily* affected or *compensating* organ. You must be careful, however, to combine this with the *history* of the case; because the *first* affect of an injurious agent is generally to increase secretion; it is only after habitual excitation that that torpor is at length induced, which, giving rise to compensating actions, places the apparent disorder in the *active*, or *proximately* affected, the *real* cause is the symptomless organ.

HUNTERIAN LECTURES

ON THE

GENERATION AND DEVELOPMENT OF THE INVERTEBRATED ANIMALS.

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[Reported expressly for the "Medical Times," and revised by the Lecturer.]

LECTURE V.

GENERATION OF ACALEPHÆ.—Characters of this Class artificial: its primary groups.—Only the more simple forms and larval individuals propagate by gemmation and spontaneous fission.—Androgynous generative organs of *Cydippe*.—Rapid development and brief duration of the ovaria and testes in the dicœcious Medusæ: multiplied marsupial pouches of the female.—Development of the fasciculate spermatozoa, and of the ova.—Many individuals propagated from one ovum, by gemmation and spontaneous fission of larval forms that successively typify the Monad, the Rotifer, and the Polype before the oviparous Medusa is finally developed.

MR. PRESIDENT AND GENTLEMEN,—At the preceding Lecture we saw that, whilst the new individuals, propagated by gemmation, were, for the most part, like the parent, those that came from the ova were in no instance like the parent, but underwent a considerable metamorphosis. They quitted the egg-state either as a ciliated *planula* under the guise of a *leucophrys*, or were partially ciliated on special lobes, like a *Rotifer*; or, what was more extraordinary, they came forth under the form of an animal which is usually ranked as a member of a higher class of Radiata, viz., a free-swimming, bell-shaped, or discoid Medusa.

In some instances, ova have been detected in the Medusiform offspring of the fixed compound polypes; but no metamorphosis of the medusiform offspring itself directly into a young campanularia or *Eudendrium* has been witnessed.

Our ideas of the relationship or return of the medusiform progeny to the Hydriform polypes, and of the processes by which the cycle may be completed, can now be guided only by the analogy of that which has been so well determined by Dalyell, Sars, and Siebold, in the larger Medusæ and other members of the groupe of Radiated animals called *Acalephæ*.

This class, the generation of which we have now to consider, comprehends creatures which are amongst the most singular of the whole animal kingdom; and each additional contribution to our knowledge of their economy adds to our wonder and interest. The *Acalephæ* are remarkable on account of the peculiar nature of their tissues, which are more like the vitreous humour than any other in the higher classes; and they are not less interesting for the elegance of their forms, the brilliancy of their colours, and for the peculiar property which many of them possess of stinging and inflaming the hand that touches them, and of giving out light in the night season. These qualities being presented by animals which are almost the sole visible representatives of living nature in the wild wastes of the ocean, at very remote distances from any land, have always attracted the attention of the navigator, who sometimes finds the surface of the sea studded with these brilliant gelatinous gems, which betray their course during the night-season by the lambent phosphorescent light which they diffuse. The *Acalephæ* are represented on our own coast by animals to which the names of Sea-blubber and Medusæ have been given. The form of many of the species is most typical of the great groupe Radiata, and they are called by Lamarck, on account of their tissue, "Radiaires Mollasses," or soft Radiaries, in contradistinction to the hard-skinned Echinoderms. Cuvier retained the ancient name of *Acalephæ*, Sea-nettles, and he characterises the class as free-swimming gelatinous animals, having a vascular system superadded to the digestive one, although he admits that the former may be only a continuation of the intestinal tubes ramified through the parenchyma of the body. He acknowledges, also, that the vascular system has not been demonstrated in every species of the class; and that those species in which it cannot be shown to exist, can hardly be distinguished from the Polypi. The division of this class has been founded on their mode of locomotion. There are a great many and curious forms which float by means of air-bladders, and in which the place of a stomach is supplied by many hollow tentacles. The Medusæ of this order are called "Physogrades," and have sometimes been denominated *Siphonophora*. In a second groupe, locomotion is effected by longitudinal series of cilia, whence the name "Ciliogrades;" these, also, have a single central mouth and a digestive cavity; they have also been called *Ctenophora*. The third order have also a central digestive, but commonly ramified, sac; and they swim by means of the rhythmical contractions of a muscular disc, whence they have been called "Pulmogrades" and "*Discophora*." The species of this order are those that are most commonly met with in the seas washing our own coasts. Extremely diversified, therefore, are both the forms and powers of the free-swimming radiated animals grouped together by the character of their gelatinous tissue and their independent movements. And first, I may remark, that the animals so associated are characterised as they manifest themselves at one stage of their existence; and, therefore, the question arises, what is the relation of this stage to the true and typical character of the species.

We may judge of this by different rules of observation. First, according to the length of time during which they exist under a given form; or, secondly, according to the form most commonly presented to our observation, and with which we are accordingly best acquainted; or, lastly, according to the form finally assumed. The two former circumstances have plainly influenced the best modern naturalists in the classification of such genera as *Campanularia* and *Coryne*, which have been placed amongst the Hydrozoa, with the distinctive character of *Progeny Medusiform*.

What may be the fate of this progeny, which swarm at certain periods, is not yet quite determined. M. Vân Beneden's notion of their metamorphosis into the base of compound parent, although seeming natural, is quite gratuitous. Sars and

Steenstrup's observations of ovaria, developed in the medusiform offspring, more probably points to the right direction of their function and destiny. We may take it as a fact, so far as it goes; and it must be interpreted by what we can gather of the larger medusiform radiaries.

Do these produce ova? and if they do, what do these ova turn to? If to planulæ and polypes, then there is strong ground for concluding the same with respect to the ova of the medusiform progeny of *Campanularia* and *Coryne*. That these compound-rooted hydriform polypes do produce free-moving medusiform individuals, is most clearly determined; and the phenomena are most important and suggestive. No one who witnesses these changes in the form of different individuals, representing one and the same species, but must feel that, by prosecuting these researches, we shall arrive nearer and nearer to the possibility of solving those questions, the difficulty of which has been eluded by the gratuitous hypothesis of the transmutation of species, and which lie at the bottom of the mystery of the progressive introduction of new specific forms of animal life into this planet.

The natural system of classification, says Cuvier, must be based upon a consideration of the totality of the organization, and a comparison of such in different beings, directed by the principle of the subordination of characters. Granted. But suppose that organization to materially change at different periods of the life of the individual of one and the same species, and these periodical characteristics to be propagable by parthenogenesis; which of these periods, it may be asked, is to be deemed the typical one, or that in which the whole organization is to be studied and compared.

The philosophic botanist sees in the tree the same condition of an aggregate of essentially distinct individuals, as the philosophical zoologist sees in the compound polype or the compound monad.

No anatomist could look upon the polype of the Bryozoa, with its rich organization and independent generative system, as a mere part or organ of the whole, as a compound individual.

No microscopical anatomist now regards the Volvox as any other than a spherical groupe of distinct and essentially independent monads.

The polype of the Anthozoa and of the Hydrozoa are two other lower grades of organization, but are as essentially distinct individuals, as the polype of the Lagenella. The gemmiparous leaf of the Bryophyllum is the vegetable equivalent of the animal polype, and is equally a distinct individual plant; and, according to the present botanical philosophy, it is a more typical individual than the leaf which has been metamorphosed into the stamen, the pistil, or any other element of the flower.

By this analogy and course of reasoning, therefore, the anatomist adheres closest to nature, and interprets her best, who classifies his subjects according to the typical character presented by the individual in any given phase of its development; and zoophytologists have reason, who include the *Campanularia* and the *Coryne* amongst the Hydrozoa, notwithstanding their medusiform progeny.

But, to be consistent, the rule should be extended to other medusiform progeny of hydriform polypes, and so to many, if not to all, of the acalephæ.

Such a suppression, however, of the class *Acalephæ*, however consistent with the reasoning based upon the principles which I have just laid down, would be opposed to the practice of naturalists in almost every instance, except the *Campanularia* and *Coryne*, and a few analogous cases of compound polypes with medusiform oviparous individuals. The cockchaffer lives laboriously three dark years under ground, eroding the roots of plants, before it emerges into light, and disports a few merry weeks in the bright summer sunshine, in its winged state.

The vermiform larva, in giving birth to the winged insect, has exhausted most of its substance, and all its vital energies as such, and leaves nothing but its empty skin behind.

The ephemera, after a year's obscure existence as a water-worm, creeps out of the vermiform case, and uses its newly-acquired aerial locomotive organs, and its procreative powers, for a brief day or hour, perhaps, then perishes.

We do not, however, class the Cockchaffer and the May-fly with the Vermes, as we ought to do according to the analogy of the *Campanularia* and *Coryne*.

So vast a proportion of the parent worm has supplied the material to the plastic force, which has operated in the re-arrangement of parts for the completion of the winged insect, that we say the worm has been *converted* into the insect, for almost all that is left behind is the skin.

The larval aphides, however, do propagate completely and truly, and so frequently as quite to parallel the condition of the procreant larvæ of the medusa-producing polypes; and the analogy is both true and close between the winged male and oviparous female, and the locomotive male and female Medusæ, and the male and female modified leaf-individuals of plants. Yet, notwithstanding these analogies, another rule guides the zoologist in the majority of these cases, which is this: to regard as the typical phase of the species that most perfect form which parallels the winged state of the insect, the medusa state of the polype, and the seed-producing and pollen-bearing flower-parts of the plant. And the zoologist accordingly classes the batrachian and the butterfly, the chaffer and the ephemeron, the beröe and the medusa, according to the structure of the last phase of their development.

Few naturalists will be found to object to this, but, to be consistent, they ought not to place in separate classes the *Campanularia* and the *Cyanœa*.

I now proceed to consider the gemmation of the obviously artificial groupe of animals to which Cuvier has given the name of *Acalephæ*.

One of their class-characters was supposed to be, that they never propagated, like the Polypes, by gemmation; this, however, is an error, and shows that the classification is not based on nature. In the Norwegian seas, there are little Medusæ, very similar to that to which Escholtz gave the name of *Cytais*. In these Sars observed, that gemmation took place from the side of the stomach; this organ has four sides, and from each of these proceeds a little bud, and these buds are observed in different grades of development. One of these may have attained to be a miniature of the parent, and it is then cast off, and grows to the size of the original; and so of the others. In May, 1837, Sars observed a similar gemmation in the *Thaumantias Multicirrata*, a (probably larval) Acalephe, one inch in diameter. Dr. Will states, that in the *Beröe multicornis* he saw its tubercles detached, and assuming signs of independent life. Martens observed small portions of the body of the *Cestum Veneris* detached, which moved independently for some time. But the most common mode of generation in the completed forms of *Acalephæ* is by the development of ova impregnated by the spermatozoa. The organs of the male and female, however, differ. With regard to the pulmogrades there are distinct males and females. In certain ciliogrades the ova are found developed along one side of each longitudinal rib or ridge, and the testes on the other; so that there are eight rows of ova and eight of testes. In respect to the pulmograde, the generative system was long a matter of great obscurity. Some light was first thrown on it by Gaede.

Ehrenberg confirmed and added to Gaede's observations of the females, but he thought the spermatozoa of the male medusæ parasitic cercariæ; the testes and ovaria having the same form and colour in the younger medusæ, but they are different in structure, and the males have never the marsupial sacs on the arms.

Male medusæ do not differ in respect of size from the females. Siebold finds, that when the *medusa aurita* is but 1½ in. to 1¾ in. long; the males may be distinguished by the sperm-sacs in the tæniiform testis; and the females by the germ-vesicle and spot in the similarly shaped ovaria; but the bandlike genital organ is small, and instead of folds, shows only risings and depressions. When the medusæ are still younger, the organ is only a flat band, without inequalities. The testes hold the same place as the ovaria—are dark, or brown, or rose colour (subject to some monstrosity). Each testis consists of a band with many folds; the whole bent in a bow, and situated between the digestive and respiratory cavity; the convexity is attached to the concave wall of the respiratory cavity.

If a probe be inserted into the generative respiratory cavity, it immediately touches the under or outer surface of testis: if, into the digestive cavities, it touches the upper or inner surface of the testis, but not immediately; the epithelium of the digestive cavity covering this surface of the testis. The testis, by its convolutions, is much longer than the cavity containing it. Its concave side, where it is connected with the thin septum between digestive and respiratory cavities, gives off an innumerable series of very moveable coloured tentacles, of the same structure as the tentacles of the arms; they are ciliated, and contain many peculiar hyaline rounded corpuscles, immediately beneath the surface. These are of two kinds, like those described by Corda in *Hydra fusca*.

The spermatic tentacles are capable of only moderate extension. At the breeding time they project from the margin of the cavity, leaving only a small passage in their centre. By their powerful ciliary apparatus they keep up a strong current of sea-water in the cavity, and thus aid in the expulsion of the semen. No ciliary movement is observable upon the delicate epithelium covering the lower surface of the testis. The parenchyma of the testis consists of a transparent granular substance, with innumerable pyriform sacs. The basis of which is toward the upper surface of testis, the apical orifices, with tumid margins, make the whole under surface of the testis uneven. The spermatozoa are developed in these sacs, which permanently represent the first rudiments of the extremely elongated seminal tubes in higher animals. The parietes of the seminal sacs are pretty thick, and, perhaps, contractile.

In young males the sperm-sacs contain numerous cysts, which are full of minute granules or nuclei, from each of which a spermatozoon is developed. In older specimens these cysts present a striated character, and, lastly, a fasciculus of spermatozoa. The spermatozoa are very like those of *Cyclas rivicola*. In them, as in the spermatozoa of bivalves, may be discerned a manifest body and filiform appendage, the end of which is so fine as scarcely to be seen. Siebold could not distinguish any independent movement in the head, but undulations of the appendage only. The fascicles of spermatozoa are not in the same degree of development in each sperm-sac, but those nearest the cervix of the sac are most perfect. Their ciliary appendages are always directed towards the opening of the sperm-sac.

The bundles follow each other, and often the apical tails of one bundle are infixed into the central interspace of the bodies of the preceding bundle, and a chain or string of bundles of spermatozoa are thus formed, easy to be seen by a moderate microscopic power. These Spermatozoa are very lively in sea-water. In order to observe the actual *ejaculatio seminis* cut off a piece of the testis from a fresh male medusa, place it on a watch-glass with the under surface—on which the sperm-sacs open—uppermost. If the animal is in the rut, the escape or emission of the spermatozoa may be seen. The development of the sperm-cells is not always according to the size of the animal; they have been found, fully formed, in Medusæ one inch and three-quarters to three inches broad, and even a specimen of one inch in diameter had living spermatozoa in the testes.

The coloured frill, in the so-called respiratory cavities of the female, as in the male, is the essential generative apparatus; but there are likewise developed at the breeding-time sacculi on the arms. The ovarium, like the testis, consists of a band, with many folds, attached between the digestive and respiratory cavities; its concave border is beset with similar tentacles, with vibratile cilia. The thin epithelium on the under surface of the ovarium, here and there, is also slightly ciliated. The tissue of the ovarium seems more hollow than that of the

testis. The germs of the eggs lie most towards that surface which is next the respiratory cavity wall, and the most mature are nearest the surface, beyond which they protrude, covered only by a very thin layer, and giving it a coarse granular character. The ovarium is not a simple folded sac, with an oviducal opening, as Ehrenberg supposed. The ova always consist of a germinal vesicle, with a spot, or nucleus. They increase in size by the addition of a violet-coloured yolk.

Siebold could not detect a chorion, or any distinct velamenta, either in the unimpregnated or impregnated ova. The ovum, when first received into the marsupial sac, consists of a transparent violet vitelline mass, with a smooth surface. The germ cell resulting from the combination of the spermatic matter with the germinal vesicle, attracts the whole germ-yelk about it, and divides it progressively with its own divisions. The first division of the yolk is like the spontaneous fission of some infusorial monads, inasmuch as it begins not at every part of the circumference, but on one side. In Siebold's plates, illustrating these changes, fig. 7 shows the vitellus with two transverse and one longitudinal fissures. As the fissures become more numerous, they take a diverging or radiating course, till at last, as in fig. 13, all the surface presents a granulated character, and now the ovum loses its violet colour and transparency and becomes dark yellow, and is covered by an epithelium, with traces of cilia; these, at length, increase, and cover the whole surface, and then the new being, or entity, changes from the condition of an ovum to the embryonic state, and obeys the involuntary moving powers. A cavity next begins to be developed in the centre of yolk globules, which, by continued and reiterated division, take only the form of truncated pyramids.

The deep yellow ciliated embryo of the Medusa, which has now a diameter of one-eighth of a line, and has a cavity in the centre, shows a disposition of the comminuted sub-pyramidal germ-cells converging towards that centre.

From a rounded form the embryo now passes to an oval form, with an oval cavity. It gradually elongates, and takes on a leucophrys-like form, being half a line to one-third of a line in length. At the upper end is a fossa, which does not, however, communicate with the central cavity, and is not a mouth. The ciliated monadiform embryos swim freely, with the great end forwards. They quit the maternal nursing pouch in this state, and swarm in the water. The preceding stage of development occupies two or three days. If they were originally produced as gemmules and could swim, they would not require the marsupium. After a brief course they attach themselves to some firm body by the terminal fossa, above described, which becomes a sucker. The free end shortens and thickens; the base expands; then a depression is observed at the under part of the free end, which is the commencement of the digestive cavity. The free end then expands, and forms a margin round the mouth, and four processes radiate thereform, giving the young Medusa the form, at first, of a Rotifer, and then of a four-armed polype.

Still more remarkable were the production in a few young medusæ of lateral branches from the body, of a great length,—in one case three such stolones were developed. These branches have continuations of the digestive cavity in them, and contract and elongate like ordinary arms. If these were irregularities, and the ordinary metamorphoses were delayed, it was perhaps through influence of captivity.

Siebold thinks that the young medusæ, which in autumn, in open sea, change to fixed polypes, hardly would continue in that state through the winter, but about the beginning of the stormy period would change to free-swimming medusæ, and settle down to tranquil depths of ocean; but Sir J. G. Dalyell has determined the period of the duration of the polype form of the larval medusæ to be much longer than Siebold conjectured, and he even succeeded in keeping a colony of three larvæ, which he called "hydræ tubæ," for six years.

During these changes of the embryo from the infusorial to the polype type, the yellow colour disappears; it becomes colourless and transparent, and contractions and expansions of the whole body appear, the larva sometimes elongating, sometimes contracting itself.

Four other arms bud out in the interspaces of the first four, and these eight arms can extremely elongate or protrude themselves,—thus an eight-armed polypus, and afterwards a many-armed polypus, results. The superficial vibratile cilia still act, and those on the arms in such a direction as to carry all particles to the mouth. The tentacula are very like those of the ovaria and testis in the adult medusæ; they are ciliated, but not in two regular rows, as in Flustra and Alcyonella. They contain clear or hyaline corpuscles, arranged in regular bracelets, like the tentacles on the margin of the disc of fully developed medusæ. Their mouth is very contractile and expansive; they feed on infusoria, or on their infusory-like younger brethren, one-half of the body of one of which may often be seen hanging out of the devourer's mouth.

With regard to the marsupial sacs on the arms of *medusa aurita*, these are processes on each side of the arm. They are developed before the ova quit the ovaria; are largest on the upper and middle part of the arms, while at the undermost part only small and usually empty sacs are found. Do they disappear after the progeny is developed and the breeding season past, or does the parent perish with them when her maternal and matricial functions have been performed? The membrane from which the sacs are developed is beset on its free edge, both in males and females, with numerous tentacles, similar to those found in the generative or respiratory cavities. Siebold thinks they are more numerous in the male than the female. There is the same obscurity regarding the passage of the young into the nursing pouches of the medusæ as in the mammalian marsupiate animals.

The subsequent metamorphoses, or rather metageneses, of the larval medusæ are equally extraordinary with those which I have endeavoured to describe, and which the observations of Siebold have mainly contributed to explain. The whole cycle of phenomena is so remarkable, that I feel bound to lay before you the whole body of evidence, from different and independent witnesses, by which the series of phenomena are established and linked together. It is now sixty years since Otho Fred. Müller first described and figured in the *Zoologia Danica*, a marine Polype, which, from its general resemblance to the fresh-water kind, he called *Hydra gelatinosa*.

Escholtz, in 1829, first described a small medusoid animal, which he called *Ephyra*; this now turns out to be the penultimate stage of *Medusa aurita*.

Sars, in 1833, first described a gelatinous Polype differing from the *Hydra gelatinosa* by its thicker body, and by the transverse rings indenting it; believing it to be a new genus of Polype, Sars described it under the name of *Scyphistoma*. In the same year, Sars also describes a gelatinous polypoid animal, differing from the above in the transverse annulations, throwing out bifid processes, and separating into segments, like little medusæ, and he called this very singular creature *Strobila*, from its resemblance to an artichoke.

At the meeting of the British Association, at Edinburgh, in 1834, Sir J. G. Dalyell communicated his observations on a marine *Hydra*, which he had called *Hydra Tuba*, or the trumpet-polypus; he describes it as about five lines long, and with about thirty tentacula, stated that it was very predacious, and would gorge young actiniæ, and passing the rejectamenta again by the mouth. It was vey sensitive to light, contracting and retreating from it. It was not very locomotive; propagated by complete gemmation; the young not removing themselves very far from the parent.

In his later Work, published in 1847, Sir J. Dalyell remarks, "Hence it is natural to assume that a germ, or deposition of elementary matter, subsists somewhere in the flesh," and that "generated within as a compact substance, its way is made by a regular process, to the exterior, where it becomes visible as a rising prominence." And at page 89 he asks, "Whether the budding results from a germ come of an earlier principle," which shows how nearly the ingenious Author had arrived, by independent thought, at the principle or true condition of parthenogenesis pointed out in my Lectures on the Invertebrate Animals of 1843, Pp. 234, 366.

Upon the whole, Sir J. G. Dalyell has given us the best history of this polype stage of the medusa, of its longevity, of its powers of propagation by gemmation, and also its powers of repairing injury. To give an idea of the re-producing force in the hydra tuba: on April 23rd an adult was detached from its site; in four days a spur or bud had issued from one side of the base, and a large protuberance, with a row of papillæ, an originating embryo, was rising from the other. On the 2nd of May these papillæ had elongated into perfect tentacula, like those of the adults. Another protuberance on the opposite side of the parent was now visible, which gradually matured into a young hydra, and began to feed on the 17th. On the 30th of May separation had taken place; four individuals were to be observed, and one was in the progress of developing two others. Sir J. Dalyell obtained from these a colony of eight larval "hydræ tubæ." These were extremely voracious; they were fed with the flesh of mussels; and in proportion as they were fed was their power of converting their food into creatures like themselves. By July 21st fifteen hydræ were propagated, and ultimately a colony of eighty-three were obtained from the individual insulated on the 23rd of April. It would seem that confinement tended to check the metamorphosis into the "oviparous form," and favoured the gemmation of the polype individuals, or the "typical form." At length, however, in the spring of a subsequent year he observed the phenomena which he thus describes, in the "Edinburgh Philosophical Journal" for 1836:—

"I kept a colony of these animals and their descendants during six years; numbers attained maturity; they fed rapaciously; grew and bred, succeeding at all seasons of the year. But, in February and March, the face or disc of some hydræ is invested by a pendulous flexible prolongation of an inverted conical form, obliterating the tentacula entirely. The apex being connected with the disc, this pendulous mass extends two or three lines in the course of time, and is gradually developed in twenty or thirty successive strata, gradually broadening outwards. When more mature, the vehement clasping of extending arms at the extremity denotes, that each stratum is an animated being, which, after excessive struggling, is liberated, to swim at large in the water. This also may be associated with the medusariæ. It is considerably larger than the preceding, two lines in diameter; of a whitish colour, tending to transparence. The body resembles a flattened watch-glass; the margin dilating into from five to twelve horizontal, broad, flattened lobes, each cleft half way down the middle, and with a black glandular-looking speck in the centre of the fork. A crest, resembling a quadrangular clustered column rises from the convex surface of the body, and four organs may sometimes be observed on the same surface near its base. Motion is accomplished in jerks or leaps, somewhat as by the medusæ proper, from percussion of the lobes on the water, the crest being downwards. Whether the pendulous mass or its individual parts be contained in one common involucrum, or in many specific integuments, is uncertain; but each of the animals composing it comes successively to maturity and departs. As the pendulous prominence disappears, the vigour of the hydra is restored, and the tentacula, liberated of the encumbrance, effecting temporary obliteration, resume their natural form and functions. Weeks elapse in the course of this process, and during survivance of the animals." So that here the observations by Sars, of his *Scyphistoma* (1833), illustrated by those of Dalyell (1836), establish a series of metamorphoses carried on from the *Hydra gelatinosa* or *Hydra tuba*, to the medusa state. Our next question would be;—What does this hydra tuba

come from? For this part of the history of the Medusa, we are indebted to Professor Siebold, in which he traces the development of the ova of the Medusa (*Cyanæa aurita*) to the Hydra tuba, as I have already detailed; and in which, as in *Campanularia*, a ciliated monadiform planula precedes the polype-stage, and thus the two fragmentary series of links are united into one harmonious metagenetic cycle. Confirmation by distinct observers is not wanting. The accurate Sars, pursuing his researches, followed out, independently, the whole series of changes of the ova of the Medusa, from the infusorial to the polype-type, thence to the strobila and scyphistoma; finally budding forth the flattened segments, and as if splitting up into a pile of Medusæ. The details, with figures, were published in 1841. But Sir J. Dalyell has shown us that the polype larva may have propagated hundreds of hydræ, before it issues into the pile of Medusæ. The sea which washes part of our coast is sometimes covered by millions of these little Medusæ. Sir J. G. Dalyell narrates, in his beautiful work, that one summer having selected a specimen of a Medusa of the genus *Chrysaora*, he kept it alive in a capacious jar of seawater for a few days. On removing it from the jar in which it had been placed, he found that a quantity of brownish matter, like dust, remained at the bottom. Subjected to the microscope this proved to be a host of animated creatures in quick and varied motion; each of an oval form, ciliated, actively moving, like the planulæ. Some of these, after a period of ten or twelve days, become developed into stationary hydræ.

Such is the nature of the full and satisfactory evidence on which the main facts of the generation of the medusæ are established. The *Medusæ Aurita* is, however, but the representative of one of the three leading divisions of the remarkable animals grouped together under the name of *Acalephæ*. With regard to the development of the ciliograde and physograde species, scarcely anything connected or precise is at present known. The Medical Officer who may be destined for foreign service, and to whom the study of Nature offers any charm, could hardly contribute observations more valuable to natural history than such as he might be able to make on the generation and development of the pelagic acalephæ.

ORIGINAL CONTRIBUTIONS.

CASES OF STRICTURE OF THE URETHRA, TREATED BY PERINÆAL INCISION.

By JOSEPH THOMPSON, Esq., Consulting Surgeon to the Nottingham Union Hospital, and to the General Dispensary.

(Read before the Medico-Chirurgical Society, Nottingham.)

Stricture of the urethra is always productive of great inconvenience and suffering to the patient, and frequently of much disease and danger—viz., dilatation, inflammation, and ulceration of the urethra, terminating in perinæal abscess, infiltration of urine, sloughing and fistulæ extending through the perinæum, into the rectum, scrotum, back part of the thighs, &c. There are also, frequently, inflammation, and abscess of the prostate, with a widening of its ducts. The bladder often becomes inflamed, thickened, contracted, and sacculated; the ureters dilated and thickened; the pelves of the kidneys dilated to a great extent; the kidneys themselves being frequently absorbed, or otherwise diseased, to an extraordinary degree. When it is considered, that these are only some of the dangerous effects likely to result from stricture of the urethra, it must be confessed, that the disease is of no trifling importance. I hope, therefore, that the following cases of stricture occurring at the membranous part of the canal, will not prove altogether uninteresting:—

Joel Hidderley, aged 52, frame-work knitter, was admitted a patient of the Dispensary on September 18, 1839, with symptoms of stricture of the urethra. He said, four years ago he was kicked on the perinæum; swelling and pain followed, and soon after he tried, but ineffectually, to empty his bladder. This caused considerable alarm, and induced him to apply to a surgeon, who endeavoured, unsuccessfully, to relieve him with the catheter. Leeches, fomentations, and medicines were prescribed, and, on the morning following the injury, he passed some urine with great difficulty. This treatment was repeated occasionally during twelve months, but without any advantage; and, on application, he was received into the General Hospital, where a catheter was, for the first time, introduced into his bladder, and his urine drawn off. When, however, the instrument was used the second time, it could not be passed; the patient experienced much pain, in consequence of which he became frightened, and abruptly left the Hospital. He then placed himself under the care of another practitioner, who attended him for three years, during which time, although many attempts were made, no instrument could be passed through the stricture, except on one occasion, soon after he left the Hospital. At the time of his admission he was thin and weak, but there was not any symptom of organic disease in remote organs. He had frequent micturition, but the urine came only in drops, although the straining was so violent as to have been productive of hæmorrhoids. On the right side of the perinæum, between the erector penis and the bulb of the urethra, there was a swelling, which afforded a sensation of deep fluctuation. It had existed a long time, and matter had discharged from the urethra, which, probably, came from the swelling; at all events, on being opened with a lancet, purulent matter escaped, but not any urine. A catheter passed along the urethra was arrested at the perinæal extremity of its membranous portion, and a probe, inserted in the wound, appeared to terminate in the neighbourhood of the same part, where it could be distinguished by the finger in the rectum. The two could not be made to touch each other. Having satisfied myself of the impracticability of getting any instrument into the bladder without an operation, I requested a consultation, and prescribed castor oil to regulate his bowels, and the following mixture:—

℞. Syrup. papaveris alb., ʒiij.; spirit. æther. nitrici., ʒij.; potassæ carbonatis, ʒij.; aquæ distillatæ, ℥vss. M. capiat coch. ii. ampla quartis horis.

25th. My colleagues met, and agreed with me as to the propriety of an operation, which I performed in the following manner:—The patient was placed on a table, and secured as in the operation for the stone, and held in a perfectly symmetrical posture on his back, with his knees elevated to the same height, and separated to the same extent on each side. Mr. Key's straight staff was then passed down to the stricture, on which it was made to rest, whilst the left forefinger was placed in the rectum, to ascertain the state of the prostatic and membranous portions of the urethra, and their position relatively to the point of the instrument, which was now given into the hands of an assistant, with directions to keep it steadily pressed against the pubes, with its point immoveably fixed on the stricture,—its handle exactly in the middle line of the perinæum, and the instrument nearly in the perpendicular direction. Having proceeded thus far, and being seated on a chair of convenient height, the integument was fixed with the fingers of the left hand, whilst an incision about two inches in length was made exactly in the centre of the perinæum, terminating rather less than half an inch in front of the anus. With the design of gaining more room, a second incision, commencing within and near the inferior extremity of the first, was carried downwards and outwards around the margin of the anus, towards a point intermediate between the latter and the tuberosity of the ischium. With the left index finger, in the first incision, the parts intervening between it and the staff were pressed upon the latter, and fixed there, the finger serving also as a guide, whilst they were freely divided with the scalpel, and the urethra laid open at its bulbous part, the bulb being divided into equilateral halves. As there was no further use for the staff it was withdrawn, and, at the same time, the finger passed into the urethra, and placed upon the perinæal extremity of the strictured membranous portion, which, by a gliding motion of the finger upwards and downwards, was easily found, and a small director, with a moderate force, and without much difficulty, introduced into the bladder. But before the stricture was divided, the finger was passed into the rectum, to ascertain the fact beyond all doubt. The director was then lifted as much as possible from the bowel, and a sharp-pointed bistoury, with a narrow and perfectly straight blade, was slid along its groove, with its edge directed downwards and outwards, and the stricture divided. After this, a female catheter could be introduced with facility, and, as urine flowed, it was a proof that it had reached the bladder, and that there was sufficient room. This was removed, and a probe passed merely as a director to a male catheter, which was now introduced along the urethra to the wound, and then along the probe into the bladder, and the operation completed. The wound was dressed with wet lint, over which was placed a compress of linen and a sponge, and all were then bound gently to the wound by means of a T bandage. A thin slip of bandage having previously been fastened to the rings of the catheter, was passed through a slit in the bandage made for that purpose a little anterior to the anus, and then tied, by which means the catheter was secured in the bladder. The patient was then placed on his back in bed, with a pillow under his knees, and ordered to take the following draught immediately:—℞ Tincturæ opii, ♏xxx.; spiritus ammoniæ co., ♏xxx.; aquæ distillatæ, ʒx. Ft. haustus.

26th.—Pulse 96; tongue dry; not any other bad symptom. Continue the mixture prescribed on 18th, and take tincturæ opii ♏xxx. hora somni.

27th.—Doing well. Continue mixture, et haust. anod. Capiat olii ricini ʒvi. cras mane. Bowels moved four times; suffers more than usual with the piles, which are to be anointed with spermaceti ointment, and fomented. Continue mixture et haust. anod.

29th.—Has had some shivering since yesterday, which terminated in perspiration. Bowels open five times. There is not any pain in the back, nor on pressure over the bladder. The water has passed freely through the wound, but not through the catheter; it was, therefore, withdrawn, cleaned, and re-introduced. Cont. remed. et capt. sulphatis quininæ gr. iii., ter die.

30th.—Tendency to shiver, but no rigors; urine alkaline; bowels not open. The alkaline mixture to be omitted, but the quinine continued. The oil to be repeated in the morning, and the following mixture to be taken as directed:—℞ Acidi sulphurici diluti, ʒij.; tincture cardam. co., ʒss.; aquæ ad op. capt. ʒiss. ter die.

Oct. 1st.—Had no sleep in the night, but some shivering; had pain in the bowels, which have been open twice, since which the pain is relieved; stools pale. The catheter withdrawn. Cont. remed.

2nd.—Mane: Tenesmus and urging of the bowels; frequent micturition; urine ropy and opaque. The catheter was introduced and removed. Take the oil in the morning, omit the quinine and acid mixture, and take the following:—℞. Acid. tart. gr. x. ft. pulvis; mitte 8. ℞ Sodæ carbonatis ʒiv. tincture opii ♏. 40, aquæ ad op. M. capt. ʒi; quartis. horis e pulv. singulis. Vespere: Better. Bowels open once, after which the nurse gave him 10 drops of laudanum. To continue the medicines, and have the following enema administered at bedtime:—℞ Tincturæ opii gtt. 40, aquæ ʒiv. M.

4th.—Has been going on well since last report. Bowels open; urine alkaline, and still very ropy. Catheter introduced and removed. Omit the remedies in use and take the following mixture:—℞ Acidi sulphur. dilut. ʒii.; syrup. papav. alb. ʒss.; tinct. cardam. comp. ʒss.; aquæ ad Oss M capt. coch. iii., ampla quartis horis.

8th.—The catheter has been passed and removed to-day, and on every day since last report, except the 7th. But little water comes through the wound, which has contracted very much; urine not so loaded with mucus; bowels open three times from oil administered on the 7th; tongue moist, but rather furred; pulse very good; piles better. The wound to be dressed with lint and cerat. cetacei.

9th.—The orifice of the urethra has become con-

tracted, and to-day it was slit with a lancet. Catheter passed and withdrawn. Cont. remed.

10th.—Urine contains but little mucous; bowels open twice; some griping; no urine has passed through the wound since the 8th. Take two teaspoonfuls of oil directly. Catheter passed.

11th.—Catheter used.

13th.—Catheter used; wound healed. Discharged cured, with directions to have the catheter passed, at intervals of five days, for some time.

[To be continued.]

CASE OF DESQUAMATIVE NEPHRITIS, WITH ALBUMINURIA AND OXALURIA; GENERAL ANASARCA, ASCITES, AND HYDROTHORAX, PHLEGMONOUS ERYSIPELAS ENSUING.

By WILLIAM BIRD HERAPATH, M.B., Lond.

Elijah Chivers, aged 2 years and 9 months, son of an engineer, residing in Alfred St. Dings, was brought to me Jan. 14, 1849. He was suffering from extensive general anasarca. The face, eyelids, hands, legs and feet, scrotum and penis, were excessively œdematous. Ascites also existed to a considerable degree. Respiration short and quick; no cough; pulse 120, small and weak; tongue clean; bowels costive; appetite bad. Appears fretful and in pain. Cardiac sounds normal. No renal tenderness. These symptoms first made their appearance a few days ago. Previously to this period he had always been healthy; never had scarlatina, rheumatism, measles, or small-pox. Mother attributes the origin to "a cold." The urine was scanty, rather high coloured, but sometimes pale and watery, froths readily, very highly albuminous. Acid. sp. g. 1·016. Deposits abundance of excessively minute octohedra of oxalate of lime, and casts of the tubuli uriniferi, whole and broken down fibrinous; numerous oval nucleated epithelium cells. I ordered pulv. jalapæ gr. iv., potassæ bitartratis gr. xviij., pulv. tragacanthæ comp. gr. xviij. M. ft. pulvis 4ta. quâque horâ sumendus ex aquâ. And a table-spoonful of the following mixture to be taken three times daily:—℞ Potassæ nitratis ʒi.; spt. ætheris nit. ʒss.; syrupi tolutani ʒss.; syrupi rhamni ʒiij.; aquæ ʒxiij.; M. ft. mistura.

Jan. 27.—These remedies were persevered with regularly up to this date, and the little patient derived considerable benefit. The anasarca and ascites were much lessened; all the peritoneal effusion disappeared. The feet and ankles were alone œdematous. The bowels were smartly acted on; four or five watery evacuations were daily obtained. The urine became more copious and paler; it was still very albuminous, and contained abundance of lithates of soda and ammonia; some uric acid, together with oxalate of lime, in larger octohedra and fibrinous casts.

Dec. 30th.—Not so well; the powders have lost their power; the bowels are now constipated; the anasarca is again coming on. Add 5 grains of compound scammony powder, and take a dose three times a day.

Feb. 1st.—Powders do not operate; the ascites is nearly as bad as before; the urine is scanty, and dark coffee-coloured, albuminous; abundance of casts and lithates. Ordered 5 grains of compound gamboge pill every four hours, together with a table-spoonful of the following mixture:—℞ Sodæ potassio tartratis ʒvi.; tincturæ scillæ ʒij.; syrupi aurantii ʒss.; aquæ ʒvss.; M. ft. mistura.

Feb 3rd.—Requested to visit him; found him much worse; ascites and anasarca increased considerably; dyspnœa very urgent, orthopnœa in fact; signs of effusion in left pleura; dullness on percussion; œgophony at the angle of scapula; immobility of the ribs; pain on coughing or moving; heart pulsating a little to the right of the sternum; sore all over; penis and scrotum as large as ever; blister to be applied to the left side of the thorax; add ʒi. tincture of digitalis to the mixture.

4th.—Worse; more fever; skin hot and dry; tongue brown and dry in the centre, edges and tip white; the dyspnœa very considerable; pulse, 160; respirations short and quick, 48; urine more scanty, and higher in colour; bowels opened three times only. Apply a poultice to the blistered surface; repeat the mixture; add one grain of calomel to each pill.

5th.—Much the same; respirations somewhat easier, 48; pulse, 144; disposition to sleep; rather comatose; bowels more open, five green stools. Continue remedies.

6th.—About the same; very restless, in consequence of the blister; pulse, 144; respirations, 40.

7th.—Improving; bowels have been very freely acted on; stools grass green, very watery; pulse, 120; respirations, 32. Omit the mixture and the pills; dress the blister; ordered pulvis colchici., gr. ij.; pulv. jalapæ co., ℈i. M. ft. pulvis 4ta. quâque horâ sumendus.

9th.—Improving steadily; tongue cleaner; fever less; not so sleepy; ascites going fast; urine more copious; bowels more freely purged; impossible to say how often as he does everything under him, and he has done so several days; he can now lie down; pulse, 108; respirations, 32. Continue powders.

10th.—Decidedly better; the face is again the natural size; the ascites is all gone; anasarca only present in legs and ankles; he lies comfortably on his back; still a little pleuritic effusion however; pulse, 112; respiration, 24; bowels well opened; urine more copious; tongue cleaner; appetite returning. Repeat the powders and the pills, but diminish the hydrarg. chlorid.; take a pill every night; not yet able to collect and examine the urine.

12th.—Again worse; the œdema has returned in the face and hands; the right leg is much swollen, and the foot is purple red; the skin threatening to give way; he has been very sick several times; bowels opened very freely; appetite very good yesterday; pulse, 112; respirations, 32; urine is more copious; pale coloured; highly albuminous; 1.016; light flocculent deposit, consisting of fibrinous casts; organic globules; nucleated oval epithelium cells; few large octohedra of oxalate of lime. Continue treatment.

16th.—He has been very much relaxed in the bowels during the last three days; vomiting also teazes him; pulse, 120; respirations, 22; the dropsical symptoms are improving; the œdema is lessened; the feet are getting darker and purple from distension, and are very painful; the right foot is vesicating on the dorsum; sphacelus is advancing; continue powders, one every six hours; omit the pills; poultice the feet.

18th.—Much improved; appetite better; tongue clean; œdema gone; legs are much smaller; sloughs have formed on both feet; wounds discharge serum in quantity at the fissures of demarcation; respirations deep, free, and easy; much too excited to observe pulse; bowels pass four fluid evacuations daily; urine not so free. Continue powder occasionally.

20th.—Appetite very good; asleep; flushed; pulse 132, respiration 24.

22nd.—Œdema all gone; hydrothorax disappeared also entirely; no cough. Wounds discharge freely; all the sloughs have separated; ulcers have red edges. The little fellow had a fainting fit this morning. Pulse 124, respirations 24. Water "very free," but it cannot be collected, as he will only pass it under him in bed when unobserved. Ordered 1 gr. of the citrate of iron and quinine three times daily.

25th.—In much greater pain; very restless and uneasy. The left leg is much swollen in the calf, in consequence of a large abscess having formed. It was immediately opened; about two ounces of pus issued from the subcutaneous cellular tissue; the collection was "diffused;" no hard circumscribed borders,—no appearance led me to expect this on the 22nd. Pulse before touching leg, 104; intermittent at 10th. To have ʒiij. of wine daily, and good diet.

28th.—He has been much easier ever since.

March 1st.—The legs are discharging freely at all the wounds; no œdema; tongue clean; pulse 180, respirations 36; water very free; copious night perspirations; hectic fever exists. Specimen of urine collected to-day for the first time since last report; light amber coloured; acid slightly; sp. gr. 1·012; highly albuminous. Ordered more nourishment and wine, or beer, if preferred. To have a table-spoonful of the following mixture three times a day.—℞ Acid. sulphurici diluti, ʒss.; syrupi papaveris, ʒss.; infus. rosæ, ʒv. M.

3rd.—Much worse; the left leg is now erysipelatous as high as the knee; it is very much swollen, scarlet red, and excessively tender; pulse 160; tongue dirty white. Tincture of iodine applied freely above the knee; fomentations and poultices ordered. Continue medicine.

5th.—Better. The iodine was applied two or three times; the erysipelas did not pass the line of tincture; calf much swollen and hardened; sloughs still adherent appear in the wounds; pulse 144. Re-apply the iodine.

8th.—Much improved; appetite is returning; the leg is becoming softer, the wounds are discharging freely, and the sloughs are separating.

10th.—Going on well; no fresh abscess has appeared; the skin is improving in colour, and the swelling is decidedly softer. I removed the sloughs with a forceps; they were of cellular tissue; all the wounds discharge freely; that on the dorsum of the right foot is granulating; urine free, slightly acid; perfectly free from albumen; only 1 oz. collected. This is a remarkable phenomenon, as I have never once found it absent before. He has continued the acid mixture ever since December 1, but now takes it with very great reluctance.

12th.—Not so well to-day; in more pain. The erysipelas has attacked the other leg (the right); it extends as high as the calf; the tissues are hardened and infiltrated. He takes nourishment often, and will have beer, of which he drinks three pints daily. Ordered to have five drops of diluted sulphuric acid thrice daily in water. The urine was again examined, and found perfectly free from albumen.

16th.—The abscess has softened sufficiently to warrant an incision; it pointed in the anterior tibial region; about half an ounce of pus issued, and gave great relief; pulse (observed before excitement), 152; urine acid, *not albuminous;* specific gravity, 1·018, depositing crystals of uric acid; no oxalates. Ordered three grains of pulv. Doveri every night.

22nd.—He has continued to improve steadily; the wounds discharge less, and the right is cicatrizing slowly. To-day a slight attack of influenza has arisen; the father was suffering from the epidemic also. There are bronchitic symptoms in the boy. Urine not albuminous; deposits abundance of pale amorphous lithate of ammonia. Ordered half a-grain of ipecacuanha, and five grains of sugar every four hours.

25th.—The catarrhal fever has disappeared; the bronchitis has nearly left him; his cough is still troublesome at night; the large ulcer on the right foot has cicatrized; the legs have considerably decreased in size; the urine still deposits the pale lithates in abundance, but there is no albumen; he completed his third year to-day, and sat up in his chair for the first time since his illness, greatly to my delight and satisfaction.

27th.—Continuing to improve. Urine, acid, pale amber, not albuminous; specific gravity, 1·022; containing crystals of uric acid (lozenges), with abundance of oxalate of lime in octohedra, with a few minute casts of tubuli uriniferi.

April 1.—During the last few days, the little fellow has not been quite so well; the right leg has again been inflamed and indurated, a small abscess having gradually formed in the right anterior tibial region. To day it was sufficiently maturated to warrant incision. The pus was situated beneath the anterior tibial fascia; about two teaspoonsful of pus issued. This abscess has not upset his health so much as the others; his appetite only fell off. On the whole, the little patient has improved considerably in personal appearance, and, he is getting fat again.

April 3.—The wound required the probe to-day; very little pus issued from it. He is wonderfully improved. All the old wounds are nearly closed

up; scarcely any pus discharged; the ulcer on the dorsum of the left foot is still open, but it is filling up, and it is half cicatrized; the urine, acid, transparent, not albuminous; specific gravity, 1·026; uric acid in lozenges; oxalate of lime, as octohedra of various sizes, and as short cubic prisms, with 24 triangular summits; dodecahedra composed of cube and octohedron. After a longer repose, it deposited phosphates as globular tufts of aciculæ, all radiating from the centre; soluble in acetic acid.

11th.—He was brought up to my surgery to-day: he is rapidly convalescent, gaining flesh and strength. His appetite is almost ravenous; "he can eat anything and everything;" his skin is acquiring the appearance and hue of health; the sallow, pasty tinge are both disappearing fast. The legs are well; the left foot has an ulcer the size of a pea on the dorsum; it is cicatrizing; it discharges scarcely anything; all other wounds have been closed for some time; he has taken no medicine lately—none since the 25th ult. Ordered to be dressed with lint spread with simple cerate. Urine, deeper in colour, acid; specific gravity, 1·029; *not albuminous;* slight mucous cloud; epithelium pavement, octohedral oxalate of lime, amorphous lithate of ammonia subsequently formed.

23rd.—Much improved; all wounds perfectly healed and sound. The little fellow has attempted to walk; he can almost do so, but requires a little support. The legs are somewhat stiff; urine pale, not albuminous; sp. g. 1·031; no excess of urea; deposits amorphous lithate of ammonia immediately it is cold.

The accompanying table exhibits, at one view, the principal phenomena attending the case, together with the treatment adopted:—

1849.	Pulse.	Respirations.	Urine.	Sp. G.	Deposits.	General Symptoms.	Treatment.
Jan. 14	120	Quick and short.	Very albuminous. Scanty; high coloured.	1·016	Oxalate of lime. Casts of tubuli uriniferi. Oval epithelium cells.	Ascites, general Anasarca.	Jan. 14. ℞ Pulv. Jalapæ, gr. iv. Potassæ Bitart. gr. xviij. M. ft. Pulvis. 4ta quâque horâ sumendus. ℞ Potassæ Nitratis ʒj; spt. æth. Nit. ʒss. Syr. Rhamni ʒiij. Aquæ ad. ʒiij. M. ft. Mistura: Capiat coch. magn. ter die. Drink gin and water.
,, 27	,,	,,	Pale albuminous.	,,	Oxalates and casts of tubuli. Uric acid. Lithate of soda.	Dropsical Symptoms disappearing gradually. Ascites and Anasarca gone; Œdema only of feet and ancles.	Treatment steadily persevered in until the 30th Jan.
,, 30	,,	,,	Do. do.	,,	,, ,,	Relapse of Anasarca; constipation.	30th.—Add 5 grains Compound Scammony P. to each powder; take one dose three times a day.
Feb. 1	,,	,,	Scanty; coffee; albuminous.	,,	Casts; lithates.	Increased Anasarca; constipation.	Feb. 1.—℞ Pill. Cambogiæ Comp. gr. v. 4ta quâque horâ. ℞ Sodæ Potassio Tart. ʒvi. Tr. Scillæ, ʒij. Syr. Aurant. ʒss. Aquæ ad. ʒvi. M. Capiat. coch. magn. quartis horis.
,, 3	,,	,,	Do, do.	,,	,, ,,	Ascites, Anasarca, Hydro-thorax.	Feb. 3.—Add ʒi. Tinct. Digitalis to the mixture. Empl. Vesicatorium Thoracis lateri sinistro app.
,, 4	160	48	Scanty, do.	,,	,, ,,	Do. do. do. and slight coma.	4.—Add gr. i. of Hyd. Chlorid to each pill. Continue mixture.
,, 5	144	48	,, ,,	,,	,, ,,	Do. do. do. five green stools.	
,, 6	144	40	,, ,,	,,	,, ,,	Do. do. do. bowels freely acted on.	
,, 8	120	32	,, ,,	,,	,, ,,	Dropsy disappearing; diarrhœa.	7.—Omit the mixture and the pills. ℞ Pulv. Colchici, gr. ij. Jalapæ Comp. ʒi. M. Pulvis quartis horis.
,, 9	108	32	Copious, do.	,,	,, ,,	Diarrhœa; ascites fast disappearing.	9.—Continue powders.
,, 10	112	24	Copious; not collected.	,,	,, ,,	Ascites gone; anasarca and hydro-thorax less.	10.—Repeat the pills with half the Hyd. Chlorid.
,, 12	112	32	Pale; copious; highly albuminous.	1·016	Casts and organic globules. Oxalate of lime. Nucleated oval cells.	More anasarca; feet threatened with sphacelus on dorsum. Sickness and diarrhœa.	12.—Continue treatment.
,, 16	120	22	,, ,, ,,	,,	,, ,,	Anasarca again less. Feet sloughing. Diarrhœa; vomiting.	16.—Continue powders; omit the pills. Poultices to the feet.
,, 18	—	Easy and free.	Not so copious.	,,	,, ,,	Œdema gone. Sloughs on both feet. Wounds discharge serum freely.	18.—Continue powder occasionally.
,, 20	132	24	,, ,,	,,	,, ,,	Four stools daily.	
,, 22	132	24	Very copious.	,,	,, ,,	Anasarca, Ascites, and Hydro-thorax all gone. Wounds discharging freely. Sloughs separated. Slight syncope.	22.—Omit all medicines. Take one grain Citrate of Iron and Quinine three times daily.
,, 25	104	Intermittent at the 16th.		,,	,, ,,	Large abcess found in left calf. Opened. Two ounces of pus issued.	25.—Wine ordered; beer if preferred; good diet.
March 1	180	36	Very copious; amber; acid; very highly albuminous.	1·012	,, ,,	Legs discharging freely at all wounds. No anasarca or dropsical symptom.	Mar. 1.—℞ Acid. Sulp. dil., ʒss.; Syrup Papaveris, ʒss.; Inf. Rosæ. ad. ʒvi. M. Capiat. coch. magn. ter die.
,, 3	160	,,	,, ,, ,,	,,	,, ,,	Erysipelas of left foot and leg, (Iodine.)	3.—Continue mixture. Iodine freely applied.
,, 5	144	,,	,, ,, ,,	,,	,, ,,	,, stationary. Wound sloughing.	
,, 8	,,	,,	,, ,, ,,	,,	,, ,,	Improving. Leg softer. Wounds discharging.	
,, 10	,,	,,	Albumen disappeared.	,,	,, ,,	Improving. Swelling less. Wounds discharge. Right foot granulating.	10.—Drinks three pints of beer daily; refuses all medicine.
,, 12	,,	,,	No albumen.	,,	,, ,,	Erysipelas attacked right foot and leg.	
,, 16	152	,,	Not albuminous.	1·018	Uric acid; no oxalates.	Abscess in right Ant. Tibial region.	16.—3 grains of Dover's Powder every night.
,, 22	,,	,,	Pale; not albuminous.	,,	Lithate of ammonia.	Erysipelas gone. Slight influenza with bronchitis. Wounds discharge less.	22.—℞ Pulv. Ipecacuanhæ, gr. ss. Sacchari gr. v. M. ft. Pulvis, 4ta quâque horâ sumendus.
,, 25	,,	,,	No albumen.	,,	Pale lithates.	Wound on right foot has cicatrized.	25.—All medicines omitted.
,, 27	,,	,,	Pale; not albuminous.	1·022	Uric acid. Oxalates abundant. Casts of tubuli.	Much improved. Able to sit up in his chair.	
April 1	,,	,,	,, ,,	,,	,, ,,	Small abscess in right Ant. Tibial region. Health improving rapidly.	
,, 3	,,	,,	Not albuminous.	1·026	Uric acid. Oxalate of lime in octohedra & in dodecahedra.	All wounds nearly cicatrized. Very little discharge. Rapidly gaining flesh.	
,, 11	,,	,,	Deeper coloured; not albuminous.	1·029	Oxalates. Epithelium. Mucous cloud. Amorphous lithates.	All wounds cicatrized, except one on the dorsum of left foot, size of pea. Rapidly getting fat. Eats voraciously.	April 11.—Simple dressing to wounds; poultices left off.
,, 23	,,	,,	Pale; not albuminous.	1·031	Amorphous lithates. No excess of urea.	Almost able to walk. Much improved. Convalescent.	

REMARKS.

The whole appearance of the case denotes it to be what it has been called,—one of sub-acute idiopathic desquamative nephritis. The presence of albumen and tubuli uriniferi casts with the oval nucleated epithelial cells in the urine, are pathognomonic indications of the renal disease; whilst the absence of tenderness in the lumbar regions, clearly showed that no acute inflammation of the kidneys could have existed.

This disease is rare in the early age of childhood, without scarlatina or some other exanthematous disease as the precursor. In this instance, no such event occurred. The renal attack appears to have been excited by exposure to the ordinary causes of catarrh, although no proof is offered of such causation. It was, therefore, a purely idiopathic form of the disease.

The usual general symptoms accompanying this peculiar and interesting affliction, are, in this case, very strongly marked; and when we consider the

age of the little patient, we must feel surprise at the gratifying result, even if we had no other phenomena than those developed on the 4th of February; dropsical symptoms had even passed on to the stage of slight coma, showing that the cerebrum was sympathising with the general state of the system: yet, by a steady perseverance in the use of the drastic forms of purgatives, these alarming symptoms succumbed to our art. Nature also lent her aid, and by producing sphacelus on the feet, she opened so many outlets to the serous effusion, and the wounds had the advantage of "issues" upon the renal disease. The long distension of the skin and sub-cutaneous cellular tissue, led to the death of certain portions of superficial and deep fascia in various parts of the inferior extremities, and, of course, abscesses arose, in order that the sloughing portions might be thrown off. Notwithstanding all these various debilitating causes, the little fellow bore up manfully against them. Emaciation was produced to a great degree; he looked like a mere skeleton covered with skin. Syncope and an intermittent pulse showed the ravages made on his constitution. At this time, wine, beer, and good diet were freely ordered; he rallied somewhat from this depression, but only to be attacked by what I thought at the time would have carried him off, extensive erysipelas, of the phlegmonous form; yet, most surprisingly, this attack was the salvation of the little patient; the albumen disappeared from the urine cotemporaneously with the appearance of the erysipelas, and this effected what all the natural issues had failed to accomplish; it changed the internal destructive inflammation of the kidneys into a comparatively innocent external inflammatory action; and, by a careful and unlimited supply of nutriment, and as excessive an allowance of beer, the little fellow was enabled to weather the storm, and now lives to prove the truth of the adage, that whilst there is life there is still hope in the resources of our noble art.

This curative effect of phlegmonous erysipelas is certainly a most interesting phenomenon. I am not aware whether it has ever been observed before. The fact cannot be doubted; it is clearly proved by the carefully-recorded symptoms of this most interesting case. We see the albuminous character of the urine as strongly marked as ever two days before the appearance of erysipelas. Seven days afterwards the urine is found to be suddenly free from the slightest trace of albumen, the previously constant and predominating feature of the whole case. The magnitude of the doses of the remedies used will alarm and astonish many of your readers probably, but I fought carefully for effects, and cared not how I obtained them, trusting but little to "the expectant treatment of disease;" that the remedies were all given as directed, I have the assurance of the careful and anxious mother, who watched over and nursed the little fellow with indefatigable assiduity.

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RESEARCHES ON INVOLUNTARY SEMINAL DISCHARGES, AND THE DISORDERS ATTENDING THEM.

By H. J. M'DOUGALL, Surgeon, Fellow of the Royal Medical and Chirurgical Society; formerly House-Surgeon to University College Hospital.

(Continued from page 472.)

SYMPTOMS OF SPERMATORRHŒA.

The headache arising from involuntary seminal discharges in persons more advanced in life differs in character from that I have already described. There are no paroxysms of acute pain, but rather a constant sense of weight and uneasiness in the frontal, coronal, and occasionally the occipital, regions. As I have before remarked, the patients often describe their sensations as a sense of emptiness in these regions. This is attended with giddiness so severe, in advanced stages of the disorder, as almost to preclude the patient's taking exercise, and is, in many cases, accompanied with flushing of the face and temporary attacks of congestion of the brain, almost resembling apoplexy. The patient constantly complains of noise in the ears and muscæ volitantes, which will be found, on careful inquiry, to be increased immediately after each pollution. The weight and uneasiness, or sense of emptiness, are also increased in a marked manner after the seminal losses, and the attacks of cerebral congestion are influenced by them. Lallemand describes so well the symptoms of these patients, that I cannot do better than quote his words:—"Some of these patients commonly experience weight in the head, a kind of uneasiness or of compression of the brain, as if the organ were swollen; others, on the other hand, complain of experiencing a sensation of emptiness in the head, as though the cranium were not exactly full. I have heard several assert that they felt their brain dried up and hardened, shaking in its envelopes. To these sensations, succeed, at a later period, dull, obtuse pains in the head, contusive, rather than strong and lancinating; wandering and movable, rather than fixed. These symptoms are often attributed to many accidental causes. Sometimes they seem to be excited or increased by bad rest at nights; at other times by a meal of difficult digestion, or by mental excitement. But these are only secondary causes, to which the patients only pay attention, when they are ignorant of the true cause; for those who suffer from nocturnal pollutions are quite aware of the intimate relation which exists between such discharges and the changes they experience in the disorders of the head. Although these sensations are in general diffused, movable, and varying from one day to another, some patients suffer fixed and almost constant pain in a particular spot. In some cases, this is in the neighbourhood of the occiput, or seems to be directed thence towards the forehead; but these cases are rare. The opinions of Gall and all phrenologists as to the functions of the cerebellum have undoubtedly caused the exact seat of the headache following masturbation and venereal excesses to be particularly noticed. I have, however, much more frequently found frontal headache in all cases of this nature, although my attention has always been fixed on the occipital region. The frequency of pain above the orbits in these patients, arises probably from the fatigue which everything that requires a little sustained attention causes them; besides, it is more heaviness and uneasiness that they experience than actual pain. In proportion as the disease makes progress, these symptoms become more marked, and there are superadded vertigo, noise in the ears, and, for a few seconds at a time, redness, heat in the head, disorder of the ideas, and embarrassment of speech. The weakness of the limbs at the same time increases. Here we see quite sufficient to lead to a suspicion of chronic disease of the brain, or of its membranes, especially if the headache returns habitually in the same region of the cranium." Describing the attacks of flushing of the face, and congestion of the head, which happen in these cases, M. Lallemand writes—"Although these patients are habitually pale, or at least have little colour, they are exposed to attacks of cerebral congestion, ordinarily slight and of short duration, but occasionally very alarming, on which it is highly important to fix the attention of practitioners. At first these congestions are confined to slight flushing of the face, excited sometimes by obstinate constipation, an attack of indigestion, the accumulation of flatus in the stomach and intestines; sometimes by too great heat in a room, or by too lively emotions; and sometimes, again, by sudden disorder of the circulation and a momentary difficulty of breathing. It is well known, that in a state of health constipation favours much the flow of blood towards the head, and constipation is one of the most constant symptoms of advanced spermatorrhœa. Difficult digestion generally brings on increased colour of the face, and the simplest meal often causes indigestion in these patients. The development of flatus causes them much uneasiness in all respects, and impedes respiration. On the other hand, they feel stifled in a hot or small room, and anxiously seek the open air, and especially cool air. Lastly, large parties of people intimidate and fatigue them, causing them mental excitement proportionate to the weakness of their faculties. The effects which these apparently slight accidental circumstances may produce in patients labouring under spermatorrhœa are explained by the facts, that the susceptibility of all their organs increases in proportion as they become weak, and that their circulation is troubled and quickened, and becomes tumultuous and disordered under the influence of the most transient internal or external impressions. It is not only towards the head these congestions take place; each organ may, in its turn, become their seat. Such patients sometimes suddenly blush to the ears without even themselves knowing the reason. The injection of the face is in general more marked in proportion as debility has made greater progress; and, in the last stage of the disease, the attacks of congestion may proceed so far, that the whole head is swollen, of a dark red, with burning heat, and at last becomes covered with sweat. It may be well supposed that these congestions are not confined to the skin: everything indicates that the same phenomena takes place in the actual substance of the brain. At the same moment vertigo, dazzling of sight, noise in the ears, and internal pulsation, make themselves felt; afterwards there are great anxiety, agitation, and uneasiness, and, in some cases, the ideas are unconnected and deranged. When the attack of congestion is severe, the patients do not recognise their friends; they know not where they are nor what they do,—they constantly want to change their posture, to breathe the external air, and, above all, to walk, although their legs are unable to support them, and, if they are not well watched, they meet with more or less serious falls. In some cases consciousness is entirely lost, and the patients fall into a state much resembling apoplexy. The medical man, called in in one of these alarming attacks of congestion, is at first struck with the injection of the face and acceleration of the pulse. He is told of frequent stunning sensations experienced by the patient, of embarrassment in his speech, of momentary stuttering, of weakness of the limbs, of more or less frequent falls, of headaches, &c. He, therefore, thinks that he has to do with a case of apoplexy, especially if he have not followed the progress of the case for some time previously. No one knows better than I how deceptive these circumstances may be. I have myself been mistaken on two occasions, after having seen many such cases. During these attacks the brain is certainly the seat of vascular injection, similar to that observed in the skin, as is proved by the concomitant cerebral symptoms. These phenomena resemble those which generally precede hæmorrhagic apoplexy. If the medical man be deceived, it is not as regards the cerebral congestion, for this really exists. His error consists in not recognising its cause, in not foreseeing its duration, in exaggerating its consequences, and, above all, in combating it by injurious measures. In fact these congestions arise from spermatorrhœa; they are more alarming in proportion as the debility is greater; they are never of long continuance; they never terminate in sanguineous effusion, and nothing can be more injurious to the patient than the abstraction of blood."

"A few words of explanation are necessary on these different points. That weakness should produce congestions, which are generally regarded as the exclusive result of a plethoric condition, may appear remarkable. But, when all the circumstances attending them are taken into consideration, it becomes evident that there exist great differences between these two kinds of congestion, as I shall presently show. On the other hand, it is by no means rare to see analogous, if not similar phenomena, produced by opposite causes. It often happens in commencing or impending cerebral affections, that a copious bleeding is followed immediately by a sudden attack of congestion towards the head, with spasmodic motions. No one doubts that plethora often excites palpitation, sense of suffocation, and difficulty of breathing; nevertheless, we have just seen that analogous symptoms may be caused by an opposite state, so as even to deceive the medical attendant as to the indications to be fulfilled. It is in the just appreciation of these different causes that true medical tact consists, and this it is which

causes the success of scientific practitioners, because they act very differently, under circumstances which seem the same to persons who are contented with a superficial examination.

"These attacks become more frequent in proportion as the debility increases; but they are generally of short duration, because they depend on the extreme excitability of the circulatory system, and not on too powerful impulse to the blood, or too great fulness of the vessels. For these reasons, too, they do not present the same dangers as ordinary congestion of blood; they do not end in capillary hæmorrhage, still less in extensive effusion. Too great flow of blood may cause death in a plethoric individual without inducing effusion, because the vessels of the brain become so distended as to cause the functions of that organ to be extinguished, as it were, by compression. When hypertrophy of the heart is not the result of an obstacle situated at the commencement of the aorta, the impulse of the blood may be so violent as to cause extravasation at the extremities of the vessels; when the latter are diseased, a less powerful impulse may cause rupture at a point of their parietes, and, in consequence, a considerable effusion. Nothing similar to this exists in persons suffering from spermatorrhœa; hence the attacks of congestion do not produce any of these effects, although they become more frequent and more alarming in proportion as the disease progresses. When such patients die, it is rather in consequence of slow wearing out, a true exhaustion, than from the fact of the attack of congestion; for it is rather in a kind of syncope that they succumb, after all the phenomena of congestion have passed off, not the least traces of which can be found in the brain or its membranes."

M. Lallemand then remarks respecting the *post-mortem* appearances in such cases:—"Neither the tissue nor the coverings of the brain are more injected than usual; there is not even present any serosity in the arachnoid. Hence the last attack of congestion has not left the least trace in the cavity of the cranium, all having returned to a natural condition, when life becomes extinct. The nervous pulp is only softened and pulpy (*poisseuse*), as in all cases in which the constitution has been slowly and deeply deteriorated by chronic disease. It is especially as regards the indications of treatment that these congestions differ from all others. I am not going here to discuss what should be done in such cases. It is evident enough, however, that the least abstraction of blood might prove fatal, and, unfortunately, the abstraction of blood is the first idea presenting itself, when we suppose there is an attack of apoplexy to combat. How is so serious an error to be avoided? The medical man, called for the first time under such deceptive circumstances, cannot immediately ascertain the first cause of the attack. But it is not necessary to ascertain the existence of involuntary seminal discharges to decide on the impropriety of the abstraction of blood. Without noticing the circumstances previously attending the case, its old standing, its peculiar progress, &c., matters which are often badly reported to the professional man, he has for his guidance the general appearance of the œconomy, the state of the strength, the state of nutrition, and, above all, the phenomena attending the circulation. The pulse is generally rapid and irregular, but it is never full, hard, and resisting; by the least pressure of the finger on the artery it becomes flattened, and ceases to beat underneath, and the pulse is only felt again by skimming the surface of the skin with the finger. When the pulse presents such conditions as these we may feel assured that there is no fear of hæmorrhage, and that all abstraction of blood will be injurious. It is, therefore, on the pulse that we must rely for information under such circumstances.

"Cases in which the symptoms of congestion are so alarming as to induce fear of apoplexy, are not of the commonest; and the symptoms may vary much, as I have before remarked, according to the periods of the disease and the idiosyncrasy of individuals. I have described the most striking phenomena, and from them slighter attacks may be easily comprehended.

"I have insisted very strongly on the peculiarities of these cerebral congestions, because sexual excitement has been stated to predispose to cerebral hæmorrhage. But if it be admitted that a single coitus may cause apoplexy, how much more would it not be to be expected in individuals who have given themselves up to venereal excesses, or extraordinary abuse? I must again repeat, that venereal excesses, abuse, and involuntary seminal discharges do not predispose to cerebral hæmorrhage; the attacks of congestion in such cases, although as frightful as they can be in appearance, from the momentary turgidity of the face, the stunning sensations, &c., never need lead to a fear of sanguineous effusion; and the frequency of the pulse, or the tumultuous palpitations, are no reason for the abstraction of blood from such patients."

I have been induced to translate the two preceding long quotations from the original work of M. Lallemand, in consequence of the full and clear manner in which he has treated the subject, leaving nothing to be desired for its full elucidation. The reputation acquired by M. Lallemand, as the expositor of the peculiarities of cerebral diseases long before his attention was attracted by the subject of spermatorrhœa, and which was the immediate cause of the investigation and discoveries he made in respect to that disease, entitle his statements and opinions, on all points of cerebral pathology, to the highest consideration and respect. My own experience entirely confirms M. Lallemand's description of the effects of spermatorrhœa on the cerebrum. Of the peculiar sensations, and dull, "obtuse" headache, I have met with numerous cases, the pain being seldom referred to the occipital region, but almost always to the internal part of the sinciput, immediately above the roofs of the orbits. Of the slighter congestion, many examples have fallen under my observation. In fact, these momentary congestions are very common in almost all cases of diurnal pollutions. The more serious congestive attacks are, however, to the best of my belief, very rare, the following case being the only instance I have met with in which the attack proceeded so far as loss of consciousness. M. Lallemand's views with regard to the characters of the pulse quite accord with the results of my experience; indeed, I believe that, in all cases in which involuntary seminal discharges are present to any serious extent, the pulse acquires the peculiar characters he has described. On this point, I shall enter more fully when treating of the disorders of the circulatory system:—

Mr. W., aged 38, first consulted me on the 26th of February, 1848. He is tall, of slight make, apparently nervous bilious temperament, dark complexion, with black eyes, whiskers, and hair slightly grey and very thin; he is much emaciated, and has rather a dissipated appearance. About the age of 14 was taught masturbation at school, practised it frequently for the first year, but then left it off entirely. About 15 he became acquainted with a female much older than himself, and was accidentally thrown much in her society. This person, during the first six months of their acquaintance, excited him by every means in her power, at the same time treating him as a child, and never allowing intercourse. During this period he suffered much from nocturnal discharges, but was not aware that any alteration in his health followed. He had them almost every night after having been in the society of the person alluded to. After this probation, intercourse was allowed, and the most unlimited excesses were committed for a period of nearly two years. Mr. W. then went to College, and the connexion was broken off. For some months after this no intercourse took place, but nocturnal emissions were frequent, and always left a degree of lassitude. A surgeon was consulted, who recommended sexual commerce as a remedy. When this was had recourse to, the emission was found to be very rapid, although, in other respects, the act was properly performed. When nearly 19, Mr. W. contracted a clap. The inflammation ran excessively high; irritation in the prostate and neck of the bladder set in, probably caused by the alkaline medicines and purgative salts with which he was alone treated at first. This required leeching and cupping on the perinæum, hot baths, opiate injections, &c.; but, notwithstanding these measures, the patient describes his sufferings, of which he entertains a vivid recollection, as having been extreme. The left testicle became the seat of acute inflammation, and he also experienced pain and tenderness in one of the lumbar regions. Calomel and opium were administered, and his mouth made sore. After a protracted confinement to bed, he recovered sufficiently to get about, but was excessively debilitated, with a hardness in the left epididymis, a frequent desire to make water, and a constant gleet. Change of air, sea bathing, and tonics, restored him considerably; but from that date, the frequency of making water, and the enlargement of the epididymis, never entirely left him. As his system recovered, he again noticed the nocturnal emissions, which now frequently occurred two or three nights successively, and sometimes twice in one night. At the age of 22, he formed an illicit connexion with a female; and he states, that, although he felt the same desire as formerly, his powers of gratification had materially decreased. About this period he commenced a very irregular course of life in all respects. Although he never drank to intoxication, he daily and nightly took more wine, especially champagne, than was sufficient to overcome his companions; he passed the greater part of his nights in dissipation, and all his mornings in bed; he had frequent promiscuous intercourse, but, almost by a miracle, escaped any further venereal contagion. This kind of life was continued about three years, during which period nocturnal pollutions occurred occasionally, and sometimes frequently. At the age of 25, he suffered from a severe attack of pleurisy, brought on by exposure to wet and cold at a horse-race. For some time his ultimate recovery was despaired of, and he spent the whole of his 26th year in the South of France. His habits now became much more regular, although he again contracted an acquaintance with a female, which continued upwards of two years, and during which, considering the disordered state of his system generally, and of the sexual organs in particular, considerable excesses were committed. Ejaculation had become much quickened during this connexion, and on breaking it off, which was done on account of the patient's failing health, the nocturnal emissions returned with considerable frequency.

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[To be continued.]

POISONING BY CAYENNE PEPPER.

By R. F. SNAPE, Esq., Honorary Surgeon to the Bolton Infirmary and Dispensary.

C. R., aged 17, a firm, well-formed youth of the bilio-sanguine temperament, engaged in learning the trade of an engineer, called upon me on Friday, the 20th of April, 1849, for advice; stated that he had, for some few weeks, suffered from intense thirst, which no quantity of diluents could alleviate; had some uneasiness, scarcely amounting to pain, generally over the abdomen, which he attributed to the costive state of his bowels, as they had not been acted upon for two days; there was no tenderness upon pressing the abdomen in *any* part; the tongue was dry and slightly furred; the urine increased in quantity, but natural in colour; the pulse 90; action of the heart natural; appetite good, though he found a difficulty in swallowing his food owing to a deficiency of the salivary secretion—no nausea or sickness—no headache or giddiness—complains of a feeling of languor and depression. The countenance wore a haggard anxious expression. Upon questioning him whether he had taken any medicine for the symptoms of which he complained, he assured me he had not; and furthermore added, that he had been most regular in his diet, which consisted of good plain food, with a moderate amount of beer and wine. I directed him to give up all stimulating drinks, to take a few

spoonsful of toast and water frequently; also often to wash his mouth out with water, for the purpose of allaying his thirst, which was the most prominent and distressing symptom he complained of; and I prescribed:—

℞ Hyd. chlorid gr. iv. in pil. *statim.* ℞ pulv. ipecac. gr. iss.; magnes. sulph., ʒ iij.; Pulv. rhei, gr. vj.; aquæ, ʒ 8. M. ft. mist. Capt. coch. magn., ij.; 4ta quâque horâ.

21st.—He again called upon me, and said he was much better. The expression of his countenance had much improved; his thirst had greatly abated; his tongue was clean; pulse, 78; bowels had been nicely relieved; there was no pain or uneasiness in any part of his body; appetite good, though the same difficulty in swallowing his food continued, and he said, if he could only get rid of the languor he felt, he thought he should be quite well. I cautioned him to observe the rules of diet I had laid down for him, and prescribed—

℞ Hyd. cum cretâ, gr. iij. in pulv. noctemaneque: mitte iij. ℞ Sodæ carb., 9ij.; infus. calumb., ʒ 8; M. ft. mist. Capt. coch. magn., ij.; ter in die.

On Monday, the 23rd, he staggered rather than walked into my room; his countenance exhibited the greatest anxiety and suffering, though he assured me he felt no pain; his thirst was intense; tongue dry and parched; complained dreadfully of weakness, and showed me a vial of brandy and water he was carrying in his pocket, which he said he felt he must frequently drink of, or he should fall. Pulse 110 and irritable; action of the heart irritable, but no bruit; bowels open; no nausea or sickness. I immediately ordered him home to bed, and told him I would follow him there in half an hour. On my arrival, I was told by his landlady that he had been in the habit of taking cayenne pepper as a medicine; but I could obtain no definite information from her, and the poor fellow himself seemed determined not to enlighten me upon the subject. I ordered him a free supply of gruel, arrow-root, and sago, and prescribed—

℞ Hyd. cum cretâ. gr. iij. in pil. om. 3tiâ hor. cum ʒj. mist. sequent.

℞ Sodæ carb. ʒj. spt. æth. nit. ʒiss. aquæ ʒ 6 M. ft. mist.

Vespere.—I found him much the same as he was in the morning; his debility had somewhat increased, and he begged hard to have a little wine allowed him. I ordered him a small quantity of sherry in his arrow root, &c., and cont. med.

24th.—He appeared better this morning; some of his symptoms being relieved, the others remaining much as they were yesterday—no nausea or sickness—his pulse varying from 100 to 120; towards evening his weakness seemed to be increasing. I ordered him in consequence a larger quantity of wine and to be given more frequently; his fauces and uvula were covered with apthæ. As his bowels had not acted, I directed that half an ounce of castor oil should be given to him, and I prescribed—

℞ Liquor citratis ammon. ʒij.; spt. æth. nit. ʒiss.; spt. lav. co. ʒj.; aquæ ad ʒvj. M. ft. mist.; capt. coch. magn. ij. om. 3tiâ hor. cum pil. j.; rep. pil. hyd. cum cretâ. vj.

25th.—He was much worse this morning; there had been no action from the castor oil, but it had made him a little sick once; his countenance was much sunk, and the debility was extreme; no pain; pulse 120, small and compressible; tongue dry and parched; throat the same as yesterday. I ordered a few spoonsful of beef tea, and sherry and sago and sherry alternately every quarter of an hour; and as the bowels failed to act as the day advanced, I administered an enema of thin gruel, with some salt dissolved in it, which brought away a moderate quantity of feculent matter. His symptoms increasing in intensity, I requested that a second opinion should be taken, and in consequence met Dr. Haworth in consultation in the evening. He considered the case a most obscure one, and unlike any he had ever before seen. We made many inquiries as to the quantity and length of time he had taken the Cayenne, but could gain very little satisfactory information. In the treatment of the case, Dr. Haworth considered that I had taken the only steps likely to lead to a favourable result, and recommended a continuance of the nourishment I had ordered, and advised gr. j. doses of quinine every three hours. I stayed with him to see that our directions were properly carried out. I gave him a dose of the quinine mixture; and, as after a while the stomach seemed inclined to reject the oft-repeated nourishment, I administered an enema of beef-tea and sherry, and applied a mustard cataplasm to the back of the neck; the latter acted well, and the poor patient seemed acutely sensible of it; the sickness stopped, and he fell into a quiet sleep, and expired at half-past twelve—midnight.

Sectio cadaveris sixteen hours after death.

The body was emaciated, but its muscular proportions well developed. On opening the cavities of the chest and abdomen we found the lungs, heart, liver, spleen, and kidneys *perfectly* healthy; the bowels were distended with gas, and there was some little quantity of feculent matter in the large intestines. On opening the stomach we found evidences of *intense* inflammation of the mucous membrane, especially at its cardiac extremity. Upon tracing the œsophagus up to the fauces we also found that the inflammation had been as severe throughout its whole course as it had been in the stomach itself, the mucous membrane, in some places, being softened, in others peeled off. There were no appearances of disease in any other parts of his body.

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THE MEDICAL TIMES.

SATURDAY, MAY 12, 1849.

The infirmities to which human nature is liable have called into existence in every age, and in every part of the world, practitioners of the healing art. In semi-barbarous countries, Medicine exhibits none of the characteristics of a science, and it is probable that those who devote themselves to its practice more frequently injure their patients than benefit them. In civilised society, however, Medicine *has* become a science, and its educated practitioners imbodied in a Profession, in order that mankind might receive the greatest possible benefit when afflicted by disease.

For more than two centuries Medical Corporations have existed in this country, and means have been adopted ostensibly for the two-fold purpose of promoting Medical Education and of suppressing quackery. The present condition of the Profession is a proof, that so far as relates to the former, those efforts have not been in vain, while, as regards the latter, it would appear as if they had been nearly useless. This is a most surprising fact, and one which demands serious consideration. If the members of the Medical Profession had made no progress in learning,—if they had been remarkably unsuccessful in the treatment of diseases, it would be no matter of surprise that the public should patronise any pretender to medical skill. To the honour of our Medical brethren, however, it must be said, that they have laboured diligently and successfully in the field of Science;—that they have done more to promote the physical welfare of their fellow-creatures, than any other Profession. Their intellect, their zeal, their benevolence, and their skill, are universally acknowledged; and yet our Government permits the most ignorant charlatan to tamper with human life, and the public are ready—too ready—to patronise him. England is, in truth, the Elysium of quacks; for the people will swallow their most expensive nostrums, and believe their most consummate falsehoods.

Within the last few years a Peer of the realm certified that he saw a fluid like quicksilver extracted from a man's head by a notorious quack. Against this same illustrious Practitioner three different verdicts of Manslaughter were returned, and yet, during his life, he rode in his carriage, and a splendid mausoleum now marks the spot where his ashes repose. A celebrated "hygeist" realized 14,000*l.* per annum for some years, in spite of Coroners' Inquests held upon many he had slain. Within the last twelve-months we recorded the case of a man who submitted to have his arm "gouged" by a quack, and died from the operation in the most excruciating agonies.

But the *Sheffield Times*, of April 28th, contains a curious account of what empirics can do, and how liberally they are supported by the public. It appears, that a certain celebrated person has long flourished in the neighbourhood of Sheffield, to whom is attached the cognomen of "the Halifax Witch-doctor." This man put up, during last month, at Burns' Tavern, where he was consulted by a poor person, named Richard Lindley. The "Doctor" told his patient that his heart was three inches too low; performed an operation, by which, he said, it was replaced; put a plaister round the patient's body, and gave him some medicine. In a few days the man died, in great pain, having faith in the "witch" to the very last. A Coroner's Inquest was the result. After the examination of the wife of the deceased, the renowned "Doctor" himself was summoned before the jury, and in order that our readers may judge of his talents, education, and success in his profession, he shall speak for himself:—

Coroner: What are you? A doctor.—To what College do you belong? To no College. I do as the Whitworth doctors do.—What trade were you brought up to? I have doctored eight-and-twenty years, and was brought up to nothing else. I started doctoring when I was twelve. I put a knee to rights when I was twelve. It was dislocated. I have nivver tacken no College, but I have doctored for eight-and-twenty years.—What do you know about the deceased? What did you do to him? I put my hand on his breast, and told him his chest was filled with water, and his heart was in the wrong place. I gave him a small bottle to take and a box of pills.—What does it contain? Nothing but oil of juniper. The pills are anti-bilious.—What are they composed of? I don't exactly know what the anti-bilious is made on; I buy them of Dr. Howorth, of Rochdale.—But how do you know that they are anti-bilious? Why, they are.—But how do you know that? Because he calls 'em so, and they are so on to t' box.—Do you know any of the ingredients of which they are composed? They are composed of anti-bilious.—Do you know any one ingredient in them? Yes; there'll be a little saltpetre and soap and other materials. Ther's soap in all pills. Pills could not be made without.—You say the deceased had water on the chest; what did you do to him? I put a plaster on his chest and telled him to keep it on. I put my finger on his chest. I and three men put his arms out behind him, and I placed my thumb on different parts of his chest and pressed gently.—What had the other three men to do? They were to stick to him and keep his arms moving, but not to punish him.—Did you tell him that his heart was out of its place, and three inches too low? Yes,

I did, Sir.—What did you do to get it into its right place? I just pressed his heart till it beat into its right place. I told him he would be a sound man provided dropsy did not take place.—What sort of a plaster did you put on him? One of my own.—What is it? One of my own. But what is it made of? Stuff on purpose. I don't know that I am compelled to tell all t' stuff it's made of.—But probably you will have to tell. Well, then, it's nothing but bees' wax and rosin and a little lard, coloured.—When did you see the deceased again? On the following Tuesday, and I grumbled at him for taking the plaster off. He said he would not do so no more, but he did. I explained to him that it was to fotch t' watter out of his chest, which it did.—Did it? Well shoo's here, (the widow,) shoo knows.—A juror: Did you think his lungs were affected?—Yes, and drowned with watter.—Coroner: We shall have the man opened, and see whether you put his heart into its place. Well, if his heart has gone back out of its place it's nothing to me. I told him to be gentle with it.—Did you ever see a man's heart? Yes, many one. I have seen men opened; George, of Whitworth, and me was cousins. I watched him a little. He never taught me, because he died before I commenced business, which was before I were twelve. I have people under me in the Isle of Man and Liverpool and all over, and when a letter comes I go. I know by t'telegraft when they want me, and I go directly if there is danger. The telegraft often costs me 4*l.* a-week. I have now about a thousand patients, and they bide a great deal of looking after, so many of 'em as there is at different places. I don't charge anything for fee, only for medicine; sometimes 6d., 1s., 1s. 6d., and half-a-crown, according to what they want. Coroner: As regards this man, can you say anything as to the cause of his death? No.—I understand you were thrown out of your gig last night; were you much hurt? Oh, no; I only had three ribs broken, I set them myself this morning, and plasted them up. I once fell three storeys and had my shoulder broken, and I set that myself!!

The evidencee of the deponent was then read over to him. On being asked to sign it, he said he could not, because he had not got his spectacles with him, but he would take the paper with him and return it signed. It was apparent from his mode of answering that he was unable to write. He fenced with the question a considerable time, but at length condescended to affix "his mark". The inquest was then adjourned for the result of a *post mortem* examination.

The Halifax witch-doctor is a splendid specimen of the Genus to which he belongs. Despising all apprenticeship indentures and College diplomas, he practises physic on his own account, and is supposed by the public to possess an intuitive knowledge of the healing art. Hence he boasts of his thousand patients, of his expenditure in telegraphic despatches, and of his abundant labours in attending the sick. His dupes pin their faith to his sleeve, and some of them, in the agonies of death, cling to him as their only saviour.

In our columns to-day a respected Correspondent gives us another instance of the fatal effects of quackery in the case of the young man who daily took cayenne pepper, for the purpose of promoting free diaphoresis during his work. It required the utmost ingenuity of his Medical attendant, who was only called in a few days before the patient's death, to elicit the facts of the case,; and our Correspondent feelingly observes, that this youth, the hope of his family, the pride of his mother's heart, was basely sacrificed through the ignorance of an impudent pretender to Medical knowledge.

But how is it that quackery thus flourishes in our enlightened country at the present time? We answer, first, because the members of the Profession, in order to obtain remuneration for the exercise of their skill, have fallen into the error of drugging their patients. Pills, draughts, and plasters have had a fictitious value placed upon them, and this has been the means of promoting the sale of nostrums and specifics. This practice further has the effect, from its expensiveness, of driving the sick poor to consult druggists and quacks, with the idea that, as drugs are all-in-all in every disease, they may obtain them at an easier rate through these persons.

Again; the Government is at fault for patronising the system of nostrum-mongering and quackery. The law has called into existence the Medical Profession,—Law therefore is bound to protect it; yet, because nostrum-mongering is a source of revenue to the Government, it is allowed to flourish in its present rank luxuriance.

Further; the Press has been instrumental in promoting the growth and extension of quackery. Empirics advertise largely and pay freely, hence non-Professional journals have sought their patronage, and have not dared to denounce a system so disgraceful to this country. The Press may hold up to ridicule or execration an unfortunate quack when he becomes amenable to law; but the Press has a pecuniary interest in the sale of nostrums and specifics.

If quackery is to be put down, medical men must commence a reformation amongst themselves. Let them, above all things, charge for their attendance, and not for their drugs. They should also endeavour to secure in every county a newspaper organ, whose columns would be never sullied with quack advertisements. Expunge these from the journals, and a large number of charlatans would find it necessary to betake themselves to some other calling. Finally, in any measure of Medical Reform, the punishment of uneducated Practitioners should be strictly enforced.

THE FORBES TESTIMONIAL.

Our readers will find, in another part of our Journal, an account of the presentation of a piece of plate to Dr. Forbes. We are unwilling to let the occasion pass, without expressing our concurrence in the sentiments put forth in the Address read by Mr. Stanley. We have always considered, that Dr. Forbes set an example worthy of imitation by Journalists of every kind and grade. He commenced his *Review* at a time when Medical reviewing was at its lowest ebb, when books found their judges usually among the friends or the personal enemies of the Author, and rarely among impartial and unbiased critics. Dr. Forbes established the rule of judging each Work on its own merits, irrespective of the Author's position, influence, or reputation. He established the rule of appointing the man to review the work, who was in each case the most fitted, in all respects, to perform the duty of a just and able critic. He thus formed a Review which was unequaled for talent, and, as we believe, unsurpassed in the general justice of its decisions. Moreover, by improving the general tone of criticism, Dr. Forbes exerted a considerable effect upon the style and manner of the criticised. There cannot be a doubt, that, knowing the ordeal they had to pass through, many English writers were induced to pay more attention to the mode in which their facts were narrated, than had previously been the case. Men began to perceive that the bare fact might be communicated well or ill, clearly or obscurely, exactly or immethodically; they began to acknowledge that, after all, the cleavings of the lapidary and the adornment of the jeweller, add not a little to the lustre of the precious stone.

It may be also said, that Dr. Forbes's merit ended not here. He not only raised the character of medical criticism, for his own Journal and his own time, but he fixed a standard for all Journals, both for his own time and for periods long exceeding that which the *British and Foreign Medical Review* was destined to endure. (a) Henceforth, no Journal which falls below this standard will long enjoy popular favour. It must possess the same qualities, to insure an equal reputation and exert a similar influence. And, although when the *British and Foreign Medical Review* was still existent, it did not escape unassailed; although it met with strenuous and malicious opposition from the disappointed, who were shorn of their self-assumed proportions; from the vain, whom no praise could satiate; from the captious, who ever carp and deprecate;—yet now, when the stage is freed from its actual presence, we find these self-same men exclaiming, in the same spirit which dictated their previous judgment, that there was no Medical Journal equal to Forbes's *Review* before, and that no Journal will be equal to it again.

The public have a very inadequate idea of the labour, the judgment, and the varied talents required to conduct a journal of high scientific character. Few men possess the necessary qualifications. The Editor must be far-seeing in his views, firm and determined in the rule of conduct laid down, and able, from his own literary and scientific attainments, to command not less the respect than the support of those who are peculiarly fitted to aid him in his arduous duties. The value of an Editor is, indeed, often much underrated. It is less his business to write than to select those who are capable of it. He may be regarded much in the light of a manager of a theatre. It is not so much his office to act, as to associate together those whose talents fit them for the several parts; and much of that completeness and efficiency which presents itself to the eye on the drawing up of the curtain,—the accuracy with which a complicated piece of machinery, both animate and inanimate, moves in exquisite harmony,—is due to the presiding spirit; and few know the difficulties he has to contend against, the pulleys and wheels he has to regulate, the asperities he has to soften down, the charmed wand he has to wield among discordant ele-

(a) It is hardly necessary to remind our readers, that, although *de jure* the *British and Foreign Medical Review* ceased to exist with the close of the year 1847, when Dr. Forbes retired from Editorial duties, yet it still, *de facto*, is continued under the new title of *The British and Foreign Medico-Chirurgical Review, or Quarterly Journal of Practical Medicine and Surgery*;" and this, from being united with the *Medico-Chirurgical Review* of the late Dr. James Johnson. The new Journal is ably conducted by Dr. Carpenter, assisted, with few exceptions, by the same band of contributors to whom Dr. Forbes alluded, as seen in our report of the late meeting.

ments and clashing interests. The beholder sees none of these, and therefore cannot appreciate the labour or judgment that has been exercised in the getting up of that which may afford him unmixed delight. The Editor is much in the same situation, with this difference, and it is an important one,—the actors stand prominently forward before the public, and are estimated according to their merit, while the manager is not seen and seldom thought about. The avowed Editor, on the other hand, is seen, and courted; while those who enrich the pages of his work are in the far distant back-ground, and only occasionally indulged with the light of day.

The Editor, by a species of reflex action, gets much of that credit which legitimately belongs to others. The public may well be astonished, that, while he attends to all the pleasures and busy occupations of life, allowing every sense to have its full measure of intellectual gratification, he, nevertheless, finds time—and, what is often much more difficult, talent and learning—to prosecute intricate investigations, to compose elaborate Articles, and to skim lightly and gracefully over the surface of literature and science. The man who is responsible for what appears, whose high character gives a value to the whole, has some right to the advantages beyond those which are directly pecuniary. Let him, then, enjoy these honours, and let no one presume to pluck a leaf from the green coronet that adorns his brow.

We are fully of opinion, that Dr. Forbes, by the actual services he rendered to Medical literature, deserved the honour he lately received. But had he not succeeded in rendering these services, or had he rendered them more imperfectly than was the case, he would still have been worthy of honour for his intentions and motives. For, morally speaking, we should pay honour only to motives honestly acted upon, according to the power of the actor. Human performance is, at the best, most imperfect, and, judged by the true standard, must necessarily be of little worth. But intentions which spring from true convictions, and which call forth the utmost powers of the individual to fulfil them, are worthy of all honour, even if the fulfilment be partial or abortive. Success, however, as being, in part at least, the measure of the intellect and judgment which executes the intention, forms with most men the measure of the homage they pay to moral worth. In this instance, at any rate, we have the pleasure of feeling that Dr. Forbes's motives in establishing his *Review* were of the highest kind, and that the power with which he acted on them met with corresponding success.

We think it a most gratifying circumstance, to find the Profession thus ready to recognise and to acknowledge honest and able exertions in the cause of science and literature. We are pleased to see this appreciation of what is so worthy of admiration and respect. And we trust that the honours now so appropriately paid to Dr. Forbes will incite others to follow in his footsteps, and to carry out in Medical criticisms the principles he has so well taught and practically applied.

STATE OF THE DISTRICT LUNATIC ASYLUMS OF IRELAND.

With reference to the three first Rules, bearing on the duties of Local Boards, we wish to say but little, since these Boards possess merely a shadow of power, inasmuch as, by a Privy Council circular, issued in 1838, and addressed to the Governor and to the Board of each Asylum, they cannot adopt any single measure of any kind without a special sanction from the Lord-Lieutenant and Privy Council; probably a wise precaution, if energetic and enlightened inspection were at hand, to point out or assist in carrying necessary and pressing objects of improvement. We now pass to Rules more immediately bearing upon the interests of those for whom the Irish Asylums had been supposed to be erected.

Rules 4, 5, 6, are so absurd, that we give them *in extenso*, in hopes that on future occasions, the Privy Council of Ireland will hesitate before they adopt the suggestions of interested or incompetent advisers.

"ADMISSION AND TREATMENT OF PATIENTS.

"4. Idiots, as well as Lunatics, properly so called, are to be admissible to every Asylum, and so also are Epileptic persons, where the fits produce imbecility of mind as well as of body.

"5. The printed form of admission, which is to be furnished at every Asylum, upon application to the Manager, is to be *carefully* filled up, according to directions contained therein, and returned (if by letter post-paid) to the Manager, who shall forthwith deliver it to the Physician, in order that he may consider the case as represented, for the purpose of advising the Governors thereon, at the next meeting of the Board.

"6. Every patient to be admitted upon a special direction by the Board, unless in cases of urgency, when the Physician may admit upon his own authority, stating on the face of his order the ground upon which he acts. In every case, a bond for the removal of the patient, when required by the Board, to be signed by some responsible person, before the admission of the patient, unless the Board upon any ground, or the Physician in cases of urgency, shall dispense with the same, or postpone the time for the execution of such bond."

Putting aside all reference to English grammar, we ask, is not Rule 4, so far as Ireland is concerned, a most mischievous one? In that country, accommodation for 2,600 Lunatics, properly so-called, has been provided by Government in the District Asylums. The admission of Idiots, therefore, *excludes* such cases *pro tanti*, while the reception of idiots and incurables, sustained at a *maximum* cost, and with a *minimum* hope of cure, is a positive injustice to an exhausted country, having, by police returns, 6,000 paupers insane, without (as yet) any Asylum provision.

But Rule 5 exposes the absurdity of Rule 4. Thus—Idiots are admissible by Rule 4, while Rule 5 orders that printed forms of application (which had been prepared with a studied view by Government, for the *exclusion of Idiots, even on the basis of an affidavit, to be made by the "next of kin," that the patient is not an Idiot)* shall be *carefully* filled up, according to the directions contained therein.

How can printed forms, setting forth a series of minute medical queries, be carefully filled for Idiots, who present few, if any, features, save age, sex, and disposition?

Again, how can forms be *carefully* filled up, when no provision is made for the *careful* performance of this duty, inasmuch as the poor Lunatics, or their friends, may not be able to obtain any professional aid gratuitously for this desirable object. Thus, certificates come to Asylums loose, imperfect, and, so far as records are concerned, valueless, being often filled, even in the professional part of them, by incompetent persons. A case could be given of 2s. 6d. being paid to a country schoolmaster for filling an *official document*, upon which statistical information will, in a year or two, be called for by the authorities. Surely this is no trifling matter; nor is the advantage which Boards of Guardians and this *paid* Medical Officer present, to be lightly considered, whether as a protection to the public against abuse of charities, so costly and expensive as Asylums are, and so *distant* as they are frequently, with reference to the helpless and friendless peasant.

Again, Rule 4 renders the admission of Idiots, and like cases, imperative, while the bond for the removal of patients (also drawn up and forwarded by Government) distinctly provides, "that when any patient is deemed harmless, and, of course, incurable, he or she shall be removed under a penalty to the bail, whose bond is to this day signed when practicable." Is there not something ludicrously contradictory in Rules rendering a class admissible which is deemed incurable at the time of admission, while it is at the same time necessary that a bond for removal be signed for the same class, or for an individual of the same class, when deemed harmless and incurable?

But, if Rules 4 and 5 are strange, contradictory, and absurd, in their provisions, Rule 6 caps every thing of Lunatic Legislation in Ireland.

"1. Every patient is to be admitted by a special order of the Board, (meeting but monthly,) *unless* whenever the Visiting Physician may deem it "urgent," then, indeed, he may admit at once.

"2. In every case, a bond for the removal of the patient is to be signed by some responsible person, (as if such could be generally got to come ten, twenty, or even sixty miles for a pauper lunatic,) *unless* the Board upon any grounds, or the Visiting Physician, in cases of "urgency, dispense with it."

Let the provisions of this Rule and its universal exceptions be analyzed a little. If Idiots are admissible (as they are now) what use is a bond of removal for cases coming in, *ipso nomine* incurable, when "deemed harmless and incurable?"

Again, if "urgent" cases are to be admitted under this Rule, how can a manager have Book 10, under his own duties in Rule 16, either correct or regular, as he is by his own rules bound to have? since many, very many cases may come in as "urgent," whose names *never* appear upon the face of this most important Book (10), called the "Application Book," while others, whose names are and have been on it for months, or for years, are thus passed over and mayhap forgotten, or in the meantime dead.

Now, let it be carefully remembered, (indeed the repetition of the fact is essential to a clear understanding of the reasons why two or three Medical Men connected with these Asylums have, with their Metropolitan supporters, so strenuously and unscrupulously endeavoured, by misrepresentation and abuse, to uphold

these extraordinary regulations, and whose operation is condemned by every person of education or intelligence in Ireland, as well as by the entire Profession, save the parties alluded to,) that it is by a *private* Practitioner alone that "urgent cases" can be admitted to a District Lunatic Asylum,—a privilege tending to strike at the very root of justice to the poor,(a) friendless, and distant claimant for relief. Nay, more, it gives one man, and one locality in which that one man is situate, an advantage highly prejudicial, not only to the humble members of the community, for which the Asylum had been built, but places that one man, if he be a conscientious *officer*, in a most unfortunate position as a *private* Practitioner, since the responsibility of the former must ever give way to the necessities or influence created by the latter. A curious illustration of this is given at page 279, of "Phelan's Report on the Medical Charities of Ireland,"—a work, whose truth and research nearly cost that indefatigable man, not only his office but his life, from the persecutions he had to undergo at the hands of the very persons that first promulgated and still sustain these rules.

As a further proof (if such were necessary) of how unpalatable and unsatisfactory to the Profession is the present confined and disorganized mode of conducting and inspecting the Lunatic Asylums of Ireland, we need only instance the fact that, at the great Cork Medical Meeting,(b) held a few days ago, the reform of these Institutions constituted a *leading* feature of the proceedings of the highly-enlightened and talented gentlemen who composed that assembly.

Since writing the above, we are glad to find, by the following extract from the Report of the Inspectors of these Institutions, that public opinion has proved too strong for the continuance of the Non-resident Medical system so long and so mischievously persevered in with reference to Irish Asylums. Under such circumstances, and as the *ci-devant* Rules now stand officially condemned in their essentials, we do not deem it necessary, at present, to carry out our original intention of reviewing what may be called a "dead letter."

Should it be, however, useful hereafter to revert to the subject, either on account of "side-winds," got up to defeat reform or carry out crude and imperfect regulations, we promise to do so with redoubled vigour and energy. The Report is, of course, addressed to the Lord-Lieutenant of Ireland, and, although an improvement on former documents of a similar kind, by a strong and lucid style, yet it is too brief, and the information, in detail, too limited for such a subject:—

"Within the last year, a vacancy, caused by the death of Mr. Parsons, Superintendent to the Carlow Asylum, has been filled by the nomination of Dr. E. White, formerly Visiting Physician. As the principle then recognised by your Excellency, of appointing Professional Gentlemen to the office of Resident Managers, is to be carried out, for the future, in our Hospitals for the Insane, a modification of existing regulations will be advisable, in order to define the respective duties of the Medical Attendants, and, at the same time, establish an equitable system of salaries and wages for the officers and servants of these Institutions."

UNIVERSITY OF LONDON PUBLIC DAY.

WEDNESDAY last, as our readers are aware, was the first public day of the London University. About three hundred of its Graduates were then presented to the Chancellor, and near five hundred men of rank, science, and literature, unconnected with the University, honoured themselves and the occasion by their presence. Among these distinguished visiters we observed, the President and Secretaries of the Royal Society, the President of the College of Physicians, the President and other eminent Members of the Council of the College of Surgeons, the principal Professors of the Colleges recognised by the University, Lord Brougham, Sir James Graham, Sir Robert Inglis, the Lord Mayor, and many members of Oxford and Cambridge. We were sorry that the Queen's Concert deprived the University of the presence of the Chancellors of Oxford and Cambridge.

The members of the London University may be congratulated on the vigour of this its first sign of vitality; and we do not hesitate a moment in expressing our conviction, that the Graduates' Committee, who have so judiciously managed to bring the University to light, must succeed in their efforts to obtain for it a charter, so liberal that the viability of the Institution will be secured and rendered certain, and its future renown inevitable.

It afforded us unmixed delight to observe, that so large a proportion,—certainly a majority of the Graduates in Medicine, if not of the Graduates generally, appeared undecked with cap and gown. The principal members of the Senate, too, had forgotten, or, in the words of their resolution, found it "inconvenient" to comply with their own recommendation, and showed, in common with numerous members of the Graduates' Committee, their good sense by leaving in the hands of the robe-maker the graceless garb. With few exceptions, the silks and velvets appeared to us to be limited to the Juveniles. It is ridiculous to urge, as an excuse for wearing these gewgaws,—and every one seemed to think an excuse necessary,—the value set on them by the public. The Graduates of a University, the offspring of the nineteenth century, should lead the mass, and be far above truckling to the prejudices of the vulgar.

Ere another meeting between the Graduates and their Chancellor take place, we trust that the University will have more ample space in which to entertain its many visiters, as the rooms were, for the greater part of the evening, inconveniently crowded and oppressively hot.

THE NEW BILL.

TO THE GENERAL PRACTITIONERS OF MEDICINE.

GENTLEMEN,—The announcement that appeared in last Saturday's *Times*, that it was the intention of the Lord Advocate to bring in a Medical Bill at an early period, must have re-awakened public interest in the cause of Medical Reform, and stimulated the curiosity of all classes of the Profession. More than this, we hold a great stake in the issue. Our respectability, our character, our livelihood, hang upon the chances of legislation, and we are naturally anxious that the new measure should be conformable with our just expectations.

Each man has an instinct of right as well as an experience of wrong, and, whilst he revenges the one, will seek to establish the other. Social rights are, however, matters of convention, prescription, and usage. They are not absolute, however ardent may be our personal convictions or disinterested our faith. Rights are grand things to discuss, and fill the mouth of the agitator with resounding phrases; but they have their limits, and succumb to the rights of others. Public institutions are the imbodiment and representation of the conscience of the age; and a public conscience, so often derided, is merely the instinct of public interest and general convenience. This is not less a law in government than a truth in morals, although it may seem, at first sight, to derogate from the unchangeable simplicity and everlasting oneness of the sentiment of right. Any new measure of Medical Reform must, therefore, be judged by the wants and possibilities of the age. Abstract propositions may have all the merit of theoretical truths, and be, notwithstanding, practical falsities. A metaphysician may discover that property is a theft, death by law murder, and our rule of conscience a lie; yet nine good men out of every ten will dispute the conclusions, and shudder with indignant horror at the mere suggestion to exalt them to the dignity of facts.

Why is this? Simply because each abstract truth is only a half of the real truth, and is antagonised by another truth as simple and potent; and, together, they constitute the universal. Our instinct reveals the mystery, and laughs our metaphysics to scorn. If this be the case, then, with abstractions, how much more so will it be found true of the practical duties of life! This idea should inculcate modesty and deference to opposing opinions. I have insensibly crept into the heart of a philosophical argument, when I only intended to divide the hard husk of political dogmas. The episode may not be wholly inappropriate.

(a) As a conclusive proof that some efficient control (Poor-law or Medical) is necessary to allocate accommodation and apportion expenditure *justly*, it is only necessary to state the following fact, taken from the last Report of an Irish County Infirmary, —which Institutions (like Asylums) are maintained from the general taxation:—

"Patients admitted from *within* five miles of Charity 437
"Patients admitted from *over* ten miles of ditto . . . . . 198."

(b) MEDICAL CHARITIES.—A very well-attended meeting of the Medical Profession of the county and city of Cork was held on yesterday (Tuesday) at the Cork Institution, Dr. Beamish, sen., in the chair. The chief object of the meeting was to petition the Legislature and Government to take into consideration the present state of the medical charities of Ireland, which are said to be in a tottering condition, the sources from which they hitherto derived support (chiefly annual subscriptions) having considerably fallen away, in consequence of the poverty of all classes in the country. Petitioners prayed that Government would take those charities under its own control; that the supervision of all Medical Institutions be vested in medical men of character and standing, who should devote their whole time to such duty, and be paid from the Consolidated Fund; that a medical department be established in the public service, to which should be entrusted everything connected with the various medical establishments, *Lunatic Asylums*, registration of births and deaths, &c.—The Petition was unanimously adopted.—*Cork Examiner.*

It is not just to anticipate a measure with the view of decrying it; but it is quite open to us to examine into probabilities, and to review the general principles which our experience may instruct us will form the basis of a general measure. We know, Gentlemen, just as well as the framers of the Bill themselves, what a Bill must be that is intended in earnest to meet the wants of the Profession, and to imbody the more pressing demands of the various interests engaged in the arrangement. We have been for some years endeavouring to learn the actual evils under which the Profession labours,—the anomalies, hardships, inconsistencies, and wrongs which have harassed and disgraced it. We have striven to adjust claims to rights, to reconcile differences according to their true weight and value, and to harmonize antagonistic sectional interests with the intent of assisting in the organization of a strong, fraternal, and united incorporation of the bulk of the Profession, which shall be worthy of our advanced science and our improved station in society. We know, therefore, all the weak and strong points of the question,—the exact spot where ℞ will be required to place every rivet, nail, and screw necessary to hold together the elaborate fabric of legislative ingenuity. Enlightened, then, by this experience, we shall venture to premise what may be expected from the tentative efforts of the new adventurer upon these troubled waters.

We may fairly assume, that the new Bill will be based upon the principles promulged by the Conference Committee, the cardinal objects contained in which were,—the incorporation of the General Practitioners—the adoption of the Elective Suffrage in the appointment of our governing officers—protection against illegal practice—uniformity of education, qualification, rights, and privileges for all practitioners in the United Kingdom.

These principles contain, in my opinion, the essence and complement of Medical Reform. Other matters are secondary to these. Where is the great principle that has ever been contended for, that is not included in this enumeration? For my part, I would not violate the dictates of my judgment, by supporting an arrangement that did not embrace a great proportion of these leading principles. Do you demand the exercise of the right of suffrage? Do you desire to have a voice in the election of the men who are to be entrusted with the duty of protecting your interests and spending your money? Do you desire to terminate the reign of privileged mediocrity? Do you desire to enthrone Merit on its own pedestal, to wreath the bay-leaves round the modest brow of Genius, and to stamp the fiat of Professional approbation on profound research and honourable labour? Is it your wish to give a fresh impulse to science, to enlarge the boundaries of knowledge, to develope obscure, and honour martyred talent, and to give to merit, merit's worth? The power, I trust, will be bestowed upon you. A new era will have commenced with the new law. The inauguration of the College of General Practitioners will be the nativity of Professional independence. It must be so; for all the rising powers and expanding greatness of the Profession will dwell in its bosom. It will be the home of the General Practitioners.

Again, how many hundreds of Medical men are pinched in their incomes, and deprived of the commonest comforts of life, by the impudent pretensions and felonious acts of the multitude of quacks of all denominations that infest their neighbourhoods, and rob them of their legitimate practice? Between Jew impostors on the one hand, and Pharmaceutical depredators on the other, the honest, hard-working, skilled practitioner, can scarcely get his day's bread, and finds it quite impossible to lay by a provision for his family. His life is a continual struggle; buffet as hard as he may, he can scarcely keep his head above water. At last he perishes; his last thought is for his children,—friendless, penniless, outcast! Will the grasping quack, think you, minister to their wants out of the profits of his daily theft? The Profession must defend themselves against this crying injustice, and the promised Bill will, in all probability, supply them with the means. I hope that it will empower the magistracy to punish illegal practitioners by summary process. I am not without hope, too, that a new College will organize a Provident Fund, for the benefit of widows and orphans. Such a proposition shall have my warmest advocacy.

Is it necessary for me, Gentlemen, to dilate upon the advantages of a uniform qualification, so far as the law can insure it, for all legal practitioners in the United Kingdom? Or to dwell upon the immense boon conferred on us by bringing all the General Practitioners into one fold, and enabling us to act with co-operative energy and united aim in all our public relations? The old Colleges are unequal to the duty of defending the interests of the Profession against an ignorant, unjust, or parsimonious Government. This is because the governing body has no sympathy with the members, and, it is well known, does not represent their interests. The Government of the day will not dare to overlook the advice or remonstrance of the Council of a College in which 20,000 men are enrolled and represented. The public authority which such a College will exercise can scarcely yet be imagined, so novel and unusual a thing it is to see a Professional Corporation pressing its wishes with spirit and resolution upon the Government of the country. I have perfect confidence, however, in the belief, that if the College of General Practitioners be governed with prudence and dignity, it will command the deference of the Legislature and the Government to all its representations upon matters implicating the interests of its members. The importance of this vocation in the future can hardly be over-rated.

Despite, gentlemen, the vast benefits that I have adverted to, men will be found to object to a measure that, in all probability, will confer upon us these great advantages; and who will still lift their feeble cry in favour of some unintelligible reform of the College of Surgeons. The views of these persons have never been presented to me with a distinctness that would allow of their being reduced to a practical shape, for as soon as I have formularised the notions of one set of men, I have found my plans upset by the extravagancies of a rival Committee. I do not, therefore, profess to deal with the merits of this question. That the Council of the College of Surgeons has been guilty of an enormous injustice I admit; but it cannot be expected that the operations of Medical Reformers should be limited to the mere gratification of a vindictive vengeance, or that the Government should be required to do no more than legalise revenge by Act of Parliament.

An error, however, has been ventilated respecting the title of Surgeon, and it is very generally believed that the general Practitioner will be robbed of this appellation. I wish to remove this misapprehension; it is an utter fallacy; every general Practitioner will, in future, supposing the arrangement agreed to at the College of Physicians should become the law of the land, be admitted a member of the College of Surgeons, and entitled to call himself *Surgeon*, with the full enjoyment of all the advantages this position can confer.

One word, Gentlemen, to the Council of the College of Surgeons, before I close this epistle. I observed a notice, in a recent Number of this Journal, to the effect, that this fickle Council had resolved to recant from their most solemn engagements, entered into through the medium of their deputies with the representatives of the General Practitioners, and to refuse the right to the new College to examine in Surgery. Is this so, or is it not?

I have the honour to be, Gentlemen, yours most faithfully,

V. V.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—April 24, 1849.

Thos. Addison, Esq., M.D., President.

A Paper was read, entitled—

Case of Foreign Body in the Bronchi. By Samuel Solly, F.R.S., Senior Assistant-Surgeon to St. Thomas's Hospital.

In this case a navigator drew into his windpipe the pebble which he had placed under his tongue to relieve thirst while working on the railway. He applied first to Mr. Passmore of Pullins-bar, who, after making him stand on his head and taking other measures to relieve him, proposed the operation of tracheotomy; but the man preferred coming up to London. On his admission into St. Thomas's, under the care of the author, his condition is thus described. When recumbent and entirely at rest, he was free from cough, and unconscious of the presence of the stone; but severe cough was induced if he moved about much, and he fancied the stone changed its position. He lay either on his back or right side; an attempt to turn on the left side producing great dyspnœa, with cough and impending suffocation. He referred to the position of the right bronchus as that occupied by the stone, and occasionally experienced a sore and pricking sensation at the same spot.

On examining the chest with a stethoscope, the author found the respiratory murmur loud, but otherwise natural on the left side. On the right, there was a loud cooing sound about four inches below the clavicle; below this and over, about three square inches, there was no respiratory murmur audible. These signs, however, varied; and at times the author could distinguish the sound accompanying the ingress of air at every part of the chest. Dr. Cohen found the respiratory murmur absent one inch beneath the nipple on the right side, whilst percussion elicited, over the same part, a clear sound. After the patient had been in the Hospital a few days, he was bound to a table, inverted, the operator frequently striking him on the chest and back with his hand. The dyspnœa and spasmodic cough forbad the maintenance of this position beyond forty or fifty seconds. This inversion of the body having produced no effect on the position of the stone, it was determined to open the trachea, which was done, and the man again inverted, without dislodging the stone: but severe bronchitis was produced, which was twice subdued by repeated cupping and the use of mercury. At last the patient suddenly left the hospital, and, returning to Holloway, died eight days afterwards.

Two days after he left the Hospital he was seized with a violent fit of coughing, and was nearly suffocated. He declared, at this time, that the stone had changed its position. He had three more convulsive fits shortly before his death; and the expectoration was very profuse through the last week of his life.

The *post-mortem* examination, which was conducted without the author's knowledge, revealed extensive pleuritic inflammation and suppuration in the pleura on the left side, and abscess of the substance of the lung on the right side.

The stone was firmly wedged in one of the first divisions of the left bronchus, but there was no ulceration of the mucous membrane around it, indicating, that it had been long resident there. It weighs 114 grains; its long axis being ¾ inch, and its short axis ½ inch.

The author remarked, that he was prepared to use forceps for the extraction of the stone; but as the

introduction of a long steel probe produced such violent spasm, without affording any information as to the position of the foreign body, he did not consider himself justified in employing them. The form would have rendered it next to impracticable to have seized it with forceps, had the attempt been made. There seems no doubt that the fatal event was accelerated by the patient's returning to his accustomed stimulants after quitting the Hospital. The author is further of opinion, that the history of the case and the *post-mortem* appearances justify the assumption, that the stone was ejected from its original position when the fit of spasmodic coughing came on two days after he left the Hospital; and that it immediately afterwards passed into the left bronchus, where it was found after death.

While the preparation which accompanied this paper was being exhibited to the Society, Dr. Solly observed, that originally the stone was so firmly wedged in, that the tube required pressure below in order to dislodge it. He was sorry that no part of the right lung was here shown.

Mr. J. Hilton: There can be no doubt, that cases such as those detailed in the Paper read, are of great interest. It has fallen to my lot to see several of them: but, in the present one, there are symptoms which were not at all present in those to which I refer; as, for instance, the sense of suffocation experienced by the patient from the head being turned down. I am not quite sure as to what reason is to be given for such a fact, and I cannot understand how such could be produced, except by the stone having fallen down into the larynx, and thus irritating the glottis; and it would lead me to question Mr. Solly, as to what explanation he would give in respect to this difficulty of breathing,—as to what was the size of the opening made into the trachea,—and also how the rings of the trachea were divided, whether the foreign body could have passed through the opening,—and as to what was the course of the emphysema.

Mr. Benjamin Phillips: A very important question arises on this case. In the case of Mr. Brunel, a principle was introduced by Sir Benjamin Brodie, on which he relied very much, and which seems to have suggested the employment of the same plan here. He found there, that, when attempts were made to dislodge the foreign body, great pain was the result; and it occurred to him, in order to avoid this difficulty, to puncture the trachea, and that thus the spasmodic action would not be induced. The result was, that, on two or three occasions on which the opening was made, the coin did pass out without any spasmodic action. The reasoning which influenced Sir B. Brodie also appears to have weighed with Mr. Solly in this case; but, although this practice has been adopted on so great an authority, yet I do not believe that it is perfectly established that the successful result as to Brunel would follow in other cases. Probably the stone, in this case, did on several occasions come in contact with the glottis, and set up coughing; and it is clear, too, that the foreign body may be coughed up without spasmodic affection. Shortly after Brodie's case, there was one at Edinburgh, in the practice of Dr. Duncan, where a coin was swallowed; the patient was turned up, and it was ejected without coughing. There are other cases, where a tamarind-stone has been removed, and others where foreign bodies have been retained for weeks or months in the air passages, and at last coughed up without any distress at all. It was by no means a settled point of practice, that all danger of suffocation was avoided by making an opening into the trachea.

Mr. Solly: The impression produced before opening the trachea was, that the stone would not shift. The man did not cough with the spasmodic cough as if the stone shifted. I did not open the trachea because I believed the stone was in that passage. As to the extent of the opening, it was at least an inch in length, quite sufficient for the passage of any body that could have passed into the trachea.

Mr. J. M. Arnott: In corroboration of Mr. Solly's statement, it appeared to me that the opening was sufficiently large; and I agree also with the author, that when the patient was turned up, the cough was not produced by the shifting of the stone. My opinion was, that the foreign body was in the right bronchus. I apprehend the purpose of the opening is not only to prevent suffocation, but to allow the foreign body to escape. It is evident that, after the man left the Hospital, the stone must have changed its place. I am acquainted with one case in which the opening was performed where the patient had a coin in one of the bronchi; the forceps were used, and gave the foreign body a turn round; a fit of coughing was then induced, and it was ejected, by air suddenly escaping from the lung.

Mr. W. Coulson: In this case, the old operation, which has been found so successful, does not appear to have been performed,—namely, the introduction of the forceps, as in the case which Mr. Arnott mentioned. It was stated, however, that the introduction of a probe into the trachea was followed by spasm; still I think this might have been repeated; for the foreign body has sometimes been ejected during such spasm; and even supposing that spasm was produced, it would be a fair case for the employment of chloroform, and so the operation by the forceps might have been performed with better chance of success.

Dr. C. J. B. Williams: It appears to me that much of the difficulty in these cases arises from the very form of the foreign body. Nothing appears more calculated to stop up the trachea than this stone; it appears just suited to fill the office of a valve, and this is the great reason why it remained so long in the left bronchus, and afterwards produced disease in the left. But I think a great change takes place after the reception of the foreign body,—the result of the irritation giving rise to a thickening of the membrane of the air-tube, and thus we experience a greater difficulty of operating on the patient. The experiment of Brodie had shown, that when the trachea is first opened, the interior may be touched without exciting cough, and it is only when the scalpel is brought up to the glottis that irritation is produced. A great practical point is that where the presence of the foreign body is clearly made out, (and the signs are always obvious,) then it is most desirable that the operation should be performed to promote its expulsion, or else that Brodie's mode be adopted. On this point I agree with Mr. Arnott, that the utility of the operation did not consist in the prevention of the contraction of the glottis, but to prevent the fatal effects of it. In several attempts I have made to produce irritation in the lower animals, it has produced convulsive coughing. We may deduce an interesting pathological inference from this case, namely, the very striking manner in which it is proved that irritation in the bronchial tubes produced successive disease, deeper and deeper in the lungs. This is nothing more than what takes place in bronchitis from any other cause.

Dr. T. Ogier Ward: I have had a case of a child in which there were symptoms of a chronic, croupy inspiration. I treated the child for this, until I was informed that it was probable the patient had swallowed a bead. Recollecting Brodie's case, I recommended the friends to administer an emetic, and turn the child's head up. I understood afterwards that the emetic had been given, but no bead had been discovered, and the child got well.

Mr. J. E. Erichsen: This case is of much interest in a physical point of view. I believe that tracheotomy does not suspend irritation of the glottis, but the patient is not in danger of asphyxia. In cases of cut throat, I have introduced a probe through an opening in the trachea, and a spasmodic cough has been produced. There are cases in which this irritability appears to be suspended, and it is an interesting point of inquiry to what circumstance this is due. I knew a case of a girl who had the peg of a top in the air passages, and a dog in which blades of grass appeared through the glottis. On looking over those cases, it will be generally found that the foreign body has remained a long time in the air tube. We all know that their continued presence exhausts the mucous surface. Irritability of the surface may be relieved by asphyxia; but there are certain cases in which irritability of the larynx is suspended, where mere tracheotomy would not be attended with much benefit, if any. And this leads us to the principle on which we should perform the operation. If it is desirable to endeavour to get the foreign body to pass out, I think it would be well to make the aperture larger. In Brodie's case, the patient had swallowed a half-sovereign; a breathing aperture was made, and the movements of the glottis probably went on; the half-sovereign was loosened, and slipped out edgeways. In one case a sixpence passed out during sleep, without exciting any disturbance.

Dr. Webster: Mr. Phillips has alluded to the circumstance of the long period during which foreign bodies may remain in the bronchi, and yet the patient get well. I once had a case of a boy who had swallowed a cherry-stone, which remained for sixty-eight days; tracheotomy was not performed; but inflammation and suppuration taking place, the stone was vomited together with pus, and he got well. There have also been many cases showing how long they may remain without producing fatal consequences. There is one case in which it remained four years. Royer Collard mentioned one at Charenton, in which a nail was swallowed an inch and a half long, but produced no disturbance in the lung; and also a case of a lunatic, who swallowed a bone of a mutton-chop, which remained six years in the bronchi without producing pectoral disease. But the most remarkable case is one mentioned of an old Covenanter, where a bit of mutton bone was swallowed of the size of a hazel nut; at the end of fifteen years it was vomited up, and the patient got well. Mr. Barrow once told me of a case in which he attended a gentleman for pectoral symptoms; till one morning he coughed up a piece of ginger which had slipped into the glottis.

Mr. P. G. Hewett: A case was admitted into St. George's Hospital, where a man had swallowed a fourpenny piece. He was first taken to St. Thomas's, and was there turned up on his head The man, however, left there, and went back to Putney. In two or three days, experiencing irritation of the chest, he came to St. George's, and was under my care. There was evident irritation about the chest, but we could not find any obstruction. On questioning him, he said he had been accustomed to bronchitis. He had been in the Hospital four or five days, when one night, about a day before he was to have had an operation performed, he had a sudden fit of coughing, and the fourpenny piece made its appearance in his mouth. I do not think that the stethoscope would invariably indicate the presence of a foreign body. In a pathological point of view, one result is the formation of a large abscess in the mediastinum and pericarditis; and I would ask Mr. Solly whether he believes these to be consequent on or antecedent to the reception of the foreign body.

Mr. Solly: The account I received was, that the patient was in perfect health before swallowing the pebble.

Mr. Macilwain: My chief object in lectures which I have delivered was to encourage surgeons to open the trachea. I examined the subject generally, and I derived impressions which have tended to confirm what has been advanced. It seems to me that surgery is a little chargeable with officiousness, and that, if that portion of the treatment was made more regular, which gives an opening from the foreign body, and less to effect its discharge by other modes, the state of the case would be materially improved. There are many cases like those which Dr. Webster has mentioned, which give us encouragement; but, I think we are hardly yet in a position to judge of a remedy. I think, that in many of the cases, the secondary conditions co-existing have been, perhaps, quite as much the consequence of the endeavours made to extract the foreign body.

Dr. Barber: There is a mention made in the paper which might lead the meeting to think that the physicians at the Hospital held different opinions in respect to this case. There was no disagreement whatever as to the fact of a stone being in one of the bronchi, or as to its situation. Over the whole left side the murmurs were healthy; above the right nipple there was a loud bronchus, varying on different days, and sometimes in five

minutes; but there was a ronchus of some kind; in the lower half of the right side no respiratory murmurs could be detected. These were the leading features of the case throughout the whole period, varied by the two severe attacks of bronchitis. But there was no doubt whatever as to the existence of a foreign body—that the stone had passed into the chest—that it remained almost fixed in one position; and no symptoms which occurred ever led my colleagues, Drs. Bennett or Cohen, to suppose that the stone ever left its situation there, or proceeded to the larynx and caused irritation; and though we might have expressed ourselves differently, we never entertained any serious difference of opinion on any particular point.

Mr. Solly: I think Dr. Barber could not have heard one statement in the paper, namely, that "so many able stethoscopists could not have been deceived."

Mr. Henry Lee said, he apprehended that the principle upon which the operation of opening the trachea, in the cases now under discussion, had been introduced, had not been fully stated to the Society. If he understood the principle upon which Sir B. Brodie at first performed this operation, it was not with a view either of allowing the foreign substance to escape through the opening with the idea that the glottis would no longer retain its irritability. But he believed the operation to have been performed with the view of exhausting the irritability of the muscles of the glottis. That in case the coin should descend, as it had done before, to the glottis, when the patient was subverted, if it could be allowed to remain in that position a sufficient length of time, the irritability of the muscles would be exhausted. They would relax, and the coin would be allowed to pass. The opening then was made in order to allow the patient to breathe during the time that this was going on. It was true that in Sir B. Brodie's case this interval did not occur. The treatment was fortunate as well as judicious, but the good fortune which attended the operation ought not to be allowed to veil the judgment with which it was undertaken.

The sitting was then adjourned.

REVIEWS.

The Journal of Psychological Medicine and Mental Pathology. Edited by FORBES WINSLOW, M.D. Vol. I. Pp. 662. London: Churchill. 1848.

We have now before us the First Volume of the *Psychological Journal*, to which we have great pleasure in directing the attention of all those who take an interest in the study of the vast and interesting field of mental phenomena. Many of the articles which it contains are of great value, whether analysed as scientific or literary productions. It has also a charm, which is not always the distinguishing feature of quarterly periodicals,—it presents a feast of rich variety to the reader, and often with so much taste, elegance, and solid instruction, that, in perusing its pages we are apt to forget we are in the depths of profound philosophical research, enjoying the luxury of clear and comprehensive views on matters of the greatest possible importance to the diversified interests and relations of humanity. Hitherto such subjects have generally been treated in a manner rather to repel than to attract. In this instance, the edge of the cup is not only sweetened, but the contents of it are often so happily blended, that there are few persons, whether learned or otherwise, but what would take off the whole, not at a draught, but in small and repeated doses, and regret that the quantity had not been greater. A felicitous mixture of variety, displaying taste, learning, and accurate information, is certainly one of the characteristics of the Journal, and ought, and, we trust, will secure for it a deservedly wide circulation. It has a value, however, to which we have not yet alluded. It is the first work of the kind published in this country, and opens up inquiries unquestionably amongst the most important that can engage the attention of man. It must give an impulse to thought, the fruits of which are not at present easy of calculation. In commerce and manufactures, we applaud the enterprise, ingenuity, and skill by which individuals not only raise themselves to distinction,—by which they enlarge their spheres of usefulness, but confer inestimable blessings on mankind. No one ever improves his condition, or places himself in a commanding situation, by the exercise of legitimate and honourable means, whether these be marked by great energy, untiring industry, or acknowledged genius, without proportionably benefitting his species. Good, whatever be its nature, is a principle pregnant with intense vitality, and, like light, is ever diffusive, active, and invigorating in its influences. We applaud the man who adds to existing truths, who raises the mind to a higher point of observation, by which it is enabled to survey, with a more accurate and comprehensive power, a multitude of phenomena crowding every department of science and art. Shall we then withhold our approbation from one who, single-handed, steps forth to open out new branches of thought—who labours with unswerving zeal and energy to awaken an interest in subjects which concern all. We are too apt to form an unjust estimate of the deserts or claims of individuals. The man who, by his successes in life, rolls in his carriage and inhabits a palace, secures to himself commanding attention and a wide field of influence; while one with talent and industry, directed to scientific or literary pursuits, toils silently and unceasingly, and often uncheered in his course, when his efforts have the rare value of correcting prevailing errors or prejudices, or of developing important truths—efforts every one of which is improving the instruments of thought, by which the good conferred is transmitted from age to age, and becomes an essential part of humanity. Let us teach the world to honour and support our claims, and this is to be accomplished only by first beginning to honour and support among ourselves those who step out of the beaten track, either to enforce new truths, or to urge on the consideration of others, inquiries of the highest value. Dr. Forbes Winslow is a judicious and enterprising pioneer, and we extend to him and the whole of his class—such will ever be the rule of conduct of the *Medical Times*—our sincere mite of approbation. We will cheer him on his way, in the hope to help him. He has one of the most essential qualities of an able Editor. He has the taste and judgment to connect himself with those who are the best fitted to carry out his views. It is no small merit, for one in his position, to distinguish and secure those talents in the co-operation of his labours, which are peculiarly qualified for the onerous task he has imposed on himself.

There is, however, one department of the *Psychological Journal* we regard as defective, and it is one of great importance, viz., the reviewing department. The writers—critics by courtesy—only occasionally appear to be sensible that their duty is to inform the reader what a Work, brought under notice, contains. If we had less of their own thoughts and cleverness, and a great deal more of the Authors', we should be gratified for the change. Again, there is a want of that high-toned independence in the reviewing department, which is indispensably necessary to give weight and value to the remarks of the critic. A little "soft sawder" may be permitted at times, but it ought not to be the current coin of the realm. The metal that bears the test of time the longest is to be preferred; and that is truth, on whose face is impressed, in large characters, liberality, discrimination, and justice.

The limited space we have at command will not allow us to allude to the many admirable papers which the volume contains. Let the public follow our example,—read them, and judge for themselves. The undertaking is one which the Medical Profession should encourage, not simply as purchasers, but as contributors. Its success will not interfere with the existing periodicals; but even if it do, it would be no less acceptable. There is no Royal road to knowledge, nor are there any Royal domains within the protecting enclosures of which we, as journalists, are permitted to claim exclusive privileges and rights. Each must endeavour to secure for himself as much ground as he can, resting assured of this, that, in the long run, the race is always to the swift, the battle to the strong, and honour and success to men of right understanding.

Eruptions of the Face, Head, and Hands; with the latest Improvements in the Treatment of Diseases of the Skin. Illustrated with Coloured Plates. By T. H. BURGESS, M.D., Editor and Translator of "Cazenove's Manual of Diseases of the Skin." Pp. 254. London: Henry Renshaw. 1849.

There is no subject, in the whole range of Medical Science more perplexing to the practitioner, than inquiries concerning diseases of the skin. To every one who has not made them a particular study, they are the mysteries of his art. If he consult the elaborate productions of those who have laboured to make them clear, but who have invariably succeeded, by endless distinctions and refinements doubly refined, in showing that nothing less than a whole life is equal to the understanding of them. We cannot but admire the learning, industry, and genius which have been expended upon investigations into the morbid conditions of the skin; we cannot, however, help thinking, that, if a little plain common sense had been more frequently brought into requisition, the medical practitioner would have been a great gainer, and there would have been less room for quackery.

The work before us is meant for the Practitioner who has no time to wade through more elaborate and much less satisfactory productions; and it is the result of recent observation in the extensive wards of the Hospital of St. Louis at Paris and the hospitals of Italy; while it is not a compilation from other authors, it is thoroughly practical in the views laid down, and intelligible in the application of them—qualities of much greater value than any strained efforts at original trains of thought, which are too often only ingenious speculations. The work is unquestionably a good one. It is one which the Profession peculiarly requires, and none will rise from the perusal of its contents with disappointment.

We commend the Author for his felicitous ide *of giving the diseases belonging to certain regions of the body.* In regard to the face, head, and hands, we have the cutaneous diseases belonging to each, so that we have only to refer to these regions for every information concerning the morbid conditions to which they are liable. This will materially facilitate the study of them, and save the practitioner a vast amount of trouble.

The principles of treatment appear to us equally judicious and excellent, and the number of prescriptions which are given will be found exceedingly useful to the practitioner. Among so much that is good, it is difficult to select for extract; so we content ourselves by cordially recommending Dr. Burgess's work to the Profession as the best book on Skin Diseases with which we are acquainted.

The plates, five in number, are faithful transcripts from Nature. They are highly coloured and beautifully executed, have received the unqualified approbation of Cazenove, and will prove of great assistance to the practitioner.

PROPOSED GENERAL MEDICAL PROVIDENT INSTITUTION.

WE have received several letters upon this very interesting and important subject; and while we thank the writers for their communications, we rejoice that the remarks in our last Number, on the necessity of establishing a General Medical Provident Institution, have not fallen in barren places. If we may judge by the many communications we have received, the proposal is one likely to secure the sympathies and co-operation of the great body of the Profession; and we do not despair that, ere long, the now scattered and consequently ineffective bodies, will, on this subject at least, become united, and so strongly bound together by the

bonds of philanthropy and brotherly love, as to defy the power of human effort to break the hallowed tie.

Did our space permit, we would willingly publish several of the communications we have received, or rather all, for it would be invidious to select. We cannot, however, refrain from particularly alluding to a long and interesting letter from Mr. Daniell, the Founder of the Newport Pagnell General Medical Annuity Fund, who has laboured so long and with so much energy in this truly philanthropic purpose. He informs us that the Annual Meeting of the Northamptonshire Society will take place in London in the course of next month; that he has reason to suppose it will be a great and influential meeting; that he has consulted Mr. Neeson, the Actuary, and is prepared with suggestions likely to advance the object in view. Mr. Daniell adds that, having no object whatever of a personal character, no ambition to gratify, no wish to advance himself, he is ready to merge his own individuality into that of the general interests of the Profession, and to adopt the wisest and best scheme that will afford efficient aid to the disabled, and a sufficient provision for the widow and the orphan.

We fully concur in these sentiments, and freely offer our humble aid in furthering the good cause.

FEMALE UNIVERSITY GRADUATES.

[To the Editor of the Medical Times.]

SIR,—It may probably interest the readers of your leading Article of the 21st April, containing an account of the admission to the degree of Doctor of Medicine of a lady, Miss Blackwell, at the University of Geneva, United States, to have the names of two other ladies brought before them, who also obtained the same degree in German Universities within the last century.

Those of your readers who possess, or have access to, a collection of Inaugural Dissertations made by Teichmeyer, will find one by the Lady Dorothea Christiana Erxleb, of the city of Quedlinburg, who graduated as Doctor of Medicine at the University of Halle, in the year 1754. The subject of her dissertation is "Quod nimis cito ac jucunde curare, sæpius fiat caussa minus tutæ curationis," and it occupies forty-one small quarto pages. The dissertation is followed by a number of German and Latin poems in honour of the talents displayed by this lady, and by an address from Dr. Juncker, the Dean of the Faculty, in which, quoting her own words, he describes her as the daughter of Christian Polycarp Leporinus, M.D., of Quedlinburg, and born the 13th of November, 1715.

It appears that delicate health, in her youth, caused her to become attached to literature, and she was taught medicine by her father, for whom, on some occasions, she acted professionally.

She married, in 1742, Sir (Dominus) John Christian Erxleb, incumbent of St. Nicholas, in Quedlinburg, and wrote a German work, (re-published in 1749 under her own name,) refuting the objections offered by custom to her prosecuting her studies. It appears, however, that permission was obtained from the King of Prussia to enable her to pass the examination, and receive the degree.

Dr. Juncker also mentions a noble lady of Bologna, named Beltica Gozzadina, who, in 1538, not only became Doctor of Laws, but also Professor, in that University.

The London newspapers, early in June, 1819, give an account of the studies and graduation, as M.D., of Miss Charlotte Von Siebold, Accoucheuse to Her Royal Highness the Duchess of Kent, and daughter of Dr. Von Siebold, of Darmstadt, and Madame Von Siebold, a celebrated Accoucheuse in Germany.

Allow me to observe, that Dominus and Domina are very ancient university titles for those who are just about to graduate, or who have only obtained the degree of Bachelor of Arts; the superior degree of Master of Arts, and Doctor in either faculty giving their own appellation to the person so graduated. Shakspeare, in the "Merry Wives of Windsor," introduces as one of his characters, Sir Evans, a clergyman. Here the title Sir means Dominus, and expresses that he is a university graduate.

I have no doubt that Miss Blackwell is called Doctor in the university in which she graduated. They would hardly commit the error of seeking out a feminine appellation for her.

Apologising for the length of my letter,

I am, Sir, your obedient servant,

S. WM. J. MERRIMAN, M.D.

34, Brook-street, Grosvenor-square,
May 7th, 1849.

TREATMENT OF ENLARGED SPLEEN.

[To the Editor of the Medical Times.]

SIR,—In answer to "N. W. H.," I beg to state that I have given hydrid. potass. with success in two cases of enlarged spleen, with ascites, but not connected with ague.

Case 1.—A robust man; as he lay on his back the spleen reached below the umbilicus, and was readily felt floating in the abdominal fluid. ℞ Hydrid. potass., ʒi.; ex. cyath. vinosum aq. bis in die.

This acted as a powerful diuretic, and completely removed the dropsy and enlarged spleen.

Case 2.—A delicate girl; spleen slightly enlarged, with great tenderness and abdominal effusion. ℞ Hydrid. potass. gr. v.; infusi. gent. c., ʒi. M., ft. haust. ter in die; hirudines viij. part. dolent.

This girl got gastric irritation on the 4th day. It yielded on the 6th day to drop doses of acid hydrocyan.; the abdomen became natural.

I believe we should be at first cautious in giving large doses of hydrid. potass., as its strength varies very much.

I am, Sir, your obedient servant,

R. TUTHILL MASSY, M.D.,
Physician to the Exeter Dispensary.

Southernhay, Exeter, May 5, 1849.

P.S.—The hydrid. potass. acted as a diuretic in Case 2, and, I should have said, produced the irritation of the stomach,—an alarming symptom in a delicate girl.

PRESENTATION OF THE TESTIMONIAL TO DR. FORBES.

The Committee appointed at the General Meeting by the subscribers to the Forbes Testimonial to expend the sum collected, in the purchase of a piece of plate, presented this testimonial to Dr. Forbes, on the evening of the 3rd of May. The Committee invited the Subscribers in London and its vicinity, to meet them on the occasion, and nearly one hundred Professional gentlemen obeyed the summons. (a) The Testimonial consists of a very handsome piece of plate, a candelabrum and epergne, beautifully designed, and executed by Messrs. Smith, of Duke-street, Lincoln's-inn-fields. The stem is supported by three figures, representing Industry, Health, and Hope, corresponding to Dr. Forbes's motto, "*Labore, robore, spe.*"

Mr. Stanley, President of the Royal College of Surgeons, presented the Testimonial to Dr. Forbes. After a short allusion to the circumstances in which the subscription originated, Mr. Stanley proceeded to read the following address, framed by the Committee, in accordance with the resolution passed at the General Meeting.

"SIR,—On the occasion of your relinquishing the Editorship of the *British and Foreign Medical Review*, it was felt by many of your friends, and the admirers of that Journal, that a proper opportunity had arrived for expressing to you their sense of the deep service you had rendered to Medical Science by the spirit and method in which, for twelve years, you conducted that important and influential publication. It would be out of place, to enter here into any statement of the mode in which that Journal was conducted, or into any estimate of the great influence it, from the first, exerted on English Medical literature; an influence, we may add, which still continues, and which is not likely soon to pass away. Suffice it to say, that you brought to the task of editorship, intellectual and moral qualities of so high an order, that your Review was at once placed in the foremost rank among the journals of periodical criticism, both medical and general. It was impossible that such a journal should cease to appear without some acknowledgment on the part of those who had so largely benefited by it. It would have been an act of injustice if no record of regret had been entered to mark the close of its useful and honourable career. A subscription was, therefore, opened to present you with a testimonial, in expression of the sense of your professional brethren on the occasion; and the rapidity with which the lists were filled testified to the esteem with which you are universally regarded.

"We may be permitted also to add, that we do not present this testimonial only to the late Editor of the *British and Foreign Medical Review*, but also to the man whose excellent moral character is no less remarkable than his wisdom and sagacity; to the Physician who has played an important part, and filled many important positions, without ever forgetting that life is a sacred trust, which we are bound to keep pure and unsullied; to the Physician who is, if any one is, a pattern to the younger members of our Profession, of truthfulness, manliness, and sincerity.

"We will not occupy your time further, than to give expression to the earnest prayer of this Assembly, that many years may be permitted to you, to enjoy the honour which your Professional brethren now offer you."

Mr. Stanley then said: In the sentiments expressed in this Address, Dr. Forbes, I most heartily concur, and I am happy that it has fallen to my lot to discharge the pleasing duty of presenting it to you. It is a most gratifying circumstance to me individually, to find that the merits of one whom I esteem so highly, have drawn forth this public expression of gratitude and regard; and, on public grounds, I cannot but rejoice that the services which have been so well and so manfully rendered, have met with spontaneous and immediate recognition.

Dr. Forbes replied: I have, Sir, on many occasions regretted that I did not possess the happy art of giving appropriate words to feelings which demanded utterance, and never have I regretted it more than on this occasion. But I console myself with the thought that it is not for making speeches, for throwing easily vivid thoughts into eloquent words, that so many of the most eminent of my professional brethren have assembled here this evening to confer on me this great honour; but for a strenuous endeavour to discharge a duty which I had assumed, and to fulfil the tacit guarantee into which I entered, when I became the Editor of a journal of periodical criticism; and on this ground I do not refuse the honour you offer me. I do not deny, that when I established the *British and Foreign Medical Review*, (although I did not altogether exclude personal and private considerations,) I did so mainly on public grounds, because I thought such a Journal was wanted, and would do good service to the Profession. But, Sir, I cannot permit myself to assume all the merit you have attributed to me in the too flattering Address you have now read. The merit of the Journal which I lately conducted, of its literary pretensions and of its philosophical acumen, is not due to me, but to the band of admirable contributors whom I was enabled to assemble round me. In their names, I will not refuse the terms in which you have been pleased to speak of that Journal. I may have appeared as an occasional contributor, and more frequently as the reviser or corrector of the criticisms of others; but the chief part of my duty was to see that the works of Authors went into competent and impartial hands, and were criticised by men who, as far as I could judge, were the most likely to give a true and unbiased account of their contents. And, Sir, I believe, that, as far as is possible, the criticisms in the *British and Foreign Medical Review* were able, were honest, were unstained by feelings of petty rivalry, and untarnished by the bias of personal enmity. It was, at least, my intention to make them not only sound in philosophy, but also just as to the Author's merits. That my endeavour was at any rate partially successful, I have the high gratification of feeling this evening. Sir, that magnificent piece of plate, valuable as a mere mass of metal, valuable as a work of art, has yet to me a value of a different kind, which is not to be measured by gold, nor supplanted by the most perfect of human productions. The Editorship of the *British and Foreign Medical Review* was to me no ungrateful task; it was not performed with pain and repining: on the contrary, it was a pleasure to me; a gratification of all my faculties; a true labour of love. But had it been otherwise, had it been indeed a hard task, performed with sighs and urged by painful necessity, I should have been repaid for it now. Now I should have received my reward, and have taken the vantage-ground from Fortune. For a man may be justly proud when he finds his labours thus rewarded, by the approbation of many of the most eminent of the Profession, not only in this country, but also in America,—that mighty State, which is indissolubly connected with Great Britain by so many ties of common interest. That testimonial,

(a) We have been requested by the Honorary Secretaries, to state that cards of invitation were not sent, through some inadvertence, to three or four subscribers. The Secretaries desire to express to these gentlemen their regret for the omission.

Sir, shall be to me the dearest of my possessions; whatever may happen to me, from it I will not be separated, and it shall be cherished by my children, when I can receive no more pleasure from it.

I feel, Gentlemen, that I have most imperfectly expressed my grateful feelings towards you. You will understand what is not easy to put into words. Permit me, Sir, to acknowledge the kind terms in which you individually have spoken of me, and which, from you, are words indeed of worth.

Dr. Forbes was loudly applauded by the audience, and, shortly after the conclusion of his speech, the meeting separated.

MEDICAL REFORM.

A COPY OF THE PETITION TO PARLIAMENT OF THE MEDICAL PRACTITIONERS OF HALIFAX AND ITS ADJOINING TOWNSHIPS, SHEWETH:—

That the undersigned duly authorized Practitioners in medicine and surgery would call the attention of your Honourable House to the evils arising from the anomalous state of the laws affecting the Medical Profession.

That no one can peruse the evidence taken before the Parliamentary Committee of the last Session, nor witness the dire effects of the prevalent indiscriminate prescribing and dispensing of medicine by unqualified persons, but must be sensible of the necessity of a revision of those laws which ought to regulate medical practice and protect the public welfare.

That your Petitioners are of opinion that the documents entituled "the principles" agreed upon by the recognized heads of Colleges of the various branches of the Profession, and "The Outlines of a Bill for Regulating the Practice of Physic and Surgery," submitted by a Conference of Delegates to Secretary Sir George Grey, contain the elements of an improved system of government; but they think that the establishment of a new College of General Practitioners, as proposed therein, would be superfluous were such modifications and alterations into the constitution of the College of Surgeons of England, as would embrace collectively in the intended register all those entitled by the possession of the double qualification, to practise in that department, or as General Practitioners.

That your Petitioners approve of a distinctive classification of the Profession, according to the actual position of its members, and they are of opinion that a measure thus framed will ultimately become the means of correcting many of the evils complained of, and afford some protection to the public against unauthorised pretenders.

Your Petitioners, therefore, humbly pray that your Honourable House will early give them your assent to a Medical Bill on a sound basis.

And they will ever, &c.

M. S. Kenny, M.D., G. Alexander, M.D., Wm. Alexander, M.D., Jas. Inglis, M.D., Wm. Paley, M.D., R. Aked, Jn. Lister, James Holroyd, Thos. Hodgson, Lawrence Bramley, Thos. Robertshaw, Solomon Smith, Fred. Garlick, W. H. Peacock, Geo. Stansfeld, F. H. Tucker, J. Gledhill, J. Robinson, Abm. Jubb, Edw. Aked, J. Harrison, J Nowell.

LIST OF BOOKS RECEIVED DURING THE MONTH.

Treatment of Headache. By Dr. James Arnott.
The Science of Life. By a Physician.
Diseases of the Skin and Exposed Surfaces. By Dr. Burgess.
Man's Power over Himself to prevent or control Insanity. By Dr. Barlow.
On Ulcers of the Lower Extremity. By George Critchett, Assistant-Surgeon to the London Hospital.
The Preservation of Infants in Delivery. By Dr. Richard King.
Defects of Life Assurance. By Alexander Robertson, W.S.
On Healthy and Diseased Structure, and the true principles of Treatment for the Cure of Disease, especially Consumption and Scrofula, founded on Microscopical Analysis. By William Addison.
On Fever. By Dr. Cormack.
On Fever. By Dr. Wardell.
Wochenschrift fur die gesammte Heilkunde. Von Dr. Casper.
Bibliotheca Medico-Chirurgica. Von Vanderhoeck und Ruprecht in Gottingen.
Remarks on Dysmenorrhœa. By Dr. Edwards.
Laws, &c., of the Essex and Herts Benevolent Medical Society.
Proposals for Establishing a General Medical Annuity Fund. By Edward Daniell, Surgeon.
Report of the Newport Pagnell General Medical Annuity Fund.
Report of the Provincial Medical Association Benevolent Fund.
Remarks on Obesity. By Dr. Wardell.
Parturition, and the Principles and Practice of Obstetrics. By Dr. Tyler Smith.
Obstetrics: the Science and the Art. By Dr. Meigs, of Philadelphia.
Letters to a Mother. Third Edition. By Dr. Conquest.
Observations on the Existence of Free Carbon in the Human Body. By Dr. Paxton.
A Practical Treatise on Morbus Coxarius. By W. C. Hugman.
Scriptural Authority for the Mitigation of the Pains of Labour. By Dr. Protheroe Smith.
Lectures on Medical Missions.
The Mis-application of Anæsthesia in Childbirth. By G. T. Gream.
A Bill for Promoting a Sufficiency of Industrial and Profitable Employment of the Working-classes of the United Kingdom.
Journal of Public Health. Edited by Dr. Hector Gavin.
Progrès Medical.
L' Union Médicale.
Gazette Médicale Belge.
La Presse Médicale.
Gazette Médicale de Paris.
Provincial Medical and Surgical Journal.
British Record of Obstetric Medicine.
Dublin Quarterly Journal of Medical Science.
The Pharmaceutical Journal.
Journal of the Statistical Society.
The New York Journal of Medicine.

GOSSIP OF THE WEEK.

APOTHECARIES' HALL.—Names of Gentlemen who passed their Examination in the Science and Practice of Medicine, and received Certificates to Practise, on Thursday, May 3, 1849:—Thomas Mudge, Bodmin, Cornwall; George Anthony Kirsopp Lake, Devonshire; Daniel Rossiter, Frome, Somerset; George Down, Pimlico.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College, at the meeting of the Court of Examiners, on the 4th inst.:—Messrs. George Gwynn Brown, Stourport; James Lorcan Kennedy, London; Robert Charles Hurst, Bedford; William Clapham Cautley, Hedon, near Hull; William Ferdinand Wratislaw, Rugby, Warwickshire; John Jones Merriman, Kensington; and Charles Lowdell, Lingfield, Surrey.

THE COLLEGE LECTURES. — Professor Paget commenced his course of Lectures on the "Processes of Repair and Reproduction after Injuries," on Tuesday last, in the Theatre of the Royal College of Surgeons. We regret so interesting a course will be brought so soon to a conclusion as next Saturday week.

OBITUARY.—On the 30th ult., at Belfast, aged 70 years, Dr. S. S. Thompson, Physician to the Belfast District Lunatic Asylum.—On the 5th inst., at Croydon, in the 60th year of his age, Francis Harris, Esq., M.D.—At Brighton, on the 3rd inst., in the 67th year of his age, Joseph John West, M.D., formerly of Blackheath, where he had resided many years, and was much and deservedly esteemed.

EXTRAORDINARY ACCIDENT.—We regret to announce the melancholy death of Dr. Duke, of Silverstone, near Towcester, at the age of 28 years. The unfortunate gentleman was sitting in the midst of his domestic circle, in excellent health and spirits, on the evening of Saturday, the 31st March, when, in leaning backwards, he overbalanced himself and fell, striking the back of his head on a chair behind him. He became almost immediately insensible and paralysed, the result of a serious injury to the brain. During the succeeding fortnight he was gradually improving, and sanguine hopes were entertained of his recovery. On Saturday, the 14th April, however, a relapse occurred, and from that time he gradually became worse, until Thursday, the 19th, when he died.

ST. BARTHOLOMEW'S HOSPITAL.—The annual distribution of prizes and honorary distinctions to the members of the Medical College of this Hospital took place last week, in the great hall of the Institution, which was crowded with persons of rank and fashion. Mr. James Bentley, the Treasurer, was in the chair, supported by the Lord Mayor, several of the Aldermen, and many members of the Court of Common Council. Dr. West having delivered an introductory address, the principal prizes, &c., were distributed to the successful competitors. A vote of thanks to the Chairman closed the proceedings.

LONDON HOSPITAL MEDICAL SOCIETY.—The Prizes for the past Session were distributed on Tuesday, in the presence of a numerous assemblage of the Governors and friends of the Hospital and School, by C. B. Stutfield, Esq., the Chairman of the House Committee. Gold Medals presented by the Governors to Pupils distinguished for zeal and humanity in attendance on the patients:—Medical—T. N. Brushfield, Spitalfields. Surgical—H. E. Fox, Godmanchester. Medicine (Senior Class)—Gold Medal, H. Hantes, Bath; Honorary Certificate, G. C. Millar, Finsbury. (Junior Class)—Silver Medal, L. T. Mahoney, Cashel. Surgery (Senior Class)—Gold Medal, T. W. D. Brown, Deptford. (Junior Class)—Silver Medal, Tatham, Poplar. Anatomy (Senior Class)—Gold Medal, T. W. D. Brown; Honorary Certificate, J. B., Mountford, Exeter. (Junior Class)—Silver Medal. A. Mantell, Bitton; Honorary Certificate, A. H. Stocker, Sheerness; W. H. Harris, Barnstaple. Physiology—Gold Medal, T. N. Brushfield; Honorary Certificate, E. R. Ray, Sittingbourne. Chemistry (Senior Class)—Gold Medal, T. J. Vallance, Stratford; Honorary Certificate, M. C. Dukes, Kingsland. (Junior Class)—Honorary Certificate, Ridley Porter, Bishopsgate. Materia Medica—Gold Medal, A. H. Stocker; Honorary Certificate, S. C. Townsend, Crediton. Midwifery—Gold Medal, T. Peate, Margate; Honorary Certificates G. C. Miller, Samuel Reynolds Davidge, J. W. D. Brown. Forensic Medicine—Silver Medal, J. W. D. Brown; Honorary Certificate, Samuel Reynolds. Botany—Silver Medal, A. W. Moore, Bath; Honorary Certificate, J. W. D. Brown. Dresserships—A. H. Stocker, W. H. Harris. At the conclusion of the distribution, Mr. Stutfield complimented the pupils on their success, in an able and eloquent address.

ST. GEORGE'S HOSPITAL.—The prizes in the Medical School of St. George's Hospital for the past session were lately distributed in the presence of a numerous body of spectators by the Dean of Westminster, who, in awarding the honours, made some very interesting observations upon the importance of the different departments of study in which they had been won. The prize list is as follows:—Senior Scholarship—Mr. Alfred Howse. Junior Scholarship—Mr. H. V. Carter. Surgical Clinical Reports—Prize, Mr. J. Rouse. Anatomy, Senior Class—Mr. T. K. Hornidge; additional prize, Mr. H. Folkard. Junior Class—Prize, Mr. J. Ewens; additional prizes, Mr. O. S. Evans and Mr. W. B. Stephens; certificate, Mr. H. V. Carter. Botany—Prize, Mr. W. Lichfield. Chemistry—Prize, Mr. H. V. Carter; certificates, Mr. J. Ewens and Mr. W. B. Stevens. Materia Medica—Prize, Mr. J. Ewens; additional prize, Mr. W. B. Stephens; certificates, Mr. J. S. Dodd and Mr. W. Lichfield. Medical Jurisprudence—Prize, Mr. J. Rouse; certificate, Mr. J. Parker. Midwifery—Prize, Mr. H. Dixon; certificates, Mr. J. Earle and Mr. J. Parker.—Practice of Physic—Prize, Mr. J. Parker. Surgery—Prize, Mr. C. J. Morris.

DISTRIBUTION OF PRIZES AT ST. GEORGE'S SCHOOL OF MEDICINE, 1, GROSVENOR PLACE, May 1.—Sir James Clarke, Bart., in the Chair.—The theatre of this school was crowded to excess by the most eminent members of the Profession, many clergy, the pupils and their friends, to do honour to those who were to receive prizes, and celebrate the nineteenth anniversary of its establishment. The Report was read by the Honorary Secretary, Dr. W. Vesalius Pettigrew, which showed a very great increase in the number of students who had entered to the classes during the past session. The following gentlemen received honours in the various classes:—Anatomy and Physiology—Gold medal, Mr. T. Ball; honorary certificates, Mr. Bullock and Mr. F. Goodrich. Practical Anatomy—Bronze medal, Mr. F. Turner; honorary certificates, Mr. H. Lane, Mr. Fountain, and Mr. Wilkin. Chemistry—Prize, Mr. H. Lane; certificates, Mr. A. Mavor and Mr. M. Bloxam. Materia Medica—Prize, Mr. H. Lane; certificates, Mr. J. Fountain and Mr. Talbot. Midwifery—Prize, Mr. Vaughan

Jones; certificate, Mr. E. A. Brown. Medicine—Prize, Mr. Vaughan Jones. Surgery—Prize, Mr. Vaughan Jones; certificate, Mr. E. A. Brown. Jurisprudence—Prize, Mr. W. Bloxam; certificate, Mr. F. Godrich. Botany—Prize, Mr. F. Godrich; certificate, Mr. G. Fast. Practical Chemistry—Prize, Mr. H. Bullock. Clinical Medicine—Mr. G. Fast. Clinical Surgery—Mr. Henry Phillips. The two last prizes were given by the Lecturers of this school, open for competition to all the students of the Hospital, irrespective of the schools at which they have been educated, and are of equal value to those given by Sir B. Brodie, Bart., and Dr. Chambers, who have lately restricted their clinical prizes to pupils of the Hospital School only. At the conclusion of the distribution of prizes the Chairman delivered a very appropriate address to the students, and especially remarked his pleasure in witnessing the impartial manner in which the prizes had been awarded, and the mutual reciprocity of feeling that existed between the Lecturers and pupils in the school. The usual votes of thanks having been passed and responded to, the meeting broke up.

FISTULA INFIRMARY.—The annual dinner of this Charity took place on Wednesday at the London Tavern, and was very well attended; the Lord Mayor presided, and about 120 friends and patrons of the Infirmary were present. During the evening subscriptions were announced to the amount of more than 1,000*l.*, and it was stated that arrangements had been made for the erection of a hospital in the parish of St. Andrew's, Holborn, the site of which had been obtained through the liberality of Mr. Benjamin Bond Cabbell.

CHARING-CROSS HOSPITAL.—Mr. Walter Jessop, of Cheltenham, and Mr. Robert Hamilton, of Ipswich, received certificates in the Medical Jurisprudence class of this School.

WORCESTER INFIRMARY.—The Governors of the Worcester Infirmary have resolved to devote 300*l.* of the Jenny Lind fund to the erection of a chapel in that Institution, which will cost 1,200*l.* To make up the residue, a subscription has been started, headed by the very liberal donation of 100*l.* from the Dean.

APPLICATION OF ART TO SCIENCE.—Monsieur Claudet, by his superior daguerreotype apparatus, has been enabled to take magnified portraits of small animals, minutely dissected, and mounted in fluid, as permanent preparations. The plates, instead of being fixed in the usual manner, are submitted to a chemical menstruum to etch them, on the plan invented by Mons. Fizeau, and then slightly touched by an engraver; by which means a finished copper-plate engraving is obtained. The silvered copper-plate usually employed for daguerreotype portraits, is much too thin for the purpose of the printing press, but by means of the electrotype this difficulty is readily obviated, and a plate of the required substance obtained; with the additional advantage, that such plates can be multiplied, *ad infinitum*, at a trifling cost. Several specimens of this art are deposited in the Museum of the Royal College of Surgeons, by the side of the unrivalled dissections of Mr. Goadby, which it will be seen are faithfully copied by this new process.

THE GENERAL MEDICAL ANNUITY FUND.—We have pleasure in announcing, that the Council of the British Medical Association have voted the sum of 15*l.* from a fund which they had at their disposal for charitable purposes, to the General Medical Annuity, or Relief Fund Society, founded by Mr. Daniell, of Newport Pagnell.

CHOLERA.—DUBLIN.—Considerable alarm was created towards the close of the last week by rumours of the appearance of the disease in Dublin, and several sudden deaths were said to have taken place in various parts of the city. On due inquiry, however, it was ascertained that beyond a few isolated cases the mortality in question was the result of neglected dysentery, and that as yet the metropolis is nearly free from the visitation. The Sanitary Committee here is extremely active, and every preparation has been made to guard against the spread of contagion. The last accounts from the West are more favourable.

DEATHS FROM GLANDERS.—This horrible disease has lately numbered among its human victims three persons who caught it successively from each other, the first having, as usual, been infected by a diseased horse. The unfortunate individuals were John Birch, of Portnorris, and his wife, and one of his children. Another child has since taken ill, and from the incurable nature of the disease, its recovery can scarcely be expected.

A GREAT MAN.—At Chorley, died, aged 65, Mr. James Todd, formerly auctioneer. About four years ago he weighed eighteen score ten pounds, or twenty-six stone six pounds, (fourteen pounds to the stone.) Since that time, up to within the last month, he ate his meals regularly, but was able to take little or no exercise, and kept increasing in bulk, but his exact weight at the period of his death was not known. It took six strong men to move his body into an adjoining apartment.

IODINE AN ANTIDOTE TO THE VENOM OF THE RATTLE SNAKE.—Dr. James Whitmire, United States, says, that he has used the tincture of iodine in bites of the rattle-snake, viper, and copper head, on both man and beast, with complete success. His manner of using it is to paint the part that is bitten, and so far as the swelling extends, with three or four coats of tinct. (pharmaceutical strength) twice daily; and should the swelling extend, which it almost always does after the first application, if made any time soon after the infliction of the wound, it should be followed up with the paint. By the time the third application is made, the tumefaction will cease to extend, and three or four more applications will generally restore the limb, or part affected, to its natural state, save perhaps an obtuse sensibility to the touch, owing probably to the cuticle being destroyed, and some soreness of the muscles, which will remain a longer or shorter period. A successful case is related in illustration of the efficacy of this mode of treatment.

MORTALITY TABLE.

For the Week ending Saturday, May 5, 1849.

CAUSES OF DEATH.	Total.	Average of Five Springs.
ALL CAUSES	986	963
SPECIFIED CAUSES	982	959
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	248	198
SPORADIC DISEASES:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	46	48
Tubercular Diseases	193	200
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	118	123
Diseases of the Heart and Blood-vessels	34	34
Diseases of the Lungs, and of the other Organs of Respiration	161	131
Diseases of the Stomach, Liver, and other Organs of Digestion	50	62
Diseases of the Kidneys, &c.	13	11
Childbirth, Diseases of the Uterus, &c.	10	8
Rheumatism, Diseases of the Bones, Joints, &c.	8	8
Diseases of the Skin, Cellular Tissue, &c.	3	1
Malformations	3	3
Premature Birth and Debility	26	21
Atrophy	16	17
Age	33	50
Sudden	4	11
Violence, Privation, Cold, and Intemperance	16	33
Causes not Specified	4	4

TO CORRESPONDENTS.

"Mr. J. D. Brown, of Haverfordwest," in a letter on the effect of tobacco smoke in the reduction of strangulated hernia, remarks, that the only novelty in his plan is to make the patient *smoke*, instead of throwing an infusion of tobacco into his rectum. This latter plan is objectionable, because it is attended with danger. Should the patient be an habitual smoker, Mr. Brown recommends that he should be made to swallow the smoke until nausea is produced. In a novice, this effect is soon accomplished. A case is mentioned by our Correspondent in proof of the efficacy of his plan. This was a man, sixty years of age, in whom strangulation had existed for twelve hours, with its usual fearful symptoms. The taxis, and other means, failed to have the desired effect. The patient, an habitual smoker, was made to inhale the fumes of the tobacco, which he was ordered to swallow; at the same time, a stream of cold water was directed upon the tumor, and diligent manipulation adopted. As nausea increased, the tumor gradually subsided, accompanied with a gurgling sound. When sickness and extreme prostration occurred, the hernia was immediately reduced. Three other cases were treated in the same manner, and with the same success.

This plan we consider worthy of a trial, prior to an operation, in all cases of strangulated hernia. The stream of cold water directed on the tumor is an important element in the treatment. Smoking is not attended with that danger which accompanies the injection of an infusion of tobacco into the rectum, while an high degree of prostration may be produced by it.

"Dr. J. Hogg, of Gower-street, Bedford-square," writes us, that Mr. Isaac Brown has recently published in a contemporary his opinions and practice relative to ovarian tumor, for the cure of which he recommends pressure on the abdomen. Of one of his cases, that of Mrs. P—, Mr. Brown says, after this date, Jan. 1846, she left London, her health certainly as good as when she first came under my hands, I lost sight of her." This patient was tapped by Mr. Brown in Jan. 1846. She subsequently came under the care of Dr. Hogg. In Dec, 1846, the fluid had accumulated to a great amount, producing severe abdominal pains and obstinate constipation. She took small doses of Hyd. cum Creta, Iodide of Potassium, and purgatives, by which the urgent symptoms were relieved, but the disease progressed. The hot-air bath produced copious diaphoresis and rupture of the sac on two occasions, from which she derived benefit. In the autumn of 1847, the tumor had so much increased as to become a complete burthen to the patient; and on the 30th of November, an operation was performed, by which twenty pints of limpid albuminous fluid were drawn off. Her size diminished two-thirds, but the solid portion of the tumor remained. On 16th December, the patient was again so distressed with the accumulation of fluid, that Dr. Rigby was consulted, who recommended the removal of the tumor. Dr. F. Bird operated Jan., 1848. Twenty pints of fluid were removed; and it was then found that the solid portions of the tumor were closely adherent to the large and small intestines, so that no separation could be effected. Those who witnessed the operation attribute the adhesions to the pressure formerly employed; and the patient said, she was sure the 'book' had done her harm. The patient expired twenty-eight hours afterwards."

"A Legitimate Practitioner, Lynn," should pay the postage of his letter.

"Mr. G. T. Gream, Hertford-street," has directed our attention to the circumstance, that a small pamphlet, purporting to be a reprint of a paper lately published by him, has been circulated amongst many members of the Profession. Mr. Gream says, "It is not at all a true copy of my paper, and is evidently printed to gain some object, the nature of which I am at a loss to comprehend."

"A Subscriber, Ipswich."—Mr. Wardrop's Work on "Diseases of the Heart" will be completed in a short time.

Our Irish Correspondence came too late for insertion in our present Number.

"Dr. George Dunn" recommends, in order to obviate Coal Pit explosions, that a ventilator, either of wood, zinc, tin, iron, or copper, in the form of a hood, or cowl, and self-acting, be placed over the up-cast shaft, and in order to insure a free and rapid current of air through the mine, a self-acting ventilator must be placed over the down-cast shaft; by these means a current of air, as rapid as that on the earth's surface, can be made to circulate through every part of the mine.

"Mr. N. B. Fisher, Bungay."—In about two months.

"Dr. Tuthill Massy, Exeter."—Communication received.

Query "Athenæum."—The author is out of town.

"Mr. T. G. Wales, Downham."—We do not know anything of the person who inserted the advertisement, nor can we engage to inquire after him. We think our Correspondent should not have sent money without knowing something of the individual to whom he forwarded it.

ERRATUM.—Page 540, column 2, line 23rd from the top, for 243 read 343.

"Mr. T. D. Martyn, St. Columb, Cornwall," has forwarded the following case of amputation at the shoulder joint. The patient was a child, five years of age, who had his hand caught in a threshing machine. Nearly all the fingers were crushed, the joint laid open, ulna and radius smashed; humerus not fractured, but the whole of the integuments and muscles stripped off as if by a circular sweep of a knife, to within half an inch of the acromion. Prior to amputation, chloroform was administered, and took effect in less than a minute. A transverse incision was made by the operator, about three inches long, beginning at the acromion process; the joint opened, the outer and inner flaps then formed; the only artery secured was the brachial, the ligature upon which did not come away till the twenty-fifth day after the operation. The patient quickly recovered from the effects of the chloroform by cold water being dashed in his face.

"Mr. Evan Thomas, Infirmary, Carlisle."—Communication received.

"Mr. Postgate, Kilham," on Belladonna in Neuralgia, received.

"Blue-bottle."—The Commissioners find all drugs.

"Dr. Turley's" Letter will appear next week.

ORIGINAL LECTURES.

THE GULSTONIAN LECTURES.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS.

By W. W. GULL, M.D.,

Fellow of the College, and Fullerian Professor of Physiology at the Royal Institution of Great Britain, &c.

[Reported expressly for the "Medical Times," and revised by the Lecturer.]

Lecture III. (Continued.)

CERVICAL PARAPLEGIA.—HEMIPLEGIA.

Amongst the exceptions to the ordinary law of hemiplegia, enunciated above, are first to be considered those in which the leg is more affected than the arm, or in which the former, contrary to what is usual, does not recover so rapidly as the latter. Although I feel, that I am not at present in a condition to explain all these exceptions, yet so many of them may be explained, and the conditions here, as elsewhere, must stand to each other in such an invariable relation, that it may be hoped, that such examples as now place themselves conspicuously against our generalization may serve as landmarks pointing to a yet higher law.

Having once obtained a general expression for a class of facts, the mind becomes alive to such as do not run parallel, and seeks for modifying circumstances. Thus, having seen what is the general condition in hemiplegia, depending upon local lesion of the encephalon, if we find cases which do not present corresponding phenomena, we cannot refer them to the same cause. Exceptional cases to the law of local lesion may depend upon hysteria, or an allied condition; also upon complication of encephalic disease with disease of the cord; or arise from disease situated in the muscles or nerves of the paralysed member itself. I have also seen two cases of hemiplegia, in which the arm recovered before the leg, in which *post mortem* examination showed the disease to be at the inferior part of the posterior lobe of the cerebrum, neither the corpus striatum nor thalamus opticus being implicated. When the 7th nerve is alone affected, the causes producing the paralysis are, for the most part, so situated as to implicate the nerve in its course, or at its immediate origin.

I have not seen or been able to find the records of any cases which form exceptions to this. The complicated course of the seventh nerve, through the bony canals of the petrous portion of the temporal bone, and subsequently its exposed position on the face, render it very obvious to disease.

Amongst the exceptions to the ordinary law of hemiplegia none are more common than those of the third nerve. In hemispheric lesions of a moderate extent this nerve is rarely much affected, yet it is amongst the nerves of the body most subject to paralysis.

Before detailing the general phenomena of these cases, I will call your attention to the origin and intercranial course and communications of the third pair of nerves, which have also been so ably remarked upon by my friend Mr. John France, to whom we are indebted for the fullest Report of a large number of cases of paralysis of the third nerve.

The nerve has its origin near an extremely vascular portion of the brain, the substantia perforata postica also: to use Mr. France's own words,—"We find the nerve, almost throughout its intercranial tract, in the immediate vicinity of those which must be regarded as very dangerous allies; first hooking round the posterior cerebral artery to traverse the narrow interval between that vessel and the superior cerebellar, then running forward nearly parallel to the posterior communicating artery, then crossing the termination of the internal carotid, immediately on its outer side, and closer to it than any other nerves in the cavernous sinus.

"The sixth nerve, it is true, is previously in actual contact with the coats of this vessel, but running along the floor of the sinus, must, in a great degree, be secured from pressure, as from the upward direction of the current of blood the horizontal portion of the carotid must be rather raised from than pressed against the inferior wall of the sinus upon each contraction of the left ventricle, and from the same cause, the inferior wall of the artery itself must be mechanically the least liable to morbid distension or rupture; that nerve, however, sometimes suffers like the third."

But not only has the third nerve these dangerous allies in its course, but, from its position and the gravitating tendency of subarachnoid effusions, it is most subject to be pressed upon in its course by inflammatory effusion.

Also, near its entrance into the orbit, it is joined by branches of the sympathetic from the cavernous ganglion, and by a branch of the fifth, which extensive nervous communication explains the functional or sympathetic affections of this nerve.

Double vision is a common effect of paralysis of the third nerve, which, if unexplained, might lead to the supposition that the central sensory ganglia were implicated; but in these cases the diplopia arises from the want of consensual action of the recti muscles of the two eyes, so that they cannot be brought to adapt themselves to the same object, and hence, as Mr. France has remarked, we get two forms of diplopia, "one arising *from disagreement of the planes* of the optic axes, as when an object is held towards the faulty side, but above or below the level of the eyes, one only of which can be raised or depressed; the other, from *defect of convergence of the axes*, as when an object is presented on the level of the eyes, but on the sound side, towards which the affected eye cannot follow it."

In many cases of paralytic affection of the third, as shown by ptosis of one of the eyelids, we cannot suppose that any central organic disease exists. The class of patients in which they occur, and the rapidity of the cure, the nature of the means which are known from experience to be most successful, together with the complete localization of the affection, justify this opinion.

The cases of ptosis recorded by Mr. France, in the Guy's Hospital Reports, illustrate the general history of these cases very well. The remarks given above, upon the intimate connexion between this nerve and the large venous sinus and the arterial trunks, together with the tendency of membranous inflammation to occur at the base of the brain, and for effusions to gravitate there, will serve to elucidate much of the obscurity of their pathology. I shall here quote two or three cases given by Mr. France:—

George D., aged 12, who had in infancy suffered from hydrocephalus, and possessed a somewhat disproportionately large head, presented himself at the Eye Infirmary of Guy's Hospital, on Feb. 7, 1845. He was subject to frequent attacks of pain in the head, particularly just over the left eye, and sometimes at the corresponding point on the opposite side, and to frightful dreams, disturbing his sleep, and causing him to scream violently. When most troubled with headache, often two or three times a week, he had sickness and vomiting, apparently unconnected with errors in diet. His general aspect was indicative of debility; he was sallow, but in a manner intelligent and lively. Nine days before application, he was seized with headache and vomiting, which lasted, together with frequent twitching of the left eyelid, for a couple of days, when the lid dropped, and he became unable to elevate it, without the assistance of the hand. Upon the patient's application, ptosis was complete, but he could slightly raise the lid on wrinkling the forehead by the action of the occipito frontalis. Abduction of the affected eye was well performed; the eye then slowly returning towards, but not quite reaching, the centre. Adduction, elevation, and depression, more especially the two latter, were impracticable. The pupil, examined separately, was active, but inclined to remain rather more dilated in the dusk, than the opposite pupil. The sight of either eye was good, when both were employed; double vision resulted, unless the objects were held to the temporal side of left eye, so as to permit the axis to correspond.

The boy was put under the influence of mercury, sufficiently to redden the gums, and repeatedly blistered, and was discharged with restored power over the globe and palpebra, after about seven weeks.

Henry H—, aged 26, a fishmonger, subject to occasional bilious derangement, and, in hot weather, to pain across the forehead, for the relief of which he had habitually employed leeches with benefit. He was, six weeks before application at Guy's, suddenly seized, immediately after a walk of six miles, with severe pain in the head, tinnitus, vertigo, and sickness. He had not partaken of anything likely to disorder the stomach. The sickness, however, accompanied with the other cerebral symptoms just mentioned, and with loss of power of elevating the upper lid on the right side (which took place suddenly on the first onset of these symptoms), continued for three or four days. He was twice cupped, was blistered at the nape of the neck, and had purgative medicine administered; and, under these remedies the sickness subsided, and the power of the levator palpebræ was in some degree restored. On application at the Hospital, November 10, 1845, he still complained of headache and vertigo; the right upper eyelid could only be raised so far as to uncover about a third of the pupil, unless the occipito-frontalis was called into action; the movements of elevation, depression, and adduction of the globe were much limited, and the globe, when quiescent, maintained the position of abduction. There was diplopia in regarding any object to the left of the median line; and the right pupil, which the patient spontaneously described to have been at first much larger than the left, was still a trifle more dilated and sluggish than the latter, which was of medium size, and active. He was ordered compound calomel pill, and two grains sulphate of zinc with the compound infusion of roses and salts, three times daily, and a blister to the back of the neck.

Nov. 21.—Though convalescing, the patient still complained of occasional vertigo and headache in the morning: he could raise the right nearly as well as the left superior palpebra; the motions of the globe were almost perfectly restored; horizontal diplopia had ceased; there yet remained a trifling increase in size and indolence in action of the pupil. A grain of quinine was added to each dose of his mixture; two of the daily pills having been previously discontinued.

28th.—He was nearly well. A just perceptible difference existed between the degree of elevation of the two superior palpebræ: the power of adducting the right globe was perfect; that of elevating and depressing it still restricted within less than the natural boundaries: hence, double vision, which had ceased a week before in the horizontal direction, was still manifested at the extremes of the perpendicular movements of the eyes. Some indolence was the only remaining morbid affection of the pupils.

John C—, aged 28, a gas-work labourer, usually in the enjoyment of excellent health; who had abstained from indulgence in liquor, and been exempt from exposure to the furnace for some time before his application at the Hospital, September 29, 1845; was attacked about two months previously with cephalalgia, vertigo, and double vision, which were not preceded by any irregularity in diet, and subsided without treatment in a couple of days. For eight or nine days before he applied at Guy's he suffered from severe pain at the occiput, extending along the right side of the head, occurring chiefly in the night, and on his rising from bed in the morning, and lasting for two or three hours at a time. This was followed by vertigo and diplopia, and, shortly after, by dropping of the right upper eyelid.

When he came for advice he was free from pain, and unconscious of any other ailment than complete inability to raise the lid, though he could slightly separate it from the inferior palpebra by wrinkling the forehead by the occipito-frontal muscle. The position of the globe, when at rest, was with the cornea directed straight forwards. The patient could abduct the globe freely, and adduct it too, as far as the centre: he could also elevate and depress the globe; but within very narrow limits only; whence objects held at all to the left side of the me-

dian line, or much below or above the level of the eye, were perceived as double. The pupil of the right eye was of thrice the diameter of the left, but acted conjointly with it; and also, to a slight extent, independently: the left eye was unaffected, and no other paralysis existed. He was ordered cupping to ten ounces, and a purgative at once; two grains of calomel, with one of opium, three times daily; chalk mixture if necessary; and the stronger mercurial ointment for inunction on the temple.

Under this treatment he rapidly improved. At the expiration of a week he could raise the lid, so as to expose three-fourths of the pupil; he could adduct the cornea considerably past the central point, and raise and depress it more extensively; double vision of objects on the left continued; and the pupil was equally dilated, but perhaps more active: the mouth was becoming sore. In another week the motions of the lid and eye were almost entirely recovered; the pupil was reduced to two-thirds of its late habitual size, and had regained its briskness of movement; and the patient shortly after discontinued his attendance at the Infirmary.

A very rare cause of paralysis of the third may be aneurism of one of the arteries lying near it in its intercranial course. Such a case occurred under my own observation, and is recorded also by Mr. France. The following is an abstract of the case:—Sarah S., aged 20, a stout and short-necked girl, of a plethoric habit, and subject to constipation, stated that, for a month, she had suffered from headache and giddiness whilst sitting at needlework, and that, five days before admission, she was suddenly seized with pain over the right eyebrow, faintness, and vomiting. Leeches were applied with relief, but the next morning the right upper lid was dropped, and vision of the same side impaired. She had, on admission, been bled, leeched, and purged, notwithstanding which, the fall of the lid and impairment of vision had both increased. Seven days after coming into the Hospital, she retired to bed complaining of headache, from which she had not, while in the Hospital, been quite free. She slept comfortably until five o'clock in the morning, when the nurse's attention was attracted by her moaning. She was then found in a state of insensibility, without convulsion, deep low stertor, and froth at the mouth and nose.

On a *post-mortem* examination, there was found considerable recent extravasation of blood at the base of the brain, penetrating extensively into the meshes of the pia mater between the convolutions. The hæmorrhage had taken place from the bursting of a small aneurism situated on the posterior communicating artery of the right side, and which had produced compression of the right third nerve.

The communications of the third nerve with the fifth and sympathetic, may explain the apparently functional character of many of its affections. Many persons in whom they occur, are weak and debilitated subjects, with obvious disorder of the general health, and are relieved by alteratives, purgatives, and tonics. M. Marchal has given, in the Archives Generales (tome xi.), a memoir on paralysis of the third pair of nerves, following upon neuralgia of the fifth pair. He believes that, in many cases, the lesion of the third is subsequent to a retrograde action, propagating itself from a few filaments of the fifth, and he gives his opinion, that the course of such influence is through the lenticular ganglion.

It is well known that irritations of the fifth from diseased teeth, or a blow, may cause amaurosis, but yet it may be doubtful whether the cases recorded by Marchal in support of his opinion be correct; whether the anæsthesia of the fifth nerve, and the supervening paralysis of the third, are not results of a common cause, having its seat in the membranes, and affecting these nerves in their intercranial course. It is sufficient, however, for the main argument of this lecture, that they do not invalidate the law of hemiplegia, inasmuch as they belong to an entirely different series of disorders. Whether membranous or sympathetic, I have not now the time to discuss, but they have certainly not a hemispheric origin.

The most remarkable exceptions to the law of hemispheric lesion present themselves to us in the affection of the nerves of sensation, and I particularly direct attention thereto.

First.—Because they bear upon the question of the existence of separate centres in the brain for common sensation and voluntary motion.

Secondly.—In reference to the pathology of these cases; because I think one class of them, at least, is strictly functional.

Without entering upon a discussion of the seat of sensation, or where the sensorium commune is situated, I would call attention to several conditions under which anæsthesia occurs.

First.—Anæsthesia is produced by diseases of the blood,—ether, chloroform, Bright's disease, and gout, supply us with examples.

Secondly.—Anæsthesia is said to arise from mental states, as in mesmerism; it certainly may be produced by nervous exhaustion, by a shock, and often exists in hysteria.

(a) Accompanying the shock of apoplexy, but generally not persistent.

(b) As part of the phenom. of epilepsy.

(c) As following venereal excesses, over study, and liver derangements.

Thirdly.—Anæsthesia forms a prominent symptom in one form of paraplegia.

Fourthly.—Anæsthesia may be an affection of the peripheral nerves.

I know of no cases of anæsthesia unaccompanied by loss of motion, which arise from local disease of the encephalic centres.

My first assertion, that anæsthesia may be the result of blood diseases, requires no very difficult train of facts to substantiate it.

My attention was first called to the peculiarity of these cases by the following. The error I then made in diagnosis has been of the greatest service to me, as pointing to a different pathology of these cases, than that which would refer them to local central lesion.

In April, 1843, a male patient, aged 35, was admitted, under Dr. Addison, into Guy's, with the following history and symptoms:—He is by trade a painter; lives but poorly, and says he drinks nothing but water. In the pursuit of his vocation he is compelled to take long journeys, and to remain for many hours standing to paint. Yesterday morning, (the Report says,) when at work, he fell from the steps on which he was standing, quite insensible, to the ground; but he soon recovered his consciousness, and found that he had complete anæsthesia in the right half of his body, including the integuments of the forehead and face.

After being in the Hospital a short time he was found in a drowsy state, and, when roused, seemed confused. The pupils were natural; there was some muscular weakness and awkwardness in the right side; he has a very vacant look.

Pulse 75. Hypertrophy of left ventricle; urine highly coagulable; sp. 1018; small in quantity.

During the course of five weeks the sensation returned to the parts affected, but with fluctuations.

About the 18th of June, that is, two months from the attack, he was suddenly seized with all the severe symptoms of renal catarrh, with pleurisy, and died the next day.

Dr. Addison, under whose care, as I have said, the case occurred, had prepared me for a disappointment in my anticipations of local lesion; yet, from the suddenness of the attack, and the complete hemiplegic character of the malady, I must confess I should have been a disbeliever had we had no *post-mortem* examination. I wrote in my note-book, at the time, a series of reasons why there should be, and why there should not be, any local disease.

The brain was anæmic; no lesion, nor traces of one, could be detected, although the brain was carefully sliced throughout. The tissue was of the normal consistence. No local ramollissement nor effusion existed. The heart was hypertrophied. Aorta healthy; large vessels good. Kidneys contracted, granular, mottled, firm, with some serous cysts on the surface.

Modern discovery has supplied us with abundant proof of the anæsthesic effects of blood diseases in the phenomena produced by the inhalation of ether and chloroform. Nor are we, I think, surprised, that a patient should be able to move his limbs, to converse, and direct his eyes to various objects, to be, to a considerable extent, conscious, and yet that he should be quite unaware of the operations of the surgeon on the extremities at this same time, when we take into our consideration the extreme extent of nervous distribution in the tissues,—that the ether is permeating all these, and that the skin, from its rich supply, must be largely affected,—whilst, as I have often seen, by experiment on this subject, muscular contractility is not affected by the circulation of ether, nor even by immersion in it. It is, however, probable, that when the anæsthesic effects are more circumscribed, that there is, with these diseased conditions of the blood, some modification of nutrition.

The second class of cases in which anæsthesia preponderates over loss of motion, are probably functional,—I mean, *essentially nervous, restricted to the nerves*, not caused by a hyperæmia, or a local determination of blood, or a congestion of the blood-vessels, nor by impurity of the blood.

A nerve has its aptitude to perform its function in virtue of its proper organisation, as muscle is contractile as the result of its physical constitution.

A nerve in action, is probably undergoing a more rapid change in its organisation, than a passive nerve; but, independent of this, we must admit that there is a strictly functional activity; for, while a nerve conducts the mandates of the will, or receives impressions from without, it is in action through all its length and breadth, yet we cannot admit that its entire organisation is changed. Perhaps the conducting wire of a battery may serve to convey my meaning. When it connects the two ends of the series, it is still a copper wire, but it has a new function,—it is magnetic. The current does not change it organically, though it does functionally; yet the current is apt, in time, to affect its organisation. Thus the heat induced, renders it more exposed to oxidation; and, if the wire be of a substance quickly to oxidate, its consequent organic change would be quicker. But, without taking up your time with such speculations, it will, I think, be admitted, that the present class of cases is functional, and that, to view them in any other way is apt to lead to dangerous practice.

About two years since, I was one evening called in great haste to a gentleman well known to me. He is of thin, spare frame, about five feet six inches in height; active, and very excitable; nervous; has a multiplicity of duties to perform, and no rest in his disposition. It was about half-past seven in the evening, he told me, in great agitation, that he had lost the use of his right leg and arm; but, on investigation, I found he could forcibly throw forward the leg or the arm, but there was an awkwardness in directing their movements; the most prominent feature in his case being the anæsthesia, the awkwardness seeming to be the result of diminished sensation, so that he could not tell the whereabouts of the limb, rather than to arise from loss of power. This being totally opposed to the law of hemiplegia, I was disposed to regard it as functional, the result of nervous exhaustion, and prescribed nothing but a long and sound sleep. The following morning he was well.

A gentleman recently married, and over-worked by mental exercise, complained to me that he had just been seized with numbness of the right leg, and that, on attempting to walk, he found his gait very awkward, and he feared he was going to have an attack of paralysis. On inquiring, I found that the want of power over the muscles arose from the numbness, rather than from any absolute loss of muscular power, and was an awkwardness rather than paralysis. Using, as we do, our muscles under the direction of sensation, this will readily be understood. Knowing his general condition, I ordered vacuity, sleep, and a tonic, and all his symptoms soon disappeared.

It would occupy more than the whole time allotted to these lectures to point out the strange variety of sensation manifested in these cases, and the

parent paralyses that accompany them. The object I have is, to show that *where the loss of sensation and its various modifications are so great, with much less affection of the muscular power*, and often in no other way than I have described above *the disease, does not arise from central lesion of a local kind*, and that they are not exceptions to the law of hemiplegia already defined, but come under quite a distinct one. The remedies approved of by experience warrant such a conclusion, such as *vacuity from business, sleep*, mild nourishment, moderate purgation, and good air and exercise. *Congestion* may occur, but never admits more than gentle local depletion.

I have known one case in which the strange vagaries of sensation would not let the patient sleep, for just as consciousness was lost a strange creeping came over the scalp and awoke him; this was so continued, and so certain, as at last to reduce the patient sadly. It was obviated by his wife watching him, and as he fell off she gently passed her hand over the head, and the pressure so produced on the nerves drove away the subjective sensations, and he slept.

Of the state induced by mental impressions, or from nervous exhaustion, induced by monotonous movements or otherwise, called mesmeric, I have no experience, and cannot, therefore, give any opinion thereon.

I would, however, place in this category of anæsthesic affections, those strange cases of apoplexy in which there is paralysis of one side of the body, and anæsthesia of the other, the paralysis depending upon lesion of the hemisphere, and following the law of hemiplegic paralysis, the anæsthesia occurring without any lesion in the hemisphere, which corresponds to these parts, and is functional after the same manner that we get convulsions on the side which is not paralysed, the result of the shock of the injury on the other hemisphere. We cannot, therefore, regard it as the effect of a local lesion, nor an exception to the hemiplegic law, nor any evidence of separate centres for sensation and motion.

A tingling, a transient numbness, a feeling of coldness, a creeping, or something equally trifling and transient may precede severe and often sudden disorganising processes, and yet, strange to say, as the well-marked paralytic effects are produced by the lesion, the affection of the sensation shall fade away. They have been like the cloud before the storm,—it is now passed; the oak is riven, but the sun still shines. These anæsthesic phenomena are thus the signs of deranged function, which, we know, often precede greater changes. Abercrombie gives the case of a young lady who, for two or three years, suffered from transient hemiplegic anæsthesia; this functional disturbance foreshadowing the ramollissement which, at the end of this time, came on. There are on record many cases, said to be anomalous, in which the sensation of parts has been much diminished or permanently lost.

I quoted some of these in my last in speaking of peripheral paraplegia, in which the morbid impression seemed to have commenced in the integuments from cold, or from some inexplicable cause, as in those remarkable examples occurring during the epidemic in Paris. I think, if the cases, whose general details are shown by the following examples, be viewed in connexion with those of peripheral paraplegia, we shall not find them anomalous, but have to refer them to the cases of peripheral disease.

Dr. Yelloly, in the third volume of "Medico-Chirurgical Transactions," gives a case of anæsthesia which strikingly exemplifies this view. It occurred in a man aged 58, a Scotchman; after being much fatigued and heated in his attendance as one of the grand jury, in Kingston, in Jamaica, in very sultry weather, he went to bed with the window open. On awakening in the morning he found his feet and ankles perfectly numb, but without pain, and without the muscular power being at all affected. Soon afterwards he felt a numbness, with a tingling pain in his little finger, such as occurs in a part asleep, and by degrees finger after finger became affected until both hands were to a great degree insensible. No head symptoms, nor any affection of his general health nor viscera. A physician of eminence attributed the disorder to scurvy: but he had no cuticular affection until twelve months after the occurrence of the numbness, when some red pimples showed themselves on his legs on his lying down on the ground after walking up a steep hill. The hands up to the wrist, and the feet half way up the leg, were perfectly insensible to any species of injury, as cutting, pinching, or burning; the insensibility did not suddenly terminate, but it existed to a certain degree nearly up to the elbow, and for some distance above the knee.

His hands were of a somewhat purple hue. If he wished to ascertain the temperature of anything, he was under the necessity of putting it to his face, or neck, or upper part of his arm. His skin seemed to be unusually affected by heat. His hands were never free from blisters, which he would get by inadvertently placing them too near the fire.

The power of motion existed in the muscles of both hands and feet. He could grasp pretty firmly; but in holding anything he was apt to drop it if his attention was at all called away. The susceptibility of impressions generally, as well as the muscular power, seemed to be diminished.

The result of the case is no further given than that the patient was not benefitted by treatment. He left England again for the West Indies. I cannot but regard this as the result of injury to the cutaneous nerves, arising, in the first instance, from exposure whilst heated.

In enumerating the apparent inconsistencies of anæsthesia, Abercrombie says, that a gentleman who was under the care of the late Dr. Hey, of Edinburgh, had two paralytic attacks at the distance of eight months from each other. In the first, there was perfect loss of feeling, with only partial loss of motion; in the second, there was perfect loss of motion, with only partial loss of feeling. He recovered perfectly from the first attack after a short time; but, after the second, though he recovered partially, he continued to drag his leg, and, after a year or more, died of apoplexy. The different results of the two attacks precisely agree with the principle I have been endeavouring to establish. I believe there is yet a source of many functional diseases of the nervous centres, which, in modern medicine, has been too much neglected. I refer to the interweaving of the sympathetic with the nerves, and, as we have reason to believe, entering into connexion with the nervous centres themselves. States of the brain produce functional disorders of the stomach and liver, and these in their turn produce strange nervous conditions: amongst the most important of which, to be here named, are numbness of the fingers or face, pain over the eyebrow, and in the occiput, partial paralysis of the retina, giving rise to hemiopia, or indistinctness of vision, with vertigo, all of which often vanish at once, by good exercise or an active purgative. Although this attempt to generalise and classify nervous affection is necessarily very defective; yet, should it hereafter be found that a careful attention to the degree in which sensation is affected in relation to paralysis may serve to inform us whether the disease be local or general, functional or organic, as indeed I think it will, the object of these lectures will have been attained.

LECTURES ON MATERIA MEDICA,

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS.

By GOLDING BIRD, M.D., F.R.S.,
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[Reported expressly for this Journal.]

LECTURE II.

THE MATERIA MEDICA OF THE 17TH CENTURY.

In a book published by Sir Theodore Mayard, two hundred years ago, we find a most complete course of clinical medicine; he gives a careful history of cases, followed by the etiology of them, with their treatment and the results; and altogether is a work of sufficient importance to rescue his name and those of many of his compeers from the unworthy estimation in which they have been held.

But in reference to the doctrine of signatures: this, as I before said, was not a mere doctrine of medicine, but was a great cosmical theory,—everything on earth being supposed to be an impression of something superior to it. And now, to take up this doctrine with reference to our own Profession, for to this we have been indebted for a large number of remedies. The belief in signatures in those days regarded the earth as an enormous apothecary's shop. Crollius says:—"Terra est Dei pharmacopolon et nil non herbarum vi effici posset si plurimarum vires no ignorarentur." Now, on looking for some illustrations of this, the first thing with which Crollius sets out is the poppy; and he alludes to the well known influence of opium in relation to the brain; and says:—"Poppy with a crown represents the head and brain; therefore a decoction thereof, in many affects of the head, is profitably exhibited." But he takes his most curious illustration from the walnut, and says:—"Walnuts have an entire signature of the head; the exterior rinde of the pericranium; the interior hard rinde of the cranium; the thin skin encompassing the kernel, of the skin and membranes of the brain; and the kernel of the brain itself." As a further illustration of this doctrine, I may allude to the introduction of fennel. This was often used in cases of alopecia, because in appearance it somewhat resembles the hair, and was therefore considered a signature of it. In lichen we have a signature of the lungs, it bearing a resemblance to a dried lung, and we are indebted to this fact for its introduction into medicine, more especially the Lichen Islandicus, or Iceland moss. Among the drugs in the first Pharmacopœia attributable for their employment to this doctrine is the root of the Scrophularia nodosa. These are powerful astringents, and would act in some measure as common gall ointment. The mandrake, or the fusiform appendage of it was employed as an important means of preventing barrenness. Now this mandrake, or, rather, mandragora, was introduced in consequence of the name occurring in Holy Writ in reference to Rachel, (Gen. xxx. 14,) the roots being supposed to confer fertility. However, there is some error in this, for, as Gerarde in the time of Elizabeth says, in reference to its use in medicine, this can hardly be true, because in the Canticles (vii. 13) they are alluded to only as giving a smell, and there is no biblical authority for employing it in medicine. Still the old herbalist could not forget it. It does not grow in this country; but in our hedges a plant is found, called the Bryonia alba, (q. dioica,) which climbs up and over the hedges, furnished with rough leaves like those of the cucumber; the herbaceous stem dies down to the root every year; this root is large and fleshy, and is known as resembling Colombo root. This bryonia still maintains a high repute as a preventive of barrenness, and for this purpose it as at this moment an important article of commerce. This root (the Lecturer here exhibited a specimen) present a curious resemblance to the legs of a man, and sometimes a sort of fusiform root is found growing between the legs having a remarkable similitude to the male organ, as in this specimen. This appearance may somewhat account for its introduction into Materia Medica. Another illustration: Crollius alludes to the well-known cassia fistula; we are indebted, also, to the same idea, for the Aristolochia rotunda; this remedy was first used in consequence of its supposed influence over the uterus, by its resemblance to that part. In like manner the Galanga major was used in consequence of its resemblance to the intestines, and the Galanga minor the same. Sometimes the doctrine was very oddly stretched, and remedies were employed when it required much tension of the imagination to bring them into repute. Thus,—a plant, the alchemilla arventis is found on dry heaths, and, from its creeping propensities, was said to be able to find its way through stone walls, and hence it was thought that it ought to cure stone in the bladder; while of course this can only excite a smile, still it is a curious circumstance that it is found to be of great use in irritation of the bladder; and the same observation applies to the saxifraga granulata. I need not allude here to the pseudo-bulb of the

orchis, but there are one or two other articles worthy of notice, such as the ore of iron—silicate of iron; and the heliotropium or blood stone, celebrated for stopping bleeding of the nose, on account of the blood-red specks occasionally appearing on its green surface. Then the mallow was famed in affections of the abdomen, because it bore some resemblance to the navel; and aquaeetum in spinal affections, because in its stem it was supposed to represent the spine. The Convolvulus Jalapa was also employed as a purgative, and for colic, because it twisted in its growth, and as colic made people twist about, this was supposed the most evident remedy. A cancer is hard, and therefore the worty excrescences on the legs of horses were employed for the purpose of removing it. But to give a specimen of the straining of this doctrine. It was supposed that there existed in the body certain animal spirits; that these permeate the nerves and take up their place in the ventricles of the brain, and it was thought that these ought to evaporate to a certain extent in order to keep the patient at a par of health; and for this purpose what could be thought so proper as the administration of cosa crassa. But among the most curious of these illustrations of false reasoning, is that of a well known body, the lapis aquila, or eagle-stone; in consequence of crystallisation, a nodule of silex becomes separated in the body of the stone, and rattles on being shaken, and is therefore said to be pregnant. What is the value of this? Why it was at once thought evident that this was intended to be used in pregnancy; but so powerful were its supposed properties, that it was always to be applied externally. I could sketch many more such as these; and it is impossible not to see that we do owe much to such a system. Take the dandelion—it is to this doctrine that we are indebted for its introduction; what should so readily point it out for jaundice as its yellow flowers; the theory may not be worth a straw, but the practice is certainly of value.

There were, also, many fashionable follies of the day; and we have a curious account of another theory which was then broached, viz., the doctrine of Isopathy. A short time ago, this again made its appearance. It supposed that a diseased structure might be removed by the application of a vitalized one. This was very fashionable in Germany a short time ago, and very largely implicated the colleges. Under this idea, the lungs of a fox were used in asthma, because that animal is said to run a long time without losing its breath; incontinence of urine was to be cured with the neck of a sheep's bladder; the penis of a tortoise was given in calculi, because the urine of the tortoise was very solid; so, also, the penis of a bull and of a stag were used in weak states of that member in man, a scruple or twenty-five grains being the dose. In palpitation of the heart, what was so obvious as the cossa e corde cervi; the skull of a murdered man was said to be an excellent remedy for headache, and in a note by Dr. Strother, he points out why it should be that of a murdered man. We have, in our collection, another kind of drug—the lining membranes of the stomachs of different animals, employed in dyspepsia, or rather I should say apepsia. How curious it is that a few years ago an attempt was made to introduce pepsin into medicine, and that 200 years ago our ancestors introduced the lining membrane of the stomach of the calf. These are so many illustrations of the doctrine of Isopathy.

The doctrine of signatures seems to have had its share in the introduction of homœopathy. Thus we find aconite employed as a remedy for the bites of scorpions, and powdered toads, and so forth. There are some curious specimens in one portion of the collection; for instance, an amulet of jasper, surrounded with curious characters (probably Arabic) called lapis metritious; this was supposed to be an excellent remedy or charm. It was reckoned so powerful in calculus, that one physician states, that, on hanging it over the kidneys, the deposit of calculus departed, and the gravel oozed out of the eyes. It was also famed as having a purgative influence; in one case producing fourteen or fifteen evacuations in a day. As a curious specimen of the influence of the mind over certain states of the body, I may mention the employment of the concretions found in the heads of the serpent tribe—the Cobra capella. But among the many curious things is this remarkable one—an important remedy in the treatment of colic—it is the skin of a man in pieces, sown together so as to form a kind of girdle, which is tied round the abdomen. The pressure of a hard piece of leather, (for such it resembles from age,) will explain the relief which it is said to have given in colic. Another is the tooth of a shark; then the horn of a rhinoceros, which is mentioned in our first Pharmacopœia, as a bezoar, or counter-poison. We have next some exceedingly curious articles. Sir Walter Scott, in his "Talisman," has a reference to them in the cures effected on the occasion of the Sultan Solyman visiting Richard Cœur de Lion, by the physician producing curiously constructed amulets, which were dipped in water, and the water then administered to the patient. These are of the appearance of balls, made of silver filagree work, and generally contain earthy matter taken from the tomb of Mohammed. Then we have the roots of the convolari polygonatum, by which King Solomon was said to command the evils spirits of his day. This led to its introduction, and it is still sold in herb-shops for the treatment of ecchymosis, or black eyes, as in cases "when hasty women run upon their angry husband's fists." We have all heard of the curious tales told of the Tartarian lamb—that in Scythia grew a little lamb, part animal, part vegetable, and said to have the power of devouring all other plants in its vicinity. The elegant Darwin thus speaks of it in his "Botanic Garden," Canto i., l. 279:—

"E'en round the pole the flames of Love aspire,
And icy bosoms feel the secret fire!
Cradled in snow, and fann'd by arctic air,
Shines, gentle Barometz, thy golden hair;
Rooted in earth each cloven hoof descends,
And round and round her flexile neck she bends;
Crops the grey coral moss, and hoary rhyme,
Or laps with rosy tongue the melting time;
Eyes with mute tenderness her distant dam,
Or seems to bleat,—a *Vegetable Lamb*."

This is very pretty, but not quite true. The barometz is, in fact, the prostrate hairy stem of the fir Aspidium barometz, which, from its procumbent position and shaggy appearance, looks something like a crouching animal. It sends up four fronds, so that for this to represent a lamb it must be turned upside down; some of the specimens do present an odd appearance of a lamb couchant. This, as a portion of the old Materia Medica, was supposed to be of immense value, and was used in cases of hæmorrhage; to stop bleeding of the nose, the kind of wool of which it consisted was pulled off, and stuffed up the nostril—not a very far-fetched expedient. I shall now only allude to one other specimen. It is in the Pharmacopœia, and is called muscus cranii humani,—it is the moss of a dead man's skull; of course, in churchyards, it is not very wonderful that a skull should be covered over with moss as well as other things. This was also used in cases of hæmorrhage.

ORIGINAL CONTRIBUTIONS.

OBSERVATIONS ON STRICTURE OF THE URETHRA, AND ITS APPROPRIATE TREATMENT.

By BARNARD HOLT, F.R.C.S., and Assistant-Surgeon to the Westminster Hospital.

(Continued from page 529.)

No specific rule is applicable to the treatment of this disease, and, although more generally resulting from one common cause, it presents so many varieties as to render it impossible, until after the preliminary examination, to determine what course should be adopted. The apparent cause, duration of the attack, situation of the obstruction, size and nature of the stream, and the several complications of hæmorrhage, enlarged prostate, fistula in perinæo, irritable urethra, diseased kidneys or bladder, are all circumstances of the utmost importance to be correctly ascertained; except in the latter cause, or where the obstruction is such as to render the urethra irritable, no medicinal treatment, other than assisting the general health, can be of benefit. In the incipient form of stricture, the mucous membrane of the urethra is in a state of chronic inflammation, thickened, and more sensitive than in the advanced stages, where it becomes degenerated into a hard cartilaginous mass; the pain, which is usually situated in the perinæum is of a dull, heavy character; there is great lassitude and disinclination for exertion; the stream is but slightly altered in shape or diameter; there is not usually any discharge, but a rather more frequent desire to make water, and a few drops escape after micturition has been apparently completed. These symptoms comprise the ordinary history of a patient suffering from incipient stricture, and it may be effectually relieved in a few days. A No. 7 or 8 silver or plated sound, having been previously warmed by placing it in warm water, or rubbing it between the closed hand, should be well oiled, and gently introduced in the manner most acceptable to the surgeon, when, if any obstacle be met with, very gentle pressure is to be maintained for two or three minutes, which, if it depend upon spasmodic contraction of the surrounding muscles, conveys a tremulous, grasping sensation to the handle of the instrument, which will ordinarily subside, and allow of further progress being made. Should, however, the obstruction be of a more permanent character, the sound must be withdrawn, and one of a smaller calibre introduced, until a passage into the bladder is accomplished. It is seldom, if the first instrument does not pass through the canal, that a very accurate diagnosis can be formed by *this* examination, the structures being rendered irritable, and contracting in a forcible degree; in fact, in some instances, it is better to defer the re-introduction of the sound to a future day than persist where great irritability exists. Should the sound enter the bladder with facility, one of a larger size may be had recourse to, and thus a tolerably correct diagnosis formed for the future. Having been once satisfied as to the size which exactly corresponds with the stricture, the examination may be repeated at the expiration of two days, when, in all probability, the irritability experienced on the former occasion will have subsided; and, by gradually increasing the diameter, which you are enabled to do in this stage of the disease at every second or third visit, the natural calibre of the urethra is quickly obtained. The symptoms which, after the first introduction, were aggravated, now almost entirely subside, and the patient is speedily restored to his original healthy condition.

Here the urethra is not likely to become again contracted without some further cause, the obstruction, as before mentioned, being merely the result of thickening, and not disorganisation of the mucous membrane. Thus it is capable of being restored to its natural condition, its elasticity resumed, and its secreting functions performed in a manner similar to that which existed previous to any disease being manifested. The foregoing history has been that of a person the subject of a mild form of stricture, and I shall now proceed to consider the disease in its more formidable shape, and where the symptoms are more decided and difficult to treat.

Although dependant on the same cause, the disease, from neglect and want of professional assistance, will gradually assume a much more dangerous type. The patient, from having been enabled to make water without very great difficulty, will now find the stream considerably altered, both in shape and volume; it will be either twisted, forked, or flattened, much contracted in size, passed with considerable straining, and occasionally by drops, no effort of the patient being sufficient to permit its expulsion from the body, but for a very limited space, the urine frequently falling from the end of the penis between his feet; the bladder being in one of the conditions before described, namely, irritable, or never empty, is excited to contraction

upon the smallest addition from the kidney, the nightly rest is disturbed, the patient listless and sleepy, appetite bad, and altogether in a most unhappy condition; chronic inflammation of the bladder quickly supervenes, mucous in large quantities is deposited, and, if relief be not speedily obtained, retention, and perhaps abscess and infiltration ensue, when it is too late for the patient to be restored to that state it is now in his power to resume.

John Williams, aged 45, a carpenter by trade, pale, emaciated, and countenance indicative of much suffering, applied to me, having been the subject of stricture fifteen years; he had four attacks of gonorrhœa quickly supervening upon one another, the discharge from the last continuing more than twelve months; has never used injections, but taken every kind of medicine. Ten years since he noticed the usual premonitory symptoms, but, as in most instances, paid but little attention to them until attacked with retention. He sought, and procured relief for the time; the stricture, however, being neglected, of course became gradually worse; his rest is now broken from frequency of micturition, his clothes almost constantly saturated with urine, the consequence of incessant dribbling from the urethra, and his health considerably interfered with from pain in the perinæum, discharge from the urethra, occasional attacks of retention, and absorption of the more deleterious parts of the urine, which deposits half its amount in thick tenaceous mucous. A No. 4 steel-plated sound was introduced, but would not pass beyond four inches down the urethra; the diameter was then decreased to No. 1, without effect; and, as it was not advisable to create too much irritation by the frequent passage of different instruments at one visit, he was desired to present himself again on the third day, to have the parts thoroughly fomented, and take two table-spoonsful of a mixture composed of decoction of pareira brava five ounces and a half, compound ipecacuanha powder one scruple, and spirits of sweet nitre half an ounce, every four hours; and the night previous to the second visit half an ounce of castor oil, with twenty drops of laudanum. Upon my next seeing him, being assured by previous experience of the impossibility of passing any but the smallest instrument, I introduced the finest catgut bougie; after some little hesitation it passed through the first stricture, but was impeded at seven inches from the orifice. Steady pressure, however, overcame the second obstacle, and I was gratified at finding it enter the bladder; it was allowed to remain ten minutes and withdrawn, a considerable degree of tenacity and difficulty of removal being experienced. Continue the mixture and fomentation and come again in two days. Upon the second introduction more pain was experienced, the parts being sore from the previous examination; a catgut bougie of a similar size, however, entered the bladder, and was allowed to remain the same time as before. After three introductions, a No. 1 silver catheter was passed, and gradually increased to the natural calibre of the urethra, and were then discontinued at longer intervals, until once in three months was found sufficient to maintain the patulous condition of the canal.

J. W., aged 50, a merchant, consulted me, having been the subject of stricture twelve years. He had been a free liver, had several attacks of gonorrhœa, had never used injections; and, from motives of delicacy or timidity, had allowed the disease to proceed until the greatest difficulty was experienced in making water, it usually taking him three or four minutes to empty his bladder. His health was much impaired, spirits dejected, and urine loaded with mucous. An endeavour was made to pass No. 4, without effect, and it was only after a week's daily trial the smallest catgut bougie could be introduced. This was allowed to remain for two hours, when no further difficulty was experienced in the treatment, which was continued until No. 12 entered the bladder with facility. This gentleman presents himself every three months, No. 12 is introduced, and he is as well as ever he was in his life.

These are cases of daily occurrence. The intention allowed to proceed, producing those progressive changes which alter the condition of the canal by the effusion of coagulable lymph in the manner before mentioned. There is no question if these cases had been treated in the first instance, or even when the obstruction was but limited, that the integrity of the mucous lining might have been restored, and that it would have been capable of resuming that elasticity it is well known to enjoy; but, from neglect and inattention to the premonitory signs, the membrane becomes permanently altered, and cannot resume its original functions. Hence the necessity, although the calibre of the canal may have been so restored as to allow No. 12 to be introduced, of passing it once in three months at least; thus all difficulty is obviated, and the patient restored to a comfortable condition.

Although the foregoing cases presented great difficulties, from being allowed to progress without means being taken to prevent their continuance, yet the treatment was simple, and only required that tact and delicacy necessary for the performance of any operation; but, where the obstruction is caused by a band or puckered form of mucous membrane, the result of laceration, &c., the difficulty of passing a catheter is increased tenfold; here the stream will not probably be so small, but it will almost always be twisted, or forked, the symptoms not so severe, but the treatment much more difficult; and, although the instrument employed may have been used with the utmost care, and by the most experienced surgeon, yet it is occasionally impossible to effect an entrance into the bladder, the point getting entangled in the valve or band-like obstruction, totally preventing any further progress. In these cases, it is better to wait until every cause of excitement has subsided, and then introduce a catgut bougie or small gum elastic catheter, without a stilett; when, if it luckily pass, it should be allowed to remain. The urine will escape as often as convenient to the patient, and a larger catheter can be introduced at the end of two days. Thus, by gradually increasing the size until No. 4 can be passed, the difficulty of introduction is mostly overcome, and the further treatment can be conducted in a similar manner to the recited cases.

There are other instances in which it may be desirable to retain a catheter in the bladder, besides those resulting from the kind of obstruction just described. I had lately a gentleman under my care who had been the subject of stricture twenty-five years, and in whom there were three contracted portions, behind each of which calcareous matter had become impacted from the detention of the urine in its passage along the canal. Here the greatest difficulty was experienced in effecting an entrance into the bladder, and, although fortunate enough to do so upon the first visit, no instrument could be again passed, and he was compelled to leave town until all irritability had subsided. Upon his next visit the catheter was again introduced, and I then deemed it advisable to retain it. This gentleman, in one month, was sufficiently well to pass No. 8 himself. The calcareous product before alluded to came away during the treatment. He now passes his instrument at longer intervals, and is perfectly well.

It may be as well to consider here the respective advantages to be derived between what has been termed the quick and slow cure, or in other words where the catheter is retained in the bladder, or passed as often as circumstances will permit. In cases of obstruction similar to those already mentioned, there is an absolute necessity for the detention of the catheter, and it should be allowed to remain until a No. 4 can be passed with facility, *and no longer*, the disposition to contract being much greater after a catheter has been retained in the bladder for a long period, than where it is passed every, or every other day. I have frequently seen cases treated by keeping a catheter in until No. 9 or 10 is attained; but weeks will elapse before any further progress can be made, and more generally the diameter has to be *decreased* to No. 5 or 6. I would, therefore, strongly urge the propriety of (in the generality of instances) not keeping any instrument in the bladder for more than a week at a time, but allowing the urine to proceed in the ordinary way. It is frequently found the patient cannot bear any foreign body in the canal, and that, if persevered in, swelled testicle, occasionally ending in abscess, will result; here, of course, the treatment is apparent. I am quite sure, that supposing the natural calibre of the urethra to be attained, the daily passage of the catheter will effect the desired object quicker than where it is allowed to remain, however much the latter method has the apparent advantage at first.

RESEARCHES ON INVOLUNTARY SEMINAL DISCHARGES, AND THE DISORDERS ATTENDING THEM.

By H. J. M'DOUGALL, Surgeon, Fellow of the Royal Medical and Chirurgical Society; formerly House-Surgeon to University College Hospital.

(Continued from page 553.)

Mr. W. states, that at this time he first felt his digestive organs give way: frequent eructations occurred, and the simplest food disordered his stomach. Constipation had been present for some time. He now also first began to suffer from a dull obtuse pain over the orbits, occurring at intervals, with a sense of void during the intervening periods. He was never free from uneasiness in this region of the head. Medical advice was taken, and tonics and steel, with cold bathing, were prescribed. Under this treatment he became much better. The disorders in his head abated considerably, and the nocturnal discharges became less frequent. He also gained flesh. His friends were now exceedingly anxious he should marry, and, by the advice of his medical attendants, against his own convictions, he married, at the age of thirty, a lady seven years his junior. During the first year things went on pretty smoothly. Mr. W. had gained experience, and carefully avoided excessive intercourse. About fourteen months after marriage a son was born. During the period of separation consequent on this, the nocturnal emissions took place very frequently. From accidental causes constipation occurred, and, during excessive straining at stool, a diurnal pollution took place. This was the first time Mr. W. had noticed any similar seminal loss. On his return to cohabitation the nocturnal emissions still continued, and, whenever the bowels were costive, losses occurred at stool. His health began to suffer; he became nervous and irritable. The pain and uneasiness in the head returned, with noise in the ears, giddiness, and muscæ volitantes. Occasionally vision was obscured. Flushes happened, with increase of vertigo and heat about the head; and, after the paroxysm had passed off, he lay languid and faint. Sexual intercourse now became almost impossible; erection either was not perfect, or emission took place before the coitus had properly commenced. The discharges at stool increased in frequency, and Mr. W. seldom passed fæces without a seminal loss. The frequency of making water, which had never entirely left him, now increased considerably, and he had often the sensation of a few drops remaining in the canal. He was obliged to rise often in the night to micturate. His temper became morose and irritable, and the least vexation brought on an attack of flushing, with increase of all the other cerebral symptoms. All these disorders increased up to the time of my seeing him; and he had several times suffered from attacks of congestion of a most serious nature.

When he consulted me I was struck with his emaciated appearance, uncertain gait, and the smallness of his pulse. He stated that he had had no nocturnal pollutions for eighteen months, or, at all events, that they had been very rare, and had occurred without erection or sensation. He seldom went to stool without experiencing loss of semen. The act of micturition was also, he believed, frequently followed by seminal discharge. He became so flushed and excited during our conversation, that I contented myself with giving him directions to take the matter which passed at stool on glass, and to bring the urine he passed, in separate bottles, for my examination at his next

On the 2nd of March he again visited me. Of nine bottles of urine which he brought, seven were more or less turbid, and the other two very clear and light coloured, resembling hysterical urine. The latter had been passed after two paroxysms of excitement. The specific gravity of the seven specimens ranged from 1,024 to 1,032; that of the other two specimens did not reach 1,005. There was no deposit in the latter, but a slight mucous cloud. Of the seven specimens two had a brick-dust sediment, but not in great quantity; next to this there was a sediment of urate of ammonia, and above this a whitish flocculent looking deposit, which showed large crystals of oxalate of lime under the microscope. In one of these specimens spermatozoa were abundant. The other did not contain any. The other five specimens contained no uric acid, but a deposit of urate of ammonia, and above it the flaky deposit of epithelium and oxalate of lime. In two of these spermatozoa were abundant, but could not be detected in the other three. One of the clear specimens of low specific gravity contained multitudes of spermatozoa. There were none in the other. We had thus in four days evidence of four pollutions occurring during the passage of urine. But this was not all. He brought me three glasses with the matter passed from the urethra at stool dried on them. Nothing had passed on the fourth morning. On submitting these matters to the microscope, they were found to contain abundance of spermatozoa. Mr. W. had therefore suffered, according to certain evidence, from seven passive pollutions during four days.

Mr. W. had suffered from two very severe attacks of congestion since his last visit;—one on the evening of the day on which he saw me, and which he attributed to his excitement of mind; the other on the 1st of March, produced by some slight domestic annoyance. He complained to me much of his irritability of temper,—on inquiry, I found that he had been perfectly impotent three years, and during that period had not attempted connexion. For the previous three years coitus had been only very rarely possible, and then the act was excessively rapid.

On examining Mr. W.'s genital organs, I found the penis and prepuce of ordinary appearance; the scrotum was pendulous; the right testicle soft and small, and the left epididymus about three times its natural size. The spermatic cords were apparently healthy. On drawing back the prepuce, I noticed that the orifice of the urethra was much congested. The patient had never had a bougie introduced. On my proposing to do so he became evidently much excited. His face flushed, and he complained of the noise in his ears and flashes of light, with a sense of giddiness. After this had passed off, however, I introduced, with much difficulty, a full sized wax bougie, giving excessive pain, and causing violent urethral spasm. The face again became flushed, and almost purple; the pupils dilated, and the patient fell forward quite insensible. There was foam at the mouth, and occasionally slight stertor. The limbs became rigid, and the eyes fixed. I placed the patient upright in a chair, loosened his clothes, and applied cold affusion to the head, pouring the water from some height. I shortly after noticed that the mouth was a little drawn to the left side. This state of things lasted about twenty minutes, as near as I can guess, as I took no notice of the time, after which the head broke out into a copious perspiration; consciousness returned, the face became pale, and the patient remained exhausted, and scarcely able to move. After a time I had him removed to his own residence in a carriage, and, to avoid further suspense, and consequent excitement, cauterised him the same evening. The effects of the caustic were unusually severe. The patient, in spite of a henbane sedative, rose every ten minutes to pass water during the night, the irritation at the neck of the bladder being very great. Much blood passed on each occasion; a bloody purulent discharge came on, and continued four or five days. A nocturnal emission took place on the third night, attended with [illegible] By the use of the warm hip-bath twice a day, the irritation set up by the caustic was subdued, and immediately the patient began to improve. He had only one attack of cerebral congestion after the cauterisation, and that by no means a severe one. No nocturnal pollution occurred between the third and twentieth nights after the operation, and, on the second occasion, there was considerable erotic excitement, vigorous erection, and a lascivious dream. Soon after the effects of the operation had subsided, tonics and steel were administered, with decided benefit, and about the end of April the patient left town for his country residence. He visited me again on the 6th of June, when the alteration in his appearance was great; he told me he had gained eight pounds in weight. He had had one nocturnal emission since leaving town, attended with the proper phenomena; the head symptoms had entirely left him. He was able to take active exercise without fatigue, and had lost a feeling of constant restlessness which he had before. By my advice he had not as yet returned to sexual intercourse, but he was most anxious to do so, as he found his erections at night vigorous and permanent. I recommended him to take change of air, and a residence by the sea-side, with sea-bathing, and to be very moderate and regular in his sexual relations. I have since seen this patient once, on the 17th of November, and heard from him several times. He is quite restored to health, and *all* his functions are properly performed.

I am indebted to my patient for the early history of this case. With considerable trouble he made notes of all he could recollect, and from those notes I have compiled the above. By his desire I have omitted all reference to the gentlemen under whose care he had previously been.

In my next paper I shall describe some of the disorders of the intellectual and moral faculties, which arise as a consequence of spermatorrhœa.

24, Henrietta-street, Cavendish-square,
April 20th, 1849.

THE INFLUENCE OF THE TINCTURE OF DIGITALIS, WHEN ADMINISTERED IN LARGE DOSES, IN CERTAIN CASES OF INSANITY.

By G. M. JONES, Esq., Surgeon to the Jersey Hospital.

The properties of the foxglove have long been known, and experience has now fully proved this plant to be a most powerful and valuable medicine. The earlier writers speak of it more in the way of a local application than as an internal remedy. In the former light, its qualities are extolled as healing strumous and other ill-conditioned sores; while, in the latter, it is thought comparatively little of, on account "of its being strongly emetic, and working upwards and downwards;" yet, as far back as the time of Parkington, and supported by some anterior to this period, a decoction of it was much thought of for epilepsy ("the falling sickness"). It is far from my intention to enter into the history of this plant, or to dwell on its efficacy in those diseases in which it has been employed. Like other medicines, it has at times been too much lauded for its never-failing virtues; at another it has lost much of its popularity. My object at this moment is only to state the beneficial effects I have witnessed from its use in certain cases of insanity, and in doing so, I am very far from claiming the merit of a new discovery; for I am aware that digitalis has been considered by many as almost a specific when given in cases of insanity; that others, not so prepossessed in favour of its medicinal qualities, have nevertheless ranked it next to emetics as a cure for madness; while some few are to be met with, who not only deny its power in restoring the mind to a healthy state, but have at the same time pretended that its use has not unfrequently been productive of injurious effects. It must at first sight appear strange, that opinions so much at variance as the first and the last of these should prevail; this can, however, be easily accounted for. We are but too apt to regard that as a specific which has proved itself a cure in the few cases which may have come under our observation, and that drug as hurtful or even inert, which our experience, a very limited one, perhaps, has proved to be so.

Insanity, in common with every other disease to which the human frame is subject, presents itself to our notice under various forms, each requiring a particular mode of treatment, though there are general rules applicable and adapted *to all*; and it is probably the want of classifying mental disorders and not guiding our practice in accordance to such classification, that our endeavours so frequently prove unavailing, and that a medicine which would in all probability prove of signal benefit in some cases, becomes not only little thought of, but is at times spoken and written against, on account of its non-efficacy in the two or three cases in which we had administered it.

It has long been a disputed point respecting the primary effect of digitalis on the animal economy whether it acts on the system as a stimulant or as a sedative. I am inclined to think, that, like opium, it is the quantity of the dose which regulates its effect. I have not witnessed one symptom which denoted an increase of power in any of the cases in which it has been given in *large* doses, and from this I am led to infer, that, when administered in this manner, it acts at once as a sedative.

It is highly necessary, in our treatment of insanity, as in that of almost every other disease which falls under our care, that we should obtain, as far as it is possible for us to do so, an internal knowledge of those causes which may have acted as predisposing or exciting; if our object in the treatment of disease is to check, and then remove the cause, it stands to reason, that our efforts must, in the first place, be directed to gain a knowledge of those causes by which our curatory intentions are carried out; our treatment of insanity must not, consequently, be based on theory, but be guided as much as possible by facts. The cases I have related (as also those not mentioned, but which bore in every respect a striking relation to them) were such as left little doubt on my mind, that in every one insanity arose, not from debility, but from asthenic or inflammatory diathesis, and it was this belief grounded on observation, and also on the history I was able to collect from the relations or friends of the unhappy sufferers, which led me to pursue a plan of treatment at once beneficial and quick in its result; I had on several occasions, first, given digitalis to several of my patients afflicted with mania, but the doses were small; improvement was generally the result; but the cure was most commonly a protracted one, and as far as my memory bears me out, on no occasion completed without the assistance of other medicines or other means.

In the first case that I employed digitalis in large doses, I had used previously most of the remedies generally employed in affections of the brain, and the doses of foxglove given which had acted on the pulse, slightly on the stomach, and frequently on the bowels, proved as unavailing as all the other means which had been pursued. This was the first case in which I had ever given digitalis in a two drachm dose, and was led to test its efficacy in this instance, having shortly before read Sharkey's valuable little work on Epilepsy, in which this plant given [illegible] much spoken of and recommended, and I had likewise had the advantage of witnessing its power as a remedy in the disease itself, the author having kindly superintended a few cases which were in the Hospital during his but too short residence in the island; still, as the merits of any particular treatment neither ought, or can be tested by a single case, I have been led to follow it up, and but one out of fourteen has digitalis, when given in large doses, failed to effect a cure.

We must ever have some definite object in view whenever we are called upon to prescribe medicine, let the nature of the case be what it may, and more particularly when the ingredient is, as every one must allow digitalis to be, a powerful remedy. It is not enough to know, that our patient has been under mania furibunda for us at once, and without further investigation, to order blood-letting, [illegible]

or any similar depleting plan: two persons may present the same symptoms,—rage, violence of every kind, the most frantic ejaculations, and utter language the most vehement, and yet these symptoms may arise from a very opposite cause, on the one hand, from a distension and rigidity of the vessels, on the other from debility; the former requiring a strict antiphlogistic and depletory treatment, the latter tonic remedies and a nourishing diet. The maxim laid down by Celsus must be adhered to, if not altogether, at all events, in part. We must seek for new information, not from latent circumstances, which are dubious and uncertain, but from such things as are capable of being fairly investigated, that is, *evident causes*, for it is of importance to know whether the disease proceeded from fatigue, from thirst, from cold, from heat, from watching, from hunger, from an excess of wine or aliments, or an immoderate indulgence of venery;" but even independent of making ourselves as thoroughly acquainted as possible as to whether the insanity is sthenic or æsthenic for the guidance of our practice; and even after all doubt is removed from our minds respecting the real nature of the case, the strictest watching is imperatively called on from the commencement of our treatment till circumstances warrant the discontinuance of the digitalis; and even after this has taken place, and when the case seems to us to be complete, are we warranted in giving up, altogether, our attendance; for, independently of the same remedy acting differently in different constitutions, there is this fear to be kept in mind, that as digitalis is a drug which, at times, accumulates silently in the system, symptoms of an alarming nature may manifest themselves, after our mind has apparently been satisfied that our primary great object has been attained.

In almost every case related by Sharkey vomiting was one of the results which followed the doses of digitalis given, and those who have written on the medicinal properties of the foxglove have considered its emetic effects as very general. Orfila states, "that all preparations of digitalis begin by acting as emetics," but the little experience I have had in the employment of this medicine (when given in mania and in large doses) does not bear out this opinion; I have in no instance witnessed vomiting as a necessary result, though symptoms denoting that nausea existed have appeared most commonly to prevail, and it is to the absence of the former symptom, and the presence of the latter, that I have been led to attribute much of the beneficial results I have found to accrue in those cases which have come under my treatment. It is well known, "that nausea lowers the pulse, contracts the vessels, and diminishes, as long as it lasts, the action and even the general powers of life, which the act of vomiting, on the contrary, rouses rather than depresses." While some physiologists regard insanity as arising from an affection of the brain altogether independent of any other bodily ailment, others, and far the greater number, consider mental aberration as invariably accompanied by corporeal disease; the examinations which have taken place after death have at times, unfortunately, thrown but little light on this subject, form any an instance is on record in which no organic change, or disease of any nature, has been discovered on the most minute examination of the brain of those who have, for years, laboured under insanity, while, on the other hand, this has been found in persons whose intellect during life was not only impaired, but of the first order; and although the spirit of discovery has, during the last years, given birth to much useful and practical knowledge respecting the phenomena of disease, and has, in many instances, and with almost graphic precision, traced causes and effects, and substantiated or rejected theories, many, perhaps, hazarded without much or due consideration,—there still exists an ample field for further investigation, in order to remove the cloud which still envelopes our knowledge of those organs connected with our reasoning faculties. In administering, at the outset of my treatment, a large dose of tinct. digitalis, and following it up (according to circumstances) in even an increased quantity, I follow the principle that the medicine acts not only on the system generally, or by diminishing its irritability, but more particularly on the brain, by lessening the tension and tone of the arterial system. The dose, at first, may appear to many by much too potent a remedy; we must, however, bear in mind, that although it might be so in other diseases, and even in insanity, in all its different forms, still that mania furibunda is often a most powerful malady to control, and that the sooner it is subdued the less fear exists of its leaving a train of symptoms almost as painful to see and to contend against as the original complaint. It is only those who have witnessed the power exercised by the maniac, who are able to form a just idea of the almost supernatural strength with which he is at times possessed. He who before the attack was, perhaps, weak and feeble, finds himself all at once endowed with such power as to require not only athletic men, but likewise mechanical means to keep in subjection. I have said that my object in giving repeated large doses of digitalis is to diminish the tone of the arterial system, more particularly in the brain. I have never seen this accomplished *quickly* when the medicine has been prescribed in a *small*, or even in a *moderate* quantity. Dr. Mason Cox, whose experience was extensive, and in whose judgment confidence can be placed, makes the following observations while writing on insanity:—"Certain it is that if any considerable commotion, any *violent new* action can be excited in maniacal complaints, by whatever means, the mental derangement is often considerably relieved or permanently removed." That digitalis, taken in large doses, produces a "new" and a "violent action," cannot, I think, admit of doubt, at least it has done so, as far as I have been able to judge, in the cases in which I have given it; by its immediate action on the heart and brain, it diminishes the irritability of the system, and lessens its nervous power; its sedative effects producing a state of prostration, in the room of one in which the greatest excitement had prevailed. Dr. Halluran is of opinion that digitalis ought not to be, or at all events cannot be beneficially employed "under the pressure of high arterial action," but that it is of advantage in cases of "diminished excitement;" he arrives at this deduction from experience; and that he, in cases of mental derangement, many others are of the same opinion, and only consider the powerful and efficacious effects of the foxglove of advantage when administered after the system has been prepared for its action by blood-letting and other means. To discuss the correctness of these views is quite foreign to my purpose. I must, however, remark, that, if digitalis is given for the purpose of lowering the irritability of the system, and few there are who do not admit its exercising this power, I am at a loss to know why it is not to be looked upon as a remedy which may prove beneficial at any period when vascular action prevails. In none of the cases I have alluded to has it caused the slightest extra excitement, or been hurtful in any way whatever; the reverse has almost invariable been the case, calmness has succeeded fury, and reason frantic gesticulations and violent vociferations. Dr. Henry Holland, to whom the Medical Profession is much indebted for his sound reasoning and practical observations, while speaking of the efficacy of digitalis, very justly remarks: "I would merely repeat my persuasion, that its use as a sedative to the circulation in diseases of inflammation or excitement might beneficially be much extended; superseding depletion in some cases, the use of narcotics in others." Another writer of well-known celebrity (Dr. James Currie) also remarks, "That he has employed digitalis to a very considerable extent in inflammation of the brain, the heart, and the lungs, and has succeeded with it in situations when he should otherwise have despaired." I quote these authorities, and many others of eminence might be brought forward, to prove that digitalis can be employed, and that, too, without danger, in much larger doses than it is generally given in, particularly when our object is to act quickly on the nervous system by reducing its morbid sensibility to its right level and healthy standard.

The same motive which first induced me to commence these observations, has led me to extend them much beyond the limits I had prescribed to myself; my wish, that a plan of treatment which has, in most instances, proved successful in my practice, should be more extensively proved than I have reason to believe it has been, must plead my apology for these lengthened remarks. I am, perhaps, recommending that as a valuable remedy (when taken in large and repeated doses) the merits of which may have already been tested by those whose experience in mental diseases is far greater than my own. I, however, feel, that let me be treading in the footsteps of others, or let me be inducing others to tread in mine, that an object is gained alike pleasing to all parties; to myself, in having it in my power to afford fresh cases in support of a remedy for the alleviation of a disease which deprives man of his reason; and to others, in finding that a line of practice they may have been the first to advocate has proved successful in other hands.

17, Old-street, St. Helen's, Jersey,
May 9, 1849.

HOSPITAL REPORTS.

ST. BARTHOLOMEW'S HOSPITAL.

Cases under the care of E. A. LLOYD, Esq. Reported by T. M. GIRDLESTONE, Esq., M.R.C.S., Surgeon to the Blenheim-street Dispensary. Formerly House-Surgeon to St. Bartholomew's Hospital.

THREE CASES OF SIMPLE FRACTURE OF THE THIGH TREATED BY KEEPING UP EXTENSION BY MEANS OF A WEIGHT AND PULLEY.

In each of the following cases a long straight splint was placed on the outer side of the limb from the hip to the foot, and three short splints, which extended from its upper part to a little beyond the knee, were placed around the remaining circumference of the thigh. The patient was placed on the back. No pelvic band was used, the long splint not being for the purpose of extension, but merely for supporting the thigh and keeping the foot in its proper position. For this purpose it extended a few inches beyond the heel, and the foot was bandaged to it, which prevented the toes from becoming everted. The foot and ankle were surrounded by a gaiter, from which depended a strong cord, having a three or four pound weight at its extremity, and suspended over the foot of the bed by a pulley, placed in a line with the leg and thigh. Care was taken that the weight should hang perfectly free between the bed and the floor, and that the bedclothes did not touch the cord, so that its action was not interrupted: thus a slight and constant extension was kept up. The upper part of the long splint was fastened to the body by means of a wide bandage above the hips, and three straps with buckles served for adjusting it with the other splints round the thigh.

Case 1.—Thomas Collins, aged 65, a carpenter, tall and muscular, was admitted on April 18th, 1848. He had a simple fracture of the left thigh, about two inches below the lesser trochanter, caused by a fall from the wheel of an omnibus. There was shortening of the limb, and the broken ends of the bone could be felt projecting outwards; there was considerable swelling, with irritability and rigidity of the muscles of the thigh. It was put up in the manner described, and the weight was kept suspended from his foot for six weeks; the splints were kept on for two weeks longer. When they were removed, the thigh was perfectly straight and firm.

On July 5th he was discharged. He was then able to walk with a crutch. On August 14th he came to the Hospital, having walked from Limehouse. The leg that had been broken was as long as the other, and he could walk without inconvenience.

Case 2.—Charles Carr, aged 16, was admitted on June 18th, 1848. He had a fracture of the left thigh, one-third from the lower extremity. This, also, was caused by a fall from an omnibus. The fracture was put up immediately after his admission.

On the 2nd of March he again visited me. Of nine bottles of urine which he brought, seven were more or less turbid, and the other two very clear and light coloured, resembling hysterical urine. The latter had been passed after two paroxysms of excitement. The specific gravity of the seven specimens ranged from 1,024 to 1,032; that of the other two specimens did not reach 1,005. There was no deposit in the latter, but a slight mucous cloud. Of the seven specimens two had a brick-dust sediment, but not in great quantity; next to this there was a sediment of urate of ammonia, and above this a whitish flocculent looking deposit, which showed large crystals of oxalate of lime under the microscope. In one of these specimens spermatozoa were abundant. The other did not contain any. The other five specimens contained no uric acid, but a deposit of urate of ammonia, and above it the flaky deposit of epithelium and oxalate of lime. In two of these spermatozoa were abundant, but could not be detected in the other three. One of the clear specimens of low specific gravity contained multitudes of spermatozoa. There were none in the other. We had thus in four days evidence of four pollutions occurring during the passage of urine. But this was not all. He brought me three glasses with the matter passed from the urethra at stool dried on them. Nothing had passed on the fourth morning. On submitting these matters to the microscope, they were found to contain abundance of spermatozoa. Mr. W. had therefore suffered, according to certain evidence, from seven passive pollutions during four days.

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The properties of the foxglove have long been known, and experience has now fully proved this plant to be a most powerful and valuable medicine. The earlier writers speak of it more in the way of a local application than as an internal remedy. In the former light, its qualities are extolled as healing strumous and other ill-conditioned sores; while, in the latter, it is thought comparatively little of, on account "of its being strongly emetic, and working upwards and downwards;" yet, as far back as the time of Parkington, and supported by some anterior to this period, a decoction of it was much thought of for epilepsy ("the falling sickness"). It is far from my intention to enter into the history of this plant, or to dwell on its efficacy in those diseases in which it has been employed. Like other medicines, it has at times been too much lauded for its never-failing virtues; at another it has lost much of its popularity. My object at this moment is only to state the beneficial effects I have witnessed from its use in certain cases of insanity, and in doing so, I am very far from claiming the merit of a new discovery; for I am aware that digitalis has been considered by many as almost a specific when given in cases of insanity; that others, not so prepossessed in favour of its medicinal qualities, have nevertheless ranked it next to emetics as a cure for madness; while some few are to be met with, who not only deny its power in restoring the mind to a healthy state, but have at the same time pretended that its use has not unfrequently been productive of injurious effects. It must at first sight appear strange, that opinions so much at variance as the first and the last of these should prevail; this can, however, be easily accounted for. We are but too apt to regard that as a specific which has proved itself a cure in the few cases which may have come under our observation, and that drug as hurtful or even inert, which our experience, a very limited one, perhaps, has proved to be so.

Insanity, in common with every other disease to which the human frame is subject, presents itself to our notice under various forms, each requiring a particular mode of treatment, though there are general rules applicable and adapted *to all*; and it is probably the want of classifying mental disorders, and not guiding our practice in accordance to such classification, that our endeavours so frequently prove unavailing, and that a medicine which would in all probability prove of signal benefit in some cases, becomes not only little thought of, but is at times spoken and written against, on account of its non-efficacy in the two or three cases in which we had administered it.

It has long been a disputed point respecting the primary effect of digitalis on the animal economy whether it acts on the system as a stimulant or as sedative. I am inclined to think, that, like opium, it is the quantity of the dose which regulates its effect. I have not witnessed one symptom which denoted an increase of power in any of the cases in which it has been given in *large* doses, and from this I am led to infer, that, when administered in this manner, it acts at once as a sedative.

It is highly necessary, in our treatment of insanity, as in that of almost every other disease which falls under our care, that we should obtain, as far as it is possible for us to do so, an internal knowledge of those causes which may have acted as predisposing or exciting; if our object in the treatment of disease is to check, and then remove its cause, it stands to reason, that our efforts must, in the first place, be directed to gain a knowledge of those causes by which our curatory intentions are carried out; our treatment of insanity must not, consequently, be based on theory, but be guided as much as possible by facts. The cases I have related (as also those not mentioned, but which bear in every respect a striking relation to them) were such as left little doubt on my mind, that in every one insanity arose, not from debility, but from asthenic or inflammatory diathesis, and it was this belief grounded on observation, and also on the history I was able to collect from the relations or friends of the unhappy sufferers, which led me to pursue a plan of treatment at once beneficial and quick in its result; I had on several occasions, at first, given digitalis to several of my patients, afflicted with mania, but the doses were small; improvement was generally the result; but the cure was most commonly a protracted one, and as far as my memory bears me out, on no occasion completed without the assistance of other medicine and other means.

In the first case that I employed digitalis in large doses, I had used previously most of the remedies generally employed in affections of the mind, and the doses of foxglove given which then acted on the pulse, slightly on the stomach, and frequently on the bowels, proved as unavailing as all the other means which had been pursued. This was the first case in which I had ever given digitalis in a two drachm dose, and I was led to test its efficacy in this instance, having shortly before read Sharkey's valuable little treatise on Epilepsy, in which this plant given largely is much spoken of and recommended, and having likewise had the advantage of witnessing its power as a remedy in the disease itself, the author having kindly superintended a few cases which were in the Hospital during his but too short residence in this island; still, as the merits of any particular treatment neither ought, or can be tested by a solitary case, I have been led to follow it up, and but in one out of fourteen has digitalis, when given in large doses, failed to effect a cure.

We must ever have some definite object in view whenever we are called upon to prescribe medicine, let the nature of the case be what it may, and more particularly when the ingredient is, as every one must allow digitalis to be, a powerful remedy. It is not enough to know, that our patient labours under mania furibunda for us at once, and without further investigation, to order blood-letting, digitalis,

or any similar depleting plan: two persons may present the same symptoms,—rage, violence of every kind, the most frantic ejaculations, and utter language the most vehement, and yet these symptoms may arise from a very opposite cause, on the one hand, from a distension and rigidity of the vessels, on the other from debility; the former requiring a strict antiphlogistic and depletory treatment, the latter tonic remedies and a nourishing diet. The maxim laid down by Celsus must be adhered to, if not altogether, at all events, in part. We must seek for new information, not from latent circumstances, which are dubious and uncertain, but from such things as are capable of being fairly investigated, that is, *evident causes*, for it is of importance to know whether the disease proceeded from fatigue, from thirst, from cold, from heat, from watching, from hunger, from an excess of wine or aliments, or an immoderate indulgence of venery;" but even independent of making ourselves as thoroughly acquainted as possible as to whether the insanity is sthenic or asthenic for the guidance of our practice; and even after all doubt is removed from our minds respecting the real nature of the case, the strictest watching is imperatively called on from the commencement of our treatment till circumstances warrant the discontinuance of the digitalis; and even after this has taken place, and when the case seems to us to be complete, are we warranted in giving up, altogether, our attendance; for, independently of the same remedy acting differently in different constitutions, there is this fear to be kept in mind, that as digitalis is a drug which, at times, accumulates silently in the system, symptoms of an alarming nature may manifest themselves, after our mind has apparently been satisfied that our primary great object has been attained.

In almost every case related by Sharkey vomiting was one of the results which followed the doses of digitalis given, and those who have written on the medicinal properties of the foxglove have considered its emetic effects as very general. Orfila states, "that all preparations of digitalis begin by acting as emetics," but the little experience I have had in the employment of this medicine (when given in mania and in large doses) does not bear out this opinion; I have in no instance witnessed vomiting as a necessary result, though symptoms denoting that nausea existed have appeared most commonly to prevail, and it is to the absence of the former symptom, and the presence of the latter, that I have been led to attribute much of the beneficial results I have found to accrue in those cases which have come under my treatment. It is well known, "that nausea lowers the pulse, contracts the vessels, and diminishes, as long as it lasts, the action and even the general powers of life, which the act of vomiting, on the contrary, rouses rather than depresses."

While some physiologists regard insanity as arising from an affection of the brain altogether independent of any other bodily ailment, others, and by far the greater number, consider mental aberration as invariably accompanied by corporeal disease; the examinations which have taken place after death have at times, unfortunately, thrown but little light on this subject, form any an instance is on record in which no organic change, or disease of any nature, has been discovered on the most minute examination of the brain of those who have, for years, laboured under insanity, while, on the other hand, this has been found in persons whose intellect during life was not only unimpaired, but of the first order; and although the spirit of discovery has, during the last years, given birth to much useful and practical knowledge respecting the phenomena of disease, and has, in many instances, and with almost graphic precision, traced causes and effects, and substantiated or rejected theories, many, perhaps, hazarded without much or due consideration,—there still exists an ample field for further investigation, in order to remove the cloud which still envelopes our knowledge of those organs connected with our reasoning faculties. In administering, at the outset of my treatment, a large dose of tinct. digitalis, and following it up (according to circumstances) in even an increased quantity, I follow the principle that the medicine acts not only on the system generally, or by diminishing its irritability, but more particularly on the brain, by lessening the tension and tone of the arterial system. The dose, at first, may appear to many by much too potent a remedy; we must, however, bear in mind, that although it might be so in other diseases, and even in insanity, in all its different forms, still that mania furibunda is often a most powerful malady to control, and that the sooner it is subdued the less fear exists of its leaving a train of symptoms almost as painful to see and to contend against as the original complaint. It is only those who have witnessed the power exercised by the maniac, who are able to form a just idea of the almost supernatural strength with which he is at times possessed. He who before the attack was, perhaps, weak and feeble, finds himself all at once endowed with such power as to require not only athletic men, but likewise mechanical means to keep in subjection. I have said that my object in giving repeated large doses of digitalis is to diminish the tone of the arterial system, more particularly in the brain. I have never seen this accomplished *quickly* when the medicine has been prescribed in a *small*, or even in a *moderate* quantity. Dr. Mason Cox, whose experience was extensive, and in whose judgment confidence can be placed, makes the following observations while writing on insanity:—"Certain it is that if any considerable commotion, any *violent new* action can be excited in maniacal complaints, by whatever means, the mental derangement is often considerably relieved or permanently removed." That digitalis, taken in large doses, produces a "new" and a "violent action," cannot, I think, admit of doubt, at least it has done so, as far as I have been able to judge, in the cases in which I have given it; by its immediate action on the heart and brain, it diminishes the irritability of the system, and lessens its nervous power; its sedative effects producing a state of prostration, in the room of one in which the greatest excitement had prevailed. Dr. Halluran is of opinion that digitalis ought not to be, or at all events cannot be beneficially employed "under the pressure of high arterial action," but that it is of advantage in cases of "diminished excitement;" he arrives at this deduction from experience; and that he, in cases of mental derangement, many others are of the same opinion, and only consider the powerful and efficacious effects of the foxglove of advantage when administered after the system has been prepared for its action by blood-letting and other means. To discuss the correctness of these views is quite foreign to my purpose. I must, however, remark, that, if digitalis is given for the purpose of lowering the irritability of the system, and few there are who do not admit its exercising this power, I am at a loss to know why it is not to be looked upon as a remedy which may prove beneficial at any period when vascular action prevails. In none of the cases I have alluded to has it caused the slightest extra excitement, or been hurtful in any way whatever; the reverse has almost invariable been the case, calmness has succeeded fury, and reason frantic gesticulations and violent vociferations. Dr. Henry Holland, to whom the Medical Profession is much indebted for his sound reasoning and practical observations, while speaking of the efficacy of digitalis, very justly remarks: "I would merely repeat my persuasion, that its use as a sedative to the circulation in diseases of inflammation or excitement might beneficially be much extended; superseding depletion in some cases, the use of narcotics in others." Another writer of well-known celebrity (Dr. James Currie) also remarks, "That he has employed digitalis to a very considerable extent in inflammation of the brain, the heart, and the lungs, and has succeeded with it in situations when he should otherwise have despaired." I quote these authorities, and many others of eminence might be brought forward, to prove that digitalis can be employed, and that, too, without danger, in much larger doses than it is generally given in, particularly when our object is to act quickly on the nervous system by reducing its morbid sensibility to its right level and healthy standard.

The same motive which first induced me to commence these observations, has led me to extend them much beyond the limits I had prescribed to myself; my wish, that a plan of treatment which has, in most instances, proved successful in my practice, should be more extensively proved than I have reason to believe it has been, must plead my apology for these lengthened remarks. I am, perhaps, recommending that as a valuable remedy (when taken in large and repeated doses) the merits of which may have already been tested by those whose experience in mental diseases is far greater than my own. I, however, feel, that let me be treading in the footsteps of others, or let me be inducing others to tread in mine, that an object is gained alike pleasing to all parties; to myself, in having it in my power to afford fresh cases in support of a remedy for the alleviation of a disease which deprives man of his reason; and to others, in finding that a line of practice they may have been the first to advocate has proved successful in other hands.

17, Old-street, St. Helen's, Jersey,
May 9, 1849.

HOSPITAL REPORTS.

ST. BARTHOLOMEW'S HOSPITAL.

Cases under the care of E. A. LLOYD, Esq. Reported by T. M. GIRDLESTONE, Esq., M.R.C.S., Surgeon to the Blenheim-street Dispensary. Formerly House-Surgeon to St. Bartholomew's Hospital.

THREE CASES OF SIMPLE FRACTURE OF THE THIGH TREATED BY KEEPING UP EXTENSION BY MEANS OF A WEIGHT AND PULLEY.

In each of the following cases a long straight splint was placed on the outer side of the limb from the hip to the foot, and three short splints, which extended from its upper part to a little beyond the knee, were placed around the remaining circumference of the thigh. The patient was placed on the back. No pelvic band was used, the long splint not being for the purpose of extension, but merely for supporting the thigh and keeping the foot in its proper position. For this purpose it extended a few inches beyond the heel, and the foot was bandaged to it, which prevented the toes from becoming everted. The foot and ankle were surrounded by a gaiter, from which depended a strong cord, having a three or four pound weight at its extremity, and suspended over the foot of the bed by a pulley, placed in a line with the leg and thigh. Care was taken that the weight should hang perfectly free between the bed and the floor, and that the bedclothes did not touch the cord, so that its action was not interrupted: thus a slight and constant extension was kept up. The upper part of the long splint was fastened to the body by means of a wide bandage above the hips, and three straps with buckles served for adjusting it with the other splints round the thigh.

Case 1.—Thomas Collins, aged 65, a carpenter, tall and muscular, was admitted on April 18th, 1848. He had a simple fracture of the left thigh, about two inches below the lesser trochanter, caused by a fall from the wheel of an omnibus. There was shortening of the limb, and the broken ends of the bone could be felt projecting outwards; there was considerable swelling, with irritability and rigidity of the muscles of the thigh. It was put up in the manner described, and the weight was kept suspended from his foot for six weeks; the splints were kept on for two weeks longer. When they were removed, the thigh was perfectly straight and firm.

On July 5th he was discharged. He was then able to walk with a crutch. On August 14th he came to the Hospital, having walked from Limehouse. The leg that had been broken was as long as the other, and he could walk without inconvenience.

Case 2.—Charles Carr, aged 16, was admitted on June 18th, 1848. He had a fracture of the left thigh, one-third from the lower extremity. This, also, was caused by a fall from an omnibus. The fracture was put up immediately after his admission.

On July 20th, the weight was removed.

On July 31st, the splints were taken off.

On August 6th, he was allowed to get up.

On August 16th, he was discharged. His thigh was quite straight, and as long as the other one.

Case 3.—Sarah Atkins, aged 18, admitted on July 8th, 1848; had a very oblique fracture of the left femur, so close to the condyles that there was some doubt of its having extended into the knee-joint. The ends of the bone overlapped each other, and the upper and anterior extremity made a projection close above the patella. The limb was shortened. The injury was caused by a fall from a first-floor window. Before putting on the splints, the leg and thigh were extended, and traction was kept up for ten minutes, for the sake of reducing the fracture. This improved the position of the bones, but the leg was still shorter than the other; the splints were then put on, and a four pound weight suspended from the foot.

On Aug. 7th, the weight was removed. The shortening of the leg had disappeared.

On Aug. 27th, the splints were taken off. The fracture was perfectly united.

On Sept. 25th, she could walk with crutches. Her knee was very stiff, owing to the swelling which remained immediately above the patella. Discharged.

On Oct. 7th she came to the Hospital to be seen. She had recovered a little motion in the knee, and could walk without assistance.

March 1st, 1849, considerable thickness, and a projection of bone remained at the seat of the fracture; the motion of the knee-joint had improved, and she walked with very little lameness.

Remarks.—The method of applying the splints, and making the extension that was adopted in these cases, is here described, not on account of its novelty, but, because it is a plan of treating fractures of the thigh not often followed in London at the present day, the long splint used by Desault being generally preferred. In Desault's method, the pelvic band, which goes between the legs for the purposes of making counter-extension is disagreeable and often painful to the patient; and when the fracture is high up, it tends to draw the upper part of the bone outwards, therefore it is advantageous to be able to dispense with it. When a weight is suspended from the foot no counter-extension is necessary, as the weight of the patient is sufficient resistance. The constant pressure of a four pound weight hanging over a pulley might be supposed to give rise to some pain or inconvenience in the foot; but this is not the case, for the long splint which is fixed to the outside of the leg, and must, of necessity, touch the bed, takes off a portion of the weight. In the cases I have related, the result was decidedly satisfactory, although the first and third were accidents that were very likely to be followed by shortening of the leg. In the third case, the reduction of the fracture, and the consequent restoration of the shortened leg to its proper length, which could not be accomplished at first, was effected in a few days by the gradual and constant traction of the weight.

CUMBERLAND INFIRMARY, CARLISLE.

Reported by EVAN THOMAS, Esq., House Surgeon.

EXTRA UTERINE FŒTATION.

Jane A., twenty-seven years of age, single, reeler in a cotton-mill, was admitted into the Infirmary on the 22nd of March, under the care of Dr. Lonsdale. She looked chlorotic, had never enjoyed very good health; though always able to follow her occupation up to last Saturday, when her present illness commenced with pain in the abdomen, nausea, and purging; these symptoms still continue, though less severe. At her admission she complained of pain in the lower part of the belly, increased upon pressure; but there was no visible enlargement nor swelling; the urine was natural, and passed without inconvenience; her appetite was pretty good, tongue was slightly furred, and the bowels, from the commencement, relaxed; she had not menstruated for six weeks, though, before that period, she was quite regular. She could not attribute her illness to any cause, except, perhaps, exposure to cold. She was ordered saline medicines, common diet, and rest in bed.

March 23.—She felt much better, and took her usual diet with relish; to continue the same.

March 24.—She was remarkably well until about nine o'clock at night, when, as she was sitting by the fire in the ward, she grew sick and faint. She was put to bed, had some wine and other cordials, and soon rallied. About ten, whilst in bed, she was attacked with violent pain in the lower part of the belly, followed by violent attacks of retching and syncope. She was ordered brandy, and a drachm dose of liq. opii sed., and mustard cataplasm to the belly. At eleven o'clock the pain in the abdomen was at intervals most excruciating; there was nearly constant sickness and fainting, followed by so much depression as to threaten immediate death. The abdomen, especially the hypogastric region, was extremely tender to the touch; but there was no sensible enlargement; symptoms, like those just noted, recurred, though at longer intervals, until about twelve at noon, (on Sunday,) when she expired, conscious almost to the last. The treatment adopted was mustard cataplasms to the abdomen, and subsequently acet. lyttæ to the hypogastrium, internally ammonia and brandy.

Here I may make this remark, that as soon as the urgent symptoms set in, we surmised the probable nature of the malady, and the appearances likely to be found after death. The character and situation of the abdominal pain, occurring at intervals, followed by nausea, vomiting, and almost fatal syncope, were such as might arise from excessive loss of blood; this, in the absence of symptoms like those which generally precede and follow perforation of the stomach or intestines, lead us to draw in this case a correct inference.

The body was examined thirty hours after death; it was extremely pale; the mammæ had undergone no change; abdomen pretty full of fluid; percussion dull all over, with the exception of the hypogastric region. On opening the peritoneal cavity, it was found to contain about six pints of fluid blood; a large clot filled the brim of the pelvis, and, amidst the coagula, we found a fœtus about three months old. The coagula, which were pretty firmly attached to the peritoneum, having been removed, the ovuline membranes and the placenta were found, between the layers of the right broad ligament, forming a tumor about the size of a hen's egg. The uterus was laid open posteriorly; its cavity was slightly enlarged, and lined with decidua; there were no off-shoots of decidua into the fallopian tubes. The os and cervix uteri had undergone scarcely any change; the glands of Naboth were very prominent. A rent an inch and a-half long was found on the posterior aspect of the tumor, through which the fœtus had escaped. The coverings of the ovum at this part (seemingly peritoneum only) being extremely delicate, the placenta was doubtless the source of the fatal hæmorrhage. A reticulated membrane, like the decidua uteri, was found lining the cavity which lodged the ovum; this membrane was easily separated from the subjacent parts. The right ovary was larger and softer than its fellow, and when cut into, its upper segment presented an oval shaped body, having a central cavity, surrounded by a broad fibrinous layer, and around this a well defined vascular zone; in other words, what is called a "true corpus luteum." Externally, there were two irregular cicatrices, in one of which the aperture had not quite healed.

The left ovary was externally puckered, and presented, when cut into, a gristly appearance, and contained a false corpus luteum. There was no undue vascularity about the fallopian tubes,—an ordinary sized probe could be introduced through the distal end for about two inches. The end of the probe being exposed with the knife, it was then seen that the tube had undergone a little contraction; a finer probe passed readily along the left to the uterus, and the right to the placental tufts.

The following account was received after the poor woman's death, from the landlady of the house, where she was a lodger. It is interesting, only as giving a probable date to the lesion. She had always bore a good character for steadiness and industry; for the past two months she had suffered much from stomach complaint; she used to be so poorly in the morning, that she could take no breakfast before going to her work; she grew better as the day advanced, and relished her tea and coffee at midday. On Saturday, March 17, she went to her work as usual, and, in the evening, she went out for a walk in company with other young women. On her return, about nine o'clock, she was attacked with griping pains in the belly, sickness, fainting, and great inclination to go to stool. With difficulty her friends managed to get her home. She went to bed immediately, becoming very faint and sick. She took some whiskey toddy, which relieved her, but she passed a very restless night.

March 18.—Complained of much pain in the abdomen, and fainted as soon as she made an attempt to walk about the room.

March 19.—Was much better; took her meals; had no fainting fits, though she sat up.

March 20.—Felt very sick and languid; inclined to faint upon any exercise.

March 22.—Admitted into the Infirmary.

PROGRESS OF MEDICAL SCIENCE.

GERMANY.

CHEMISTRY OF DIARRHŒA.

Oesterlen, in *Henlé and Pfeuffer's Zeitschrift, Band 7, Heft 3*, contributes an important paper on the Chemistry of Diarrhœa, a disorder which is exceedingly prevalent in the Baltic provinces, especially in conjunction with ague and malaria disorders.

The older chemical schools attributed extraordinary appearances to the excrements, bile, and blood of the dysenteric, but valid researches have not yet been made; so that this disease, which offers most to the chemist, has perhaps been most neglected by him. And in pursuance of these pathological errors, therapeutic singularities have obtained. Diarrhœa has been treated with mercurials, since the bile is supposed to act some mysterious part in the tragedy; or patients already purged ten and twenty times in the hour, have been treated with laxatives, on account of an alleged dependence of tenesmus on accumulation of fæces. It was only a few years ago that Masselot and Follet for the first time analysed the blood in this disease, and their analyses, grouping many cases together, will allow little stress to be laid on the results.

Many circumstances had for fifteen years drawn the Author's attention to the evacuations in these diseases, especially in the cases seen in the Baltic epidemic of the autumn, 1846. Their appearance, the blood they contain, their physical properties, and their enormous quantity in the twenty-four hours, all indicate them as an important element of the disease. So, likewise, the often rapid collapse, the rapid wasting, (especially of the face,) and the manner in which persons previously in robust health are completely prostrated, all these circumstances, which are unexplained by anatomical alterations in the intestinal canal, point to the statement that the materials set free from the body greatly preponderate over those taken into it, and that this preponderance occurs with a rapidity and intensity differing only in degree from Asiatic cholera. Although the dependence of the two sets of facts is apparently obvious enough, yet he had never met any experiments upon either the composition or quantity of the evacuations. After long delay a favourable opportunity presented itself in the following cases.

The three first were of diarrhœa; the last was the diarrhœa occurring in the latter stage of Bright's disease. They seem to have been severe, but not extraordinary cases, and the examinations were not made in the earliest and most acute stage. The first and last terminated fatally; the others completely recovered. The analyses were conducted with the assistance of Dr. C. Schmidt. The method

of examination, in most instances, included the urine; but the small quantity of this, and, in all but the taste, its healthy characters, precluded any error of consequence.

In the four cases, on an average, the quantity of evacuation in the twenty-four hours, amounted to 2433 cubic centimetres, or to 721 cubic inches English.

The average of nine examinations gave the daily loss of albumen 50½ grammes, or 782¼ grains English. The albumen was (a) albumen of serum (b) epithelial structure; on an average of three comparisons, the latter amounted to one-sixth of the of the former variety.

On an average of eight examinations, the quantity of fixed salts thus removed in the twenty-four hours was 14½ grammes, or 224¼ grains English.

The author compares the large quantity of albumen thus obtained with two other cases; one, the flux produced by calomel and jalap, in a case of chronic disease of the brain; the other, the (loose?) stools of a typhoid patient. In the diarrhœa, the albumen amounted, in the average of eight examinations, to 24·75 parts in the thousand; in the two latter instances, to about 3½ parts per thousand, the two being nearly alike, 3·3 and 3·9. This is scarcely a seventh of the preceding quantity.

Comparing the composition of the stools with that of the blood, from which they must be derived, the following points are noticeable:—

The quantity of albumen in the whole blood-mass may be estimated at 800 or 900 grammes,—about 29½ oz. English. Thus, in less than three weeks, such a daily loss as the estimate above would equal the whole quantity normally present. Or, daily, a seventeenth of the whole quantity is removed. Again, taking the quantity of fixed salts present in the blood as about one-tenth of the albumen, the daily loss may be estimated at 1-170th of the whole quantity in the blood.

The *absolute daily loss* of albumen fluctuated considerably; but the *per centage* of albumen present, or its number of parts in the thousand of evacuations, had a very constant and well-marked relation to the severity and date of the disorder; subsiding as it subsided, or aggravated on its relapse.

Some blood taken by cupping was examined in two instances. In both the quantity of water was increased, the quantity of salts was nearly normal, while the remaining constituents had decreased. The impoverished blood had been able to replace the water lost, while the organic constituents were still missing.

The Author goes on to apply these chemical results, to explain the condition of the different organs and functions. The small anæmic pulse, the sunken eye, the small quantity of urine, the condition of the secretions generally, are all referred to in turn. But our readers will have heard or read most of these before. We have, therefore, only to add, that he appears inclined to regard diarrhœa as essentially a chemical process, manifested by the tendency to thickening of the mucous membrane, and exudation from it. To this we can only say, that on like grounds we must call all secretion, both healthy and morbid, a *chemical* process. This we must hesitate to do. Yet, until we can state why the healthy intestine secretes healthy intestinal mucus, we cannot tell why the diseased one should separate its diseased product, however different in appearance and quality the latter may be.

IRELAND.

[From our Dublin Correspondent.]

DUBLIN OBSTETRICAL SOCIETY.—MARCH 26.

Dr. SHEKLETON in the chair.

Dr. Churchill said, that having been called upon by the Secretary to read a paper that evening, he was placed in a rather difficult position. He did not like to refuse, being at all times anxious to contribute what assistance he could to the Society; but yet a variety of other engagements quite precluded the possibility of his writing such an essay as he could have wished. He had no resource, then, but to throw himself upon the indulgence of the Society, whilst he laid before it some observations he had made on the treatment of certain diseases, which, if they appeared too trifling, he begged them to be accepted as a proof, at least, of his willingness to do what he could.

IODINE IN CONGESTION AND EROSION OF THE CERVIX UTERI.

Dr. Churchill proceeded to say, that after the elaborate work of Dr. Bennett, and the excellent paper of Dr. Evory Kennedy, it would be superfluous for him to enter into a description of congestion and erosion of the cervix uteri. He quite agreed with those writers as to its being much more frequent than was heretofore believed, and, also, that it is neither easily detected nor easily cured without the use of the speculum. At the same time, he thinks it neither necessary nor becoming to propose an examination with this instrument in every case of vaginal discharge; a degree of delicacy and discrimination should always be exercised. This is particularly necessary with nervous women. The author has known irremediable mischief result from neglecting this consideration. Again, if it be possible to avoid it, he should consider it wrong to propose an internal examination to an unmarried female. In accordance with these views, whenever he is consulted for a whitish or yellowish vaginal discharge, or for leucorrhœa, Dr. Churchill always makes an attempt to cure it by general means, such as blisters to the sacrum, balsam of copaiba, ergot of rye, &c., with local baths of cold water or astringents. Many cases are thus cured; but if he fail, he thinks it fair to assume that there is either congestion or erosion, requiring other local treatment, and in the majority of cases he has found this to be so. The usual application is nitrate of silver, acid nitrate of mercury, nitric acid, chloride of zinc, all of which he has repeatedly tried with great benefit; but it occurred to him (Dr. Churchill) that caustic iodine would probably answer better than any of these singly, inasmuch as it possesses sufficiently strong caustic properties, and, in addition would be likely to act beneficially in reducing the enlarged cervix. The preparation Dr. Churchill employs is of the following strength:—℥j. Iodinii, ℥ij. Potassæ hydriodatis, ℥ij. Aquæ destillatæ, ℥ij. Spiritus vini. ℞. and, after four or five years trial, he can truly say that he has found it the best application for congestion, erosion, or superficial ulceration, of all that he has tried. Dr. Churchill usually commences with a single application of nitric acid, or the acid nitrate of mercury, and then, after a few days, he paints the entire cervix with the iodine. This must be repeated once or twice a week, but not oftener, for whenever he has attempted its more frequent use he has found the uterine irritation rather to increase than diminish; and this will probably explain why these trifling complaints take so long a time to cure. Dr. Churchill had seldom succeeded in less than two months if the congestion was considerable, and many cases have required a much longer time. The application occasions no pain at all, unless the orifice of the vagina should be touched by the caustic, which may happen if it be applied too profusely. In one case the patient complained of a metallic taste in her mouth, in five minutes or less after each operation. After one or two applications, the cervix will generally be found to have diminished in volume, to have lost its tenderness, and the eroded surface to have lessened in extent, and to have assumed a more healthy appearance. Dr. Churchill strongly recommends that the application of the iodine should not cease abruptly, but first be diminished in frequency, then left off, and resumed if, as is very common, any of the symptoms return.

TINCTURE OF INDIAN HEMP IN SANGUINEOUS UTERINE DISCHARGES.

Dr. Churchill mentioned that he was indebted for the knowledge of the utility of this medicine to Dr. Maguire, of Castleknack, who had discovered its value in this class of cases by accident. Dr. Maguire had prescribed a small dose of the tincture of Indian hemp for a poor woman labouring under some form of neuralgia; and on inquiring into the effects a few days afterwards, the patient declared that it had cured both her complaints, and then, for the first time, informed Dr. Maguire that she had been suffering from menorrhagia. This led him to try it in some similar cases, and finding equally satisfactory results, he mentioned the fact to Dr. Churchill, requesting him to try it, which he has done extensively. Dr. Churchill mentioned it to the late Dr. Hunt and other friends, and the remedy he believes has had a pretty fair trial; and if their experience (as he believes) confirms his, the Profession has reason to congratulate itself upon the addition of a most valuable remedy for a class of diseases whose materia medica has been hitherto very limited. The largest class of cases in which Dr. Churchill has found the most unqualified benefit are those of menorrhagia, where the discharge, though excessive, is fluid, and but little mixed with clots, and when the uterus is not enlarged. In many such cases five drops of the tincture three times a day have stopped the discharge in 24 or 48 hours. When there is pain, too, if it be not excessive, relief is obtained without the addition of another anodyne. In other cases, when the discharge, whether too much or not, has returned too frequently, Dr. Churchill has succeeded in arresting or postponing it to the proper period by the tincture, just as can be done by means of ergot of rye. In those cases of menorrhagia, when the uterus is much congested and enlarged, and where the discharge is largely mixed with coagula, although it has succeeded in many cases, yet it has failed in other instances, and the success in some has been incomplete. Nevertheless, even in these, it is of great value; and finding that it possessed power even over uterine hæmorrhage, it occurred to Dr. Churchill to try it in threatened abortion at an early period of the attack, when the hæmorrhage was slight, and the pains rare and weak. In such cases, ergot of rye is out of the question; lead has but little power. Opium and cold applications and quiet are our principal remedies, but they often fail; and, therefore, the addition of a direct and powerful agent which should combine an astringent with an anodyne, would be a valuable acquisition. Dr. Churchill has now tried it in six or seven such cases, and he has found that when employed sufficiently early, it succeeded remarkably well, but that at a later period it failed partially or wholly. Lastly, Dr. Churchill has tried it in three cases of cancer at a tolerably early period. He gave it on account of continued draining of blood, not to any great amount, and thought that perhaps its anodyne quality might to a certain extent supersede the use of opium. He does not think that these cases are sufficient for any definite conclusion as to its value; but the results will certainly induce him to repeat the trial. He does not for a moment suppose that it or anything else will permanently arrest the downward course of cancer, or that the hæmorrhage will not return; but every degree of success, however temporary, every relief, even though slight, is of great value in these cases. Dr. Churchill does not pretend to explain its *modus operandi*: he can only say, that it appears to exert an astringent power in hæmorrhages from mucous surfaces, and, also, to have a sedative or anodyne effect. The preparation he has invariably used is Mr. Donovan's tincture of the resin. He begins with five drops three times a day, in a few cases increasing it to ten, but seldom more. The effects are very soon seen, generally in twenty-four or forty-eight hours, often much sooner, nay, in some cases mentioned to Dr. Churchill by Dr. Hunt and Dr. Maguire, the effect was instantaneous. In some cases the beneficial effect was accompanied by a slightly unpleasant feeling in the head, resembling that from an extra glass of wine. In one case only has Dr. Churchill seen any more disagreeable results; but in that, five drops produced an extraordinary degree of nervousness and a sense of sinking, almost of dying, which gradually passed off.

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THE MEDICAL TIMES.

SATURDAY, MAY 19, 1849.

It is only within the last few years that the College of Surgeons of England has required of Candidates for its Diploma to have attended Midwifery Lectures, but even now the Court of Examiners does not test the young Surgeon's knowledge in this important department of Medical Science. The Apothecaries' Society has for a long period demanded of those who seek its license, a proof that they have attended to Midwifery practice; yet obstetrics form no portion of the examinations at the Hall. These are the two Corporations with which General Practitioners are more especially associated, and it might be concluded, therefore, that midwifery was a department of science with which they had very little to do. This is so far from being the case, that nine-tenths of them derive a considerable portion of their income from that source, and in no other science is more skill required occasionally to be called into exercise.

It is not to be expected that all Medical Students will pay that attention to obstetric science which its importance demands, when it is known that our licensing Corporations are satisfied with only a Midwifery Certificate. The possession of a piece of paper will not enable a Practitioner to detect the nature of a presentation. He may have attended Lectures and yet mistake the breech for the head, or be scared by imaginary dangers when nature is operating in the best and safest manner. The Corporations, in neglecting to demand of their candidates a certain amount of knowledge and experience in obstetrics, act unjustly to the Profession and the public; and we are not surprised, therefore, that when women die in child-bed, the Medical attendant's skill is frequently called in question. Public safety and professional honour require our Colleges at once to bestir themselves in this matter, and henceforth to grant no more diplomas without being satisfied that candidates are duly qualified to practice midwifery. We think this would be one of the most effectual means that could be adopted for diminishing the number of coroner's inquests upon women who have died in the puerperal state; now of too frequent occurrence, even though the patients have been attended by regular practitioners. This is deeply to be regretted; for, when the skill or judgment of one of our brethren is called in question, an indirect injury is inflicted upon the whole Profession.

Within the last fortnight an inquest has been held at Bangor upon a young married woman, who died in child-bed under very singular circumstances. It was her first labour, and every thing seemed to progress most successfully. Her medical attendant was Mr. J. Richards, a Member of the College of Surgeons, and from the witnesses who were examined before the Coroner we learn, that the patient was delivered about half an hour before the arrival of the accoucheur. The funis appears to have been properly divided by some of the women present, and there was no more hæmorrhage than is usual in ordinary labours. When Mr. Richards arrived, a person named Elizabeth Parry states, that she had the cord and part of the placenta in her hand, but "let go all when he came." On his arrival at the bedside, he said, "I cannot find it,—you have loosed it, *and it has gone in.*" He then examined the patient, and said: "I have never seen a woman like her." She was at this time on her hands and knees, but was desired by Mr. Richards to lie down. He then took off his coat, turned up his shirt-sleeve, "and examined as Doctors do when they take away the placenta." It is stated by one of the witnesses, that Mr. Richards "might be an hour or an hour and a half engaged in the examination." The woman became exhausted, and shortly after died. Mr. Herbert, another medical gentleman, was called in just before this event, and he said that, on examining externally, he found no evidence of the presence of any substance in the uterus. After the death of the woman, the placenta was discovered beneath her. She had turned, subsequently to the division of the funis, and, the after-birth being expelled, she lay upon it without its being discovered. The jury returned a verdict, that Mr. John Richards "was not guilty of gross negligence or ignorance, but that he greatly erred in judgment in not causing a more diligent search to be made in the bed for the placenta before entering upon such manual examination."

This is a most singular case, and its publication may perhaps be of some service to young accoucheurs. The grand mistake was, the not searching diligently in the bed for the placenta. In this instance it was expelled immediately after the child; and the woman having been upon her hands and knees, rendered it not improbable that it might have slipped underneath her. There was no cord to be felt projecting from the os externum—no placenta within reach of the finger—the uterus, externally, appeared well contracted—and there was nothing more than the ordinary quantity of blood lost. The external search, should have preceded the internal manual operation. If, after diligent examination of the bed, the missing after-birth could not have been found, then a careful internal investigation would have been necessary. The cord might have been ruptured at its insertion into the placenta; and the os uteri contracting, might have retained it. Hence it might have become necessary subsequently to search for and extract it. A placenta, however, retained for a few hours without hæmorrhage, is not so dangerous a thing as some have supposed. Denman relates a case which he saw where the placenta was retained till the fifteenth day after the birth of the child, and then expelled, with little signs of putrefaction except upon the membranes. An Accoucheur, therefore, may safely wait, at least an hour or two, without any danger to the mother, when there is no flooding, to see what nature may accomplish. That there is a placenta *somewhere*, after the expulsion of a fœtus, is a rational conclusion; for we are not aware of a gravid uterus ever lacking this viscus. We, of course, view with every member of the Profession the proceeding of introducing the hand into the cavity of the uterus as one that is not unnecessarily to be had recourse to.

THE SOUTH LONDON DISPENSARY AND ITS MEDICAL OFFICERS.

Five medical gentlemen, connected with this Institution, have resigned their respective offices in consequence of the election of a Surgeon to it, who keeps an open shop, and who is stated to be a retailer of quack medicines. We admire the spirit which has regulated their conduct; it is evidently prompted by the desire to promote and maintain the dignity and respectbility of the Profession,—a feeling we should like to see more generally manifested and rewarded. We think, however, that they are only partially just in this case. They confound two things which should be scrupulously kept apart, and which, indeed, have no necessary connexion. The open shop, is one question; the retailing of quack medicines, is another, and a widely different one. Why a Surgeon who keeps an open shop, should be less eligible for any official situation than one who does not, we are at a loss to imagine. Many distinguished Practitioners began life, and honourably too, in this way. It was the stepping-stone to their success; nor does the fact in any way deteriorate from their worth and usefulness. Some men commence their professional career with a horse or carriage,—we will not stop to consider how many of these end it without either one or other,—and, according to such a mode of reasoning, they are far more respectable, and claim much higher considerations, than the man who steadily and quietly pursues his course on foot. All such distinctions are ridiculous:

> Worth makes the man, and want of it the fellow.

All men are not equally provided with means to secure such a position as the dignity of the Profession may possibly seem to require; but this is no just ground why they should not endeavour to obtain such a position by keeping an open shop, if, in all other respects, they conduct themselves with integrity and honour in their relations to their professional brethren; nor would it be correct to apply to them one standard of respectability, and another to the more favourably endowed with the gifts of Fortune.

The struggles which most of us have to experience in the arduous attempts to live, are the elements out of which a vast amount of our personal excellence springs. They force knowledge upon us,—they sharpen our perceptive faculties,—they develope our talents, and proportionally enlarge our usefulness. The free play which is allowed for the energies of the intellect, for the enterprise and genius of individuals, in commerce, and in every business and pursuit of life, should not be withheld from the more necessitous of Medical Practitioners. The question should not be, whether they keep an open shop or not, but whether they have claims on our consideration, from their talents, acquirements, and conduct. This is the only

broad rule on which we can act. Refined distinctions are as impracticable as they are unjust.

How far the retailing of quack medicines affects the position of the practitioner, is another and important question to consider. We unhesitatingly condemn it. A man sells that which he knows, in the majority of instances, to be a gross imposition upon the public, whether examined in relation to its properties or the price that is paid for it, and he is tempted to retail it from the exorbitant profits which it yields. *This* we regard as beneath the dignity of the Profession; and we think the decision of the Medical Officers, in reference to the retailing of quack medicines, rests upon a basis altogether unobjectionable. Undoubtedly the sale of such articles does detract from the respectability of professional character.

THE VALUE OF MEDICAL PRIZES.

The annual prize distributions at the Medical Schools being just concluded, a few remarks on the advantages and disadvantages of the system will not be out of place.

Only a few years since, the most important part of the Medical Session was its commencement, for then the Professors in the various schools did their best to dazzle, by the brilliance of their eloquence, the fresh men.

The object sought by each Lecturer in those annual exhibitions seemed to be, to extract from the students those precious medals which men of all ages and countries prize, and the abundant possession of which is considered the climax of greatness. In the palmy days of "introductories," the names of Hippocrates, of Galen, and of Hunter, were duly honoured; the long space of time intervening between the days of the father of physic and the great English surgeon affording materials enough for the most long-winded orator to discourse on Professional subjects, and to prove to the inexperienced students that he was a very clever man. The glories of the "introductories," however, are waxing dim before the rising sun of the Medical Prize system.

Scarcely is there a School of Physic now which has not its medals and certificates to allure enterprising young men; and hence it is a matter of importance to ascertain what good or evil results to them from the institution of these academical honours.

That it is desirable to encourage industry, talent, and good conduct, all will allow; and prizes will in some measure do this. With many young men there is doubtless a commendable ambition to take a high standing among their fellow-students—one probably, which, owing to a retiring disposition, a want of friends or money, they might not otherwise be able to attain. The working for prizes, moreover, will engender and foster habits of close application, and, as a rule, lead to regular attendance on the several classes.

Other advantages might be mentioned resulting from the bestowment of prizes, but we think that they are all more than counterbalanced by their injurious tendencies.

Prizes are evils when a student devotes his attention so entirely to one subject, in order to gain honours, that other important branches of education are neglected, or when he makes mere reading and attendance on lectures his only occupation. That these evils are real, and not imaginary, every person conversant with the matter will allow. We have known students pass through what is called a brilliant career of medical studies,—the heroes of the lecture-room,—unfortunate students, we call them, who, by their constant habit of mere reading, have got their memories crammed with practically useless materials, but, neglecting to cultivate their other mental powers, their faculties of observation and reflection become impaired, and their acquaintance with the practical details of their profession and the duties of the bed-side little advanced.

There are evils, also, too frequently connected with the awarding of academical honours. Candidates for prizes are not always equally educated. Thus it often happens that senior and junior students come together as competitors, or that some have been previously at another school; or, as in colleges having a Faculty of Arts as well as of Medicine, that some have removed from the former to the latter department. Under these circumstances, prizes are not always awarded to the most deserving. We here suppose every opportunity of favouritism is guarded against as far as possible, by the concealment of the names of the competitors from the judges.

But the merit attaching to prizes varies indefinitely. At one time candidates may be numerous or formidable to each other. At another, a student may meet with no opposition, or there may be no adversary that he fears. This will particularly happen when the class is small, or those who compose it know, or think they know, each other's powers. Here some will retire from competition for fear of one who may have been generally successful, or towards whom they think some partiality has been shown by the Lecturer. Other circumstances affecting the merit of gaining prizes are, the character and style of the questions, the previous knowledge of the peculiarities of the examiner, and a due attention to his *hobbies*. We will not, however, extend our remarks, believing we have said enough to show there are serious defects in the present system of awarding prizes. Mere reading for honours interferes with the satisfactory advance in useful professional knowledge; and we may safely affirm, that there are not a few students, diligent in the wards of the Hospital and in the Dissecting Room, whom the glitter of prizes will not induce to become competitors.

In conclusion, we would suggest that the merit of a pupil should not be decided by one trial, but that there should be several written examinations in every class during a session; that the honours should be conferred on those who have maintained the highest position on the several occasions, in the different classes, and that these examinations should not be optional, but required of every member of the class. By such an arrangement, we believe, the most worthy men would obtain distinctions, and the prizes be made to stimulate the whole school to diligence, instead of, as at present, a few individuals.

THE CHOLERA IN DUBLIN—BENEFITS OF SANITARY REFORM.

The Cholera appears to have obtained a firm footing in Dublin, although, as yet, but comparatively few persons have been attacked. There can be little doubt but that the approach of the epidemic has been impeded, and its virulence much mitigated by the active sanitary measures adopted by the citizens. The Sanitary Association of the Irish Metropolis perceived, when the Nuisances Removal Act was passed, that it was likely to remain a dead letter if its execution was left to the ordinary divisional magistrates of police. These gentlemen have, usually, as much work as they can do; and any sudden and considerable addition to the business of their Courts would prevent their adjudications being conducted with that care and circumspection for which they have been hitherto remarkable. Under these circumstances, the Justices of Peace of the borough, who had previously nothing to do, instituted Courts for the adjudication of cases under the Nuisances Removal Act; and, with the assistance of the police and the parish officers of health, they have carried out the provisions of the Act with most praiseworthy energy. Up to Easter, they adjudicated in 4341 cases of alleged nuisance; of these, 3864 had been abated under the orders of the Court, and as each of these required on an average about four hearings, we may form some conception of the quantity of business done. The result is, that Dublin is now comparatively clean; and inasmuch as the Boards of Guardians have divided the city into districts, to which medical men are appointed, and have also provided separate hospitals for the reception of the sick, the citizens feel that every human effort has been made, and there is, therefore, under the circumstances, but very little panic. As early as January last, the epidemic threatened to locate itself in the city. Within a few days, six persons were attacked in St. Mark's parish, living a few doors from each other. In this irruption, the best effects were obtained by putting into operation the district visitation system, as first tried at Dumfries. The visiting physician found in the immediate neighbourhood of the houses in which the disease broke out a great number of cases of diarrhœa; these were easily checked; and there has since been no cholera there. The next place, where the disease presented itself, was in the convict depot at Smithfield. Eight persons were attacked, of whom three died. One of these cases presented a remarkable symptom; a double bruit audible along the course of the ascending aorta. After death an autopsy was made by Mr. Rynd, under whose care the man was, and the heart and great vessels were brought to the Pathological Society of Dublin by Dr. Stokes. A very firm polypus was found in the left ventricle, passing through the orifice of the artery up into the vessel, so as evidently to have prevented the valves from closing. For some weeks after the Smithfield cases no more cholera was heard of in the City, when it suddenly broke out in the Hardwicke Hospital, at first among the patients; but cases of the disease were subsequently admitted, until it was thought advisable to establish distinct Hospitals

cholera patients. There were altogether thirty-two cases of the disease at the Hardwicke Hospital, of which eighteen died. One of these cases was deserving of attention; the disease intermitted for several hours, and then re-appeared and proved fatal. After death, it was ascertained that a considerable effusion had taken place into the left pleura; the liquid was exactly similar to the discharges from the stomach and intestines, with scanty patches of lymph upon the surface of the pleura. Dr. Gordon, who exhibited the lungs at the Pathological Society, considered it probable that a pleuritic inflammation had established itself in the interval between the first and second attacks of cholera. The number of cases of cholera at present being admitted into the different hospitals do not average more than four or five a day.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—MAY 8, 1849.

THOS. ADDISON, ESQ., M.D., President.

A Paper was read, entitled—

Remarks on the Causes and Morbid Anatomy of Mental Diseases. By JOHN WEBSTER, M.D., F.R.S., &c.

The Author commenced his paper by observing, that, having had two of his communications already published in the 26th and 28th volumes of the Society's Transactions, on the Statistics and Pathology of Mental Diseases, he presented the present as a further exposition of the subjects then discussed. He then stated, in illustration of the comparative frequency of madness in the two sexes, that, out of 1,798 lunatics admitted into Bethlem Hospital, during six years ending the 31st December last, 1,094 were females, and only 704 male patients. He next alluded to the causes apparently producing insanity, which he divided into moral and physical, besides hereditary tendency to mental disease. Of the male lunatics, nearly one-half, or 346, became mad from moral causes; whilst the proportion of females was not quite so considerable, being 489 of the entire number. By physical causes, less than one-fourth of the male lunatics, or 156, became insane; whereas, amongst the female patients, the proportion was rather larger, being 282. Hence, speaking generally, moral causes produced half the total cases; but physical causes only one-fourth. The principal moral influence which occasioned insanity amongst males, was reverse of fortune, whereby 86 examples are recorded. Next, anxiety, which furnished 69 instances. Then religion, giving 45 cases; lastly, love, which caused the loss of reason in 18 men. Amongst female lunatics, anxiety was the most frequent moral cause, producing 79 instances out of the 489 patients classed under the above category; whilst 69 cases arose from religion; 62 from the loss of relatives; and 57 from the more powerful influence of Cupid's tender passion upon the susceptible feelings of women. Fright caused insanity in 50 cases; reverse of fortune in 49; whereas, amongst men, as already stated, the same cause produced nearly treble that amount, speaking comparatively. In regard to physical causes, of the 156 male lunatics so affected, 80 originated from intemperance; and of the 282 female lunatics similarly classified, 117 arose from puerperal disease. Other physical causes were subsequently mentioned by the Author, before passing to the examination of hereditary tendency to mental complaints. Of 704 male lunatics previously enumerated, 219, or 31·10 per cent., had hereditary tendency to mania; but of the 1,094 female insane patients, the proportion was larger, namely, 390, or 37·47 per cent. The Author, amongst other remarks respecting the influence of hereditary tendency in producing mental disease, said, such an important fact, wherever it exists, should be always well considered by parties forming matrimonial engagements, especially when both families are unfortunately so stained. He next adverted to the age at which insanity is most likely to supervene. In males, he stated, the most susceptible time of life was from 30 to 40; but in females it was earlier, being from 20 to 30. The Author subsequently noticed the two sections of Psychological Physicians now dividing the Profession; namely, the "Vitalists," and the "Anatomists;" of which latter body he is himself a disciple, since he considers their doctrine the most rational, and in a greater degree consistent with the present advanced state of pathological knowledge respecting mental diseases. The Author afterwards gave a synopsis of 67 dissections made at Bethlem Hospital, of which the following is a summary of the diseased appearances observed in the brain and membranes:—In 53 cases, effusion of water had taken place in the ventricles. In 53 cases, also, there was infiltration of the pia mater In 38, turgidity of the cerebral blood-vessels. In 30, the arachnoid membrane was thickened and opaque. In 26, the colour of the brain was altered from its natural tint. In 15, there was an effusion of blood within the skull, besides other alterations of structure, as mentioned by the Author. The organs of the chest were likewise more or less diseased in as many as 62 of the patients; whilst in 30, morbid changes were likewise noticed in the abdominal viscera; so much so, indeed, was this the case, that the immediate cause of death, in a number of the insane patients referred to in the present communication, was apparently disease in these parts, but, more especially, affections of the organs of respiration. Dr. Webster then alluded to the long period during which some of the lunatics had laboured under mental aberration, particularly females; one female lunatic having constantly resided in the incurable ward of Bethlem Hospital for upwards of half a century, or actually fifty-four years; thereby showing, that the loss of reason is sometimes not incompatible with longevity. After again referring to the deductions contained in his previous papers communicated to the Society, the Author concluded by remarking, that the facts and statements now brought forward fully confirmed his former observations, and he hoped they might prove useful to students of Medical Psychology.

Mr. Solly: I cannot but express my regret, that in the detail of the cases in the paper, as it regards their *post mortem* appearances, there is no reference to the cortical substance of the brain, since all experience warrants the belief that it ministers most to the mental faculties. I think that in these investigations we should carry our researches into the individual portions of the brain, or else the pathological facts which we arrive at are not facts at all. Dr. Bright, in his interesting papers on this subject, refers especially to the colour of the cortical substance of the brain; and, from my observations on the brain of the insane at Hanwell, I have found the colour changed, and the brain more or less hypertrophied. Therefore it seems to me a pity that Dr. Webster did not endeavour to obtain for us more information on this head, and also as to whether the medullary substance of the brain and the ganglia were involved in the disease. There is one fact, however, which is interesting, as shown in the paper, namely, that in almost all the cases the pia mater and the arachnoid were affected, since, as these are in close contact with the hemispheric ganglia, we know that one portion cannot be diseased without involving the other.

Dr. Sutherland: This Society, I think, is deeply indebted to Dr. Webster for his most interesting details; because any one who has investigated these cases must be aware how very difficult they are to come to right conclusions upon, and that it is very seldom we are able to correct our previous views by subsequent examination of cases. Difficulties beset us at every step; we find, that what obtains among patients in our hospitals and asylums, does not obtain in other cases; the symptoms or appearances in patients of one class of society, are not found among patients of another class; for instance, the proportion of cases stated to arise from hereditary taint is said to be one-eighth in the lower class and one-half in the higher; and then, as to sex, there is a larger proportion among females of the lower class, but a larger proportion of males in the higher; and thus we may be greatly misled if we consider that what obtains under one class of circumstances is sure to be developed in another. And not only so, but a difference is observable in respect to occupation; thus, there is a greater proportion of insanity in the agricultural districts; the proportion of sane to insane among that class is 1 in every 800; while in the manufacturing districts, it is 1 in 1,200; and therefore, in following the statistics in the paper, we must be careful to make allowance for the class of patients. Then, again, differences in climate and diet seem to operate in this disease; in marshy districts dementia and imbecility are common. As to the pathology of the disease, I differ somewhat from Dr. Webster. I mean, not with respect to the *post-mortem* appearances, but in its widest sense, drawn from the circumstances of the patient as well as the treatment. Insanity may take its rise from a nervous centre, or from the liver, or the uterus primarily; and it may be idiopathic or symptomatic; but whether the one or the other, I think we must look to the cerebrum. With respect to the *post-mortem* appearances, my experience corresponds with that of Dr. Webster's. Mr. Solly, however, has drawn attention to a subject which is very important. There is generally a state of hyperemia in old cases; in some venous congestion, in others apthous congestion; but as regards effusion into the ventricles, I think in old cases this is the result of hypertrophy of the brain. But few would consider that all they see on a *post-mortem* examination had occurred during life; and even during life the symptoms are difficult to reconcile. From analysis of the urine, we have sometimes *plus* and sometimes *minus* of lithates; some have shown that there is a *minus* quantity of phosphorus in some, and that it is *plus* in others. As to the blood, I think that it is not only the quality, but the quantity which has to be taken into account. There are many in St. Luke's, where the disease has arisen from a low diet, which Liebig calls rens. Another thing: the condition of the nervous force is a very important point. These, however, are only some of the subjects which should engage our attention; and it behoves us to take a wide view, not limiting ourselves to only a part of the conditions or symptoms attending the disease.

Dr. Webster: Mr. Solly has remarked that there were no allusions made to the colour of the cortical substance of the brain in the paper; but that gentleman should bear in mind, that, for the purpose of saving the time of the Society, the cases were not read in which the morbid appearances are set forth; and the general epitomy of them which was read gave only the chief characteristics. It will be found, on perusing those cases that the points mentioned are alluded to, and I think it sufficient to state, that perfect confidence may be reposed in them, since the observations were made by those most able anatomists, Mr. Lawrence and Mr. Coote. Then as to what Dr. Sutherland has remarked with regard to the sexes. Certainly, in the lower ranks, there is a greater proportion of female than of male insane, and that in the higher classes there are more males. But among those in Bethlem they must not be regarded as poor at all. Many of them are clergymen, governesses, merchants,—many are people of education; and this is remarkable, that they come from all parts of the country; one is from the north, another from Exeter, and so on. Dr. Sutherland has also remarked that climate will be found to have a considerable influence in this disease. This is a just remark, and is borne out by all experience. If you take a bird's-eye view of Europe—take Norway and Sweden—go gradually south, and as you go, you will find the tendency to insanity diminish. In the north the proportion is 1 to 550. In Northern Germany the proportion is greater than in South Germany; in Belgium more than in France; in the north of France more than in the south. In North Italy insanity is twice as common as in the South; in Spain it is not so common as in France. Again, cross the Mediterranean; take Egypt and Syria—there it is very rare; in the Alexandria Hospital, during ten years, there had only been one Arab admitted, a lunatic, although the population is from 80,000 to 90,000. But independently of climate, the political or religious character of a country is found to have great influence. In North Germany, a Protestant country, it is very prevalent; and it is more frequent amongst Dissenters than among those of the Catholic religion. Then as to the politics of a country. How frequent is the occurrence of lunacy in Paris. I have been twice there lately, and visited its Institutions: during the last revolution a great

number lost their reason; the *bouleversement* produced a most lamentable effect there; and the same thing happened in former times; as among the Crusaders; during the Reformation in Germany, also, lunacy was very common, as also during the civil wars, the Long Parliament, and in Cromwell's time; and when the questions of the day were the upsetting of thrones, and when kings were made by Napoleon, this had the effect of filling the madhouses with kings—the Bicetre having no less than fifteen Louis XIII. at one time; so that it will be seen that these political convulsions had a most melancholy effect on the mind. In this country lunacy is more common in Scotland than in England, from the circumstance of a greater tendency to hereditary mania. And it was remarked of the old French nobility, that it was more common in the higher ranks. This may arise from there being less mixture in the blood of the lower classes than in the higher. The chemical point in reference to lunacy is also very important; and the more surgeons study the disease both chemically and pathologically, the more good will arise to society.

Mr. Streeter: I know of no class of diseases in which there is so much difficulty in the way of prosecuting our studies than in reference to the Lunatic Asylums of our country; there is no plan there by which medical men can prepare themselves for their duties in courts of justice as to evidence. Therefore, when Dr. Webster brings forth a large mass of information on this subject, I think he deserves great credit; and although there may be much that is omitted, yet I do not blame him, but rather wonder how he has been able to do so much. I feel disposed to find as much fault with Mr. Solly as he did with Dr. Webster; we might have expected at any rate one thing more from him, namely, that he would have localised those changes in structure. In those cases where puerperal mania has led to the disease, the posterior hemisphere will be found to exhibit a deeper colour; and I am persuaded that if the subject be followed out by the aid of the microscope and by chemical analysis, much additional light will accrue to us. Another point on which we want information is, the incipiency of insanity, that state which Dr. Winslow has described under the name of incubation of insanity; it is one in which great benefit arises from the active employment of medicines. It is also important to remember that insanity arises from centric causes as well as from eccentric: I mean, that condition of the brain which is caused by irritation of the stomach. If there is one kind of insanity more tractable than another, it is that; and in the earlier stages, if the stomach is in a condition to absorb opium, no one who has seen its remarkable power in soothing the brain will hesitate to administer it. I believe Dr. Lever, in cases of affections of the uterus, has, by the removal of that disease, tranquillised the brain; and I think that in females a great mischief has been often done by the disposition to stop the vaginal discharge without substituting other drains. The very prevalent disposition which females have to porter, which, to my great abhorrence, I have often known introduced into lying-in wards, I believe in many cases leads directly to insanity in after life. These are all points which should be borne in mind; and I think that the Government, before long, will see the necessity of taking some steps in order better to prepare the Profession for their duties in this respect. I allude especially to the tendency there is in the minds of lawyers to run a tilt at the Profession with reference to their opinions in cases of insanity. It is the bounden duty of the Profession to save the insane from the punishment of crime.

Dr. Sibson: There is one thing remarkable in the paper, namely, the small number of definite diseases discovered in these 170 odd autopsies; the most remarkable change is, that in about thirty the blood is effused. The other appearances, the thickening of the arachnoid, and so forth, are the most common appearances on making autopsies, and are referred to the results of disease and death. I am satisfied that the proportion is not different to the insane and sane in cases where there is infiltration; this makes it clear that insanity must be attributed to some circumstances in life, and therefore the question is as to the effect produced. For this we must look to the results of chemical analysis, and this not only as it respects the brain. I think that it is our duty to look to the whole conformation of the entire person—the distended stomach, lifting up the diaphragm, preventing the free access of blood to the heart, and leading very frequently to the morbid phenomena connected with the brain. We also have delirium arising from pericarditis. I should say, that we have not yet established a distinct connexion between a diseased state of the brain and insanity. Besides the central points with regard to their influences on insanity, it may be well to look to the configuration of the brain; also, to inquire into the fineness of the skin and hair; the state of the sensations in health, and their altered state in insanity. Then there is also the muscular conformation, the size of the lungs, the power of the heart to send the blood to the lungs in due proportion to their power. Besides these, there is the reference of insanity to the abdominal organs and to the state of the digestion. In fact, I believe with one of the greatest psychologists, that the causes of insanity must be looked for in every structure of the body, and by viewing man as a whole, with every part each influencing the other; and by this means we may hope to arrive at the true pathology of insanity.

Dr. Webster: I must beg of the Society to remember, that my paper does not pretend to embrace the whole subject of insanity. If I had extended it to such subjects, I dare say the Society would soon have been tired of it. But still I am delighted to hear the remarks of Dr. Sibson. It has occupied the attention of many writers, especially the colour of the eyes and of the skin. The colour of the eyes has been most extensively investigated, and it has been stated, that the blue eye is more liable to insanity; the shape of the ear, also, has been noticed. In two or three visits I made to Charenton, the physician pointed out a peculiar formation of the ear which was indicative of insanity. I do hope, that, from what has fallen from Dr. Sutherland, that we shall have from him a mass of chemical evidence. So far as my observation goes, I think that intemperance is not so frequent a cause of insanity as it used to be. In America it was a very frequent cause; and it is also stated to be due in many cases to the eating of opium. In this country the extensive use of tobacco is attracting much attention of the psychologists; there is no question that it is a very serious subject; in America it has been considered so important, that the use of tobacco is prohibited in the Asylums.

Dr. Wood: It is a great mistake to suppose that insanity is a specific disease, and, therefore, we are not to expect a morbid change to follow it. We have examined cases at Bethlem, and have found a brain perfectly healthy—without any change. This is important, because people, generally speaking, suppose there is something in it more than there really is. As observed by Mr. Streeter, the difficulties in the way of studying the disease are very great; but I would just mention, for the information of the Fellows, that a scheme has been adopted which enables any member of the Profession to attend Bethlem Hospital on the payment of a small fee.

The sitting was then adjourned.

REVIEWS.

A Treatise on the Pathology, Diagnosis, and Treatment of Neuroma. By ROBERT W. SMITH, M.D., T.C.D., M.R.I.A. Fol. Pp. 45. Fifteen lithographed plates. Dublin: Hodges and Smith. 1849.

This noble work is destined to raise still higher the well-deserved reputation of the Medical School of Dublin. It is, indeed, a magnificent offering at the shrine of science. The printer and the artist have vied with each other in the excellent performance of their respective tasks; and we do not know which most to admire, the plain and correct style of the Author, or the delicate and accurate pencillings of Conolly. The appearance of monographs such as this, belongs to a wholesome condition of professional *morale*. Such works are not produced for a party or for a selfish purpose. They emanate from research, steadied and supported by single-minded constancy to philosophy; and they are studied only by those who love knowledge for its own sake. The publication of such works are, therefore, creditable to the purchasers as well as to the Author; and it is calculated to give us a high opinion of our Irish brethren, to see, in the one before us, so numerous a list of subscribers.

The term Neuroma, introduced into medical nomenclature by M. O'Lier, of Geneva, has been employed to designate a tumor connected with a nerve. The disease, however, was known long before the name which it now possesses was assigned to it; and it may, Dr. Smith thinks, be inferred from the writings of Morgagni and Boerhaave, that these authors were not unacquainted with this remarkable form of tumor, although Cheselden appears to have been the first to give a distinct account of the disease. The observations of this celebrated surgeon refer to but one species of the affection, viz., the cystic, a variety by no means so frequent as the solid form of the disease. A very full and accurate list is given by Dr. Smith of all the cases and essays that have hitherto been published on the subject of neuroma.

Neuromatous tumors are either of spontaneous origin, or the result of wounds or other injuries of the nerves; among the latter may be included the tumors which form upon the extremities of nerves divided in amputations. In the idiopathic variety of the disease there is in general but a single tumor, which, whether it be solid or composed of a cyst filled with fluid, is usually painful; but, when several such tumors exist, either upon the same or upon different nerves, they are, in most instances, solid and free from pain. The traumatic varieties of neuroma, whether solid or fluid, are, in almost all cases, the source of severe suffering.

Idiopathic neuroma is usually of an oval or oblong form, the long axis of the tumors corresponding with the direction of the trunk of the nerve to which they are connected. These tumors vary considerably in size, being sometimes smaller than a grain of wheat, while, in other instances, their dimensions equal, or even exceed, those of a large melon; and between these two extremes every variety of size occurs. There may be one or several upon the same nervous trunk, and they are occasionally found existing simultaneously upon all the spinal nerves. They are comparatively rare in the ganglionic system. In general they are solid throughout, but, in some instances, are composed of a cyst filled with fluid. They are of slow growth, but continue steadily to enlarge, although years may elapse before they attain such a size as to render them the source of inconvenience; they are moveable in the transverse direction, but not in the course of the trunk of the nerve upon which they are seated. Even when they have reached a very considerable size they do not contract any adhesion to the investing integument, unless from their situation they are exposed to continued pressure; the skin is not discoloured, nor, unless the tumor be of unusual magnitude, do we ever see tortuous and dilated veins ramifying beneath it; they are not prone to attacks of inflammation, nor has Dr. Smith ever seen them suppurate, or known their removal by absorption. In solitary neuroma, the pain, in some instances, is not severe when the parts are kept at rest, but in most a tickling or tingling, creeping, or numbing sensation, or a combination of these, is felt in parts near or below the tumor; and in many a most excruciating pain, independent of, but much increased by pressure, exacerbated at intervals, is complained of at a distance from it, but in the direction of the trunk or branches of the nerve affected. The powers of sensation and motion are, however, seldom impaired; but motion aggravates or brings on the pain, and prickling, accompanied or alternated with numbness, is felt in the limbs, and severe pains dart in the direction of the nervous branches.

In some instances the pain is continued, but is subject to exacerbations whenever the tumor is pressed upon, or accidentally touched; but in other examples of the disease, paroxysms of the most severe character will occur without any apparent exciting cause, and continue during a variable period of time. It has been observed, that, during this paroxysmal period, the tumor appears to be in a state of erethism, and manifests the most acute sensibility. Frequently no other cause can be assigned for the occurrence of the paroxysms than mental emotions, or variations in the state of the atmosphere; and, during dry weather, the pain has been observed to cease entirely. It not unfrequently happens, that the pain, which at first occurred only in paroxysms, at length becomes continued, torturing the patient both by day and night. It has been stated by Arohnsohn and others, as a pathognomonic sign of neuroma, that when the trunk of the nerve is compressed above the tumor the pain ceases, and that the tumor, which had previously been acutely sensible, can then be touched without any uneasiness being caused. It is also worthy of notice, that, in the majority of cases of idiopathic neuroma, the pain is limited to the parts below the tumor. In the traumatic form of the disease, however, it may extend both upwards and downwards, darting along the trunk of the nerve towards the centre of the nervous system. Several examples are on record in which neuroma has occasioned epileptic convulsions, which have been permanently cured by the excision of the tumor.

We have quoted from Dr. Smith's work sufficient to demonstrate the very great importance of a knowledge of neuroma to the surgeon or physician. We shall not attempt to make an analysis of the book itself, for the simple reason that it would be impossible. The contents are so well arranged, and the information so concisely and clearly communicated, that there are few repetitions, and nothing superfluous. We, therefore, cordially recommend this work to every medical man desirous of possessing a select library; and we take our leave, for the present, of Dr. Smith, confirmed in the opinion which we formed of his industry and knowledge, from the study of his former excellent although less ambitious work, the Treatise on Fractures in the vicinity of Joints.

The Science of Life; or How to Live, and What to Live for. With Practical Remarks on Health, Diet, and Longevity. By a PHYSICIAN. London. 1849. 12mo. Pp. 182.

We confess we took up this little volume with a strong prejudice against it; because we have invariably found *anonymous medical* works, and especially those which are classified with the "Silent Friend," and similar productions, in the advertising columns of the daily papers, to be not only disgusting rubbish, but rubbish foisted on the public under the protecting garb of the Professional toga.

An Author who writes what he conscientiously believes to be good and useful, should never be ashamed or afraid to attach his name to it; and we believe that the Author of the interesting *brochure* whose title heads this notice, would have added much influence to the practical truths he has recorded, and done no discredit to himself, by so doing. It is true, there is nothing novel in the work, and little that is not familiar to all observing people; but truths, however familiar, when they are disjointed, unconnected, and awkwardly applied, lose half their usefulness, and all their force. Such is not the case with the arrangement of the present volume. As its name implies, it is essentially a popular work, directed, almost exclusively, to the heads of families; and its unpretending aim is to guide parents as to the moral and medical hygiene best calculated to promote and secure the happiness and health of their offspring; together with several judicious admonitions to children of an older growth, upon the facility of undermining the health by the neglect of a few of the simplest principles of medicine. The chapter on the Management of Infancy, Puberty, and Youth, is extremely good, and will well repay the trouble of perusal; as also that which embraces a consideration of the Turn of Life, Old Age, and Decrepitude. The high moral strain which pervades this little work forcibly reminds us of the inimitable productions of the late Dr. Andrew Combe on popular medicine; for as the Author justly observes in his Preface, "The present Treatise may lie in the nursery, or be seen in the same cabinet with the Prayer-book of a young lady. It professes to teach what all young people ought to learn, and nothing more."

CONVENTION OF POOR-LAW MEDICAL OFFICERS.

[To the Editor of the Medical Times.]

SIR,—The Committee of Poor-law Medical Officers relying upon the obliging assistance given to their cause by all the Medical Journals, beg the favour of your inserting in your next number the following notice, addressed more especially to the Poor-law Medical Staff.

Shortly after their meeting in February last, presided over by Lord Ashley, and the presentation to Parliament of the Petition then extensively signed, it was deemed expedient by the Committee to incite, or excite, the Union Surgeons over the Kingdom to petition the Commons' House relative to their grievances and false position.

A circular note, with an outline or form of Petition, was sent to one of the Surgeons in each Union, with the hope that he might induce his colleagues to sign a Petition in aid of the general movement. Since then numerous well-signed Petitions have been received by the Committee for presentation, while others have been introduced to Parliament by members of the Legislature from the more immediate districts of the Petitioners.

There are, notwithstanding, many Unions which have not accomplished anything in this measure; it can rarely be the case, that such are satisfied with their remuneration from the Guardians, or the countenance given to their professional consequence. The few, however, thus more happily placed, may, perhaps, find a generous motive for acting furnished by the defects of the present system, and the consequent heavy pressure on the bulk of their less fortunate brethren. The Committee, therefore, earnestly urge all to forward their Petitions without delay, that the movement now becoming so general may lose nothing through want of a simultaneous and harmonious action, if not of the Profession at large, at least of the Poor-law Medical Staff.

In conclusion, I beg to remark, as very *apropos* to the subject, that when the Parliamentary inquiry of 1844 was going on, a member of the Special Committee, not friendly to the Surgeons, remarked that the hardships alleged to exist for the Poor-law Doctors could not be "so great," since "only *one Petition had been presented to the Legislature seeking redress!*"

I have the honour to be, Sir,
Your very obedient servant,
CHARLES F. J. LORD, Hon. Sec.

4, Hanover-square, May 15, 1849.

OBSTACLES TO MEDICAL REFORM.

[To the Editor of the Medical Times.]

SIR,—The subject of Medical Reform has been for a long time agitated, and each order in the Profession appears desirous that it may be benefited. I fear, however, that those changes which are really required, to raise us as a body in public estimation, will not be brought about, simply because we are a "house divided against itself." If society were to estimate us according to the value we put upon each other, that estimate would be very low. The Physician prides himself upon the worth of his diploma, which, however, is considered by the General Practitioners as little better than a worthless piece of parchment. The College of Surgeons has said, its diploma is nothing more than a declaration that the possessor is only equal to the ordinary exigencies of surgery; while the mere Licentiate of the Apothecary's Company is viewed by the Physician and Surgeon as occupying the lowest professional grade. This, however, is not the estimate he puts upon himself, for he considers that his education has been more liberal, and his examination more stringent than that of the orders, which hold him in contempt. By thus degrading each other, we lead the public to imagine that diplomas are no *criteria* of professional attainments, and we make the Government averse to legislate for us. If some Home Secretary is not bold enough and good enough to set our "house in order," I fear we shall never do it ourselves. Pray, Mr. Editor, urge Sir G. Grey to go to work at once. Yours, truly,

RUSTICUS.

THE PEACE SOCIETY AND THE MEDICAL PROFESSION.

[To the Editor of the Medical Times.]

SIR,—I have read a good deal lately in the papers of the labours of the Peace Society, and I cordially approve of its object. I have been thinking, that if the agents of this excellent body were to undertake a mission amongst the members of the Medical Profession, it might be the means of accomplishing much good. We are proverbially pugnacious, and if we could be induced to subdue our warlike spirit, a golden age would dawn upon the republic of medicine. I would recommend that the Society should make application without delay to the Colleges of Physicians and Surgeons, and the Apothecaries Company, for the use of their theatres, wherein lectures may be delivered to the fellows, members, and licentiates of the three corporations. From such benevolent labours I believe the most important good would result. Might we not hope to see, after an eloquent and convincing address, the venerated presidents of the two colleges, and the master of the company, with tears in their eyes, embracing each other most fraternally? the fellows, members, and licentiates, at the same time, catching the spirit of their revered governors, cordially shaking each other by the hand, and vowing eternal friendship. Sir George Grey himself would rejoice at such a sight, and before the close of the present session of Parliament, the Royal Assent would be given to a Medical Reform Bill, satisfactory to all parties, and one which would raise the Profession to the highest pinnacle of honour and usefulness.

Hoping my suggestion may not fall to the ground,
I am, Sir, your obedient servant,
AMICUS PACIS.

THE ILL-USED ASSISTANT-SURGEONS OF THE NAVY.

(Copy.)

Unto the Honourable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament assembled.

The Petition of the Faculty of Physicians and Surgeons of Glasgow, humbly sheweth,—

That the Assistant-Surgeons of the Royal Navy, many of whom are Licentiates of this Faculty, are subjected to grievances from which, in the opinion of your Petitioners, they ought to be relieved by the Legislature.

That these grievances are mainly due to an order of the Lords in Council, made in 1805, not having been fully carried out, to the effect that Medical Officers of the Royal Navy should be placed in the same position, in all particulars, with Medical Officers of corresponding rank in the Army.

That it appears that the Assistant-Surgeons of the Royal Navy are the only officers entering the service at an adult age excluded the ward-room or general officer's mess.

That in consequence thereof they are exposed to many personal indignities, and compelled to mess and associate with midshipmen and naval cadets, gentlemen much their juniors, engaged in the acquisition of an elementary nautical education.

That their position as gun-room or junior officers renders them ineligible to possess cabins, which are the only places of *bona fide* retirement for the purposes of study.

That, in consequence, they are denied the opportunities of studying the diseases which come under their observation, as well as of reviewing [the varied knowledge which they had acquired at the schools, and of keeping pace, through a consultation of the medical literature of the day, with the rapid march of the medical sciences, thus leading to a neglect of self-culture highly injurious to their own future prospects, and most detrimental to the public service.

May it therefore please your Honourable House to take into your early consideration, and to remedy the grievances set forth in this Petition, by granting to the Assistant-Surgeons of the Royal Navy the rank and privileges of ward-room officers.

And your Petitioners, as in duty bound, will ever pray.

Signed for and in the name of the said Faculty, by order and authority of a General Meeting, held at Glasgow, the seventh day of May, Eighteen Hundred and Forty-nine.

WILLIAM WEIR, M.D.,
President of Faculty of Physicians and Surgeons.

A NICE POINT IN DIAGNOSIS.

Dr. O'Ferrall had lately to operate for a tumor, about the size of an orange, apparently malignant, situated on the front of the fore-arm, and the question was whether to amputate, or to attempt the extirpation of the tumor. When the parts were relaxed, the tumor was felt to be easily moveable; and on this account it might be considered free from adhesions to the neighbouring organs; but when the open hand was pressed forcibly back, so as to put the integuments and tendons on the stretch, the tumor became fixed, and from this circumstance some able surgeons considered that it had contracted adhesions to the tendons. Dr. O'Ferrall thought it possible, however, that the immobility of the tumor under the described manœuvre might be owing to its being held down by the stretched integuments, and he sought for some means of fixing the tendons without extending the skin. This he effected by getting the patient to close the fist tightly on a small cylinder; and now, although the tendons were fully put on the strain, the tumor continued to be perfectly moveable. Convinced by this that the tumor had not formed any connexions such as would render amputation indispensable, he proceeded to remove it, an operation which was performed with very great facility.

GOSSIP OF THE WEEK.

Apothecaries' Hall.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, 10th May, 1849:—Thomas Denny Everet, Stepney-green; Edmund Brown; John Williams Jones, Dolgelly; Robert Harper, Brighton; Daniel Saunders, Carmarthen; Nathaniel Philip Betts; Thomas Massey Harding, Ludlow, Salop.

War Office.—Hospital Staff.—John Berry, gentleman, to be Assistant-Surgeon to the Forces, vice William Smellie Johnstone, resigned. Acting Assistant-Surgeon Vesey Agmondisham Brown, M.D., to be Assistant-Surgeon to the Forces, vice Finlay, deceased.

Obituary.—On the 17th of January, at Graham's Town, Cape of Good Hope, in his thirty-fourth year, Edward Russ, Esq., Surgeon, late of Castle Cary, Somersetshire, and formerly of Wolverhampton. May 5th, at Feckenham, Worcestershire, Edward P. Turner, Esq., Surgeon, aged thirty-one.—Dr. Pemberton, of Ballinrobe, on Wednesday evening last, from cholera, contracted in the discharge of his professional duties.—At Paris, 4th inst., of cholera, Charles Morison, M.D., Physician to the Forces, half-pay. Dr. Morison was long in the 10th Royal Hussars, and served in that regiment during the campaigns of General Sir John Moore, in Spain, also in the campaigns of Field-Marshal the Duke of Wellington in the Peninsula.

Death of Dr. Streeter, of Worcester.—On Thursday, May 10th, died at Worcester, after a lengthened illness, Dr. Streeter, Secretary to the Provincial Medical and Surgical Association, and one of the Editors of the *Provincial Medical and Surgical Journal*. He was also one of the Physicians of the Worcester Dispensary. Dr. Streeter was considered a kind-hearted man and scrupulously honourable in his professional demeanour. His abilities were good, and he possessed a respectable share of medical and general knowledge. He has bequeathed little of his labours to posterity save his editorial remarks in the pages of the Journal which he either solely or jointly edited for some years past. He was thrice married. It was a melancholy spectacle to behold so robust and healthy a looking man as he once was, cut down in a few months, in the prime of his intellect, and in a sphere where a great many will feel the absence of his usefulness.

King's College Hospital.—The tenth anniversary festival of this Institution took place on Saturday, at the Freemasons' Tavern, and was remarkably well attended. The Earl of Carlisle presided, and among the company present were the Bishop of Ripon, the Dean of Westminster, Major Moore, Sir Waller Riddell, the Rev. Temple Frere, Mr. Serjeant Stocks, the Rev. Dr. Self, the Rev. R. Jones, Mr. W. Cotton, Mr. Elbigran, Mr. W. Ferguson, and Mr. C. Heberden. About 200 gentlemen sat down to dinner, which was provided in the best style. After the usual loyal toasts, the Chairman, in proposing "Prosperity to the Hospital," expressed his delight at finding that, during the ten years of its existence, the benefits which it had conferred in the alleviation of sickness and bodily distress had been without exception regular and progressive. In the year 1840 the number of out-patients amounted to 4,056, and of in-patients to 778. Now, however, he found that during the past year there had been 19,383 out-patients, and 1,253 in-patients. The generosity of the public had not kept pace with the demands upon the skill of the medical officers attached to the Hospital, but the good offices of the latter had been rendered notwithstanding. The Hospital supplied great facilities for the attendance not only of medical, but also theological students, on the sick; and the clergy had constant access to the wards for the purpose of administering spiritual consolation to all who might be willing to receive it therein. The noble Lord concluded a very eloquent and impressive speech by calling on the company present to subscribe according to their means towards the support of so excellent an Institution. The Secretary, in the course of the evening, announced subscriptions and donations amounting altogether to a sum very little short of 2,000*l*. Toasts were dedicated to "the Council, the Principal, and Professors of the College," to "Mr. Charles Heberden and the Committee of Management," to "Dr. Johnson and the Medical Officers," and to all who had exerted themselves conspicuously in aid of the Institution.

University of Oxford.—It is hereby notified to Students of Medicine who purpose to offer themselves as candidates for the degree of Bachelor in that faculty, that the next examination will be held on Tuesday, June 12. Candidates are required to transmit to Dr. Ogle, the Clinical Professor of Medicine, the usual certificates of their having complied with the requisitions of the statute Tit. VI., sec. 5, § 1, 3, on or before Monday, the 28th inst. Disputationes pro forma ad consequendum gradum S.T.B. diebus Maii XIV° et XV° habendæ, in horam secundam post meridiem prorogantur.

North of England Assurance Office.—The Directors of this respectable Institution have just issued a circular, stating that they have determined to allow a fee in all cases where a Medical man is referred to preparatory to effecting a life insurance.

Dr. Muspratt and the University of London.—Sir George Grey, we find, has written to the Senate of the University of London, authorising them to receive Dr. Muspratt's certificates for graduating in medicine. The Senate is a most aristocratic and conservative body, therefore this honour must have been paid to our townsman solely from the position he has earned for himself as a scientific man.—*Liverpool Times.*

Iodide of Potassium.—We are glad to learn that a small practical work on the efficacy of this medicine in the treatment of gout, rheumatic gout, and syphilitic gout, will shortly be published by Mr. Spencer Wells, R.N.

New Pauper Lunatic Asylum.—The first stone of a new Pauper Lunatic Asylum for the county of Middlesex was laid on Monday week by Prince Albert, in the presence of a large assemblage of the magistracy and leading gentlemen of the county. The new building is situate in the hamlet of Colney Hatch, parish of Friern Barnet, on an elevated plot of ground. The asylum is calculated to contain 1,000 patients, which is equal to the accommodation afforded at Hanwell, and the building will be completed by the autumn of 1850. The cost of the asylum is estimated at 130,000*l*., which sum has been borrowed by the justices under power of an Act of Parliament, which obliges one-thirtieth of that amount to be paid off yearly. The ratepayers of the county will be agreeably surprised to learn that, so far from saddling them with any permanently additional burthen, the effect of the new building will be just this—that when the loan is paid off, the county will be relieved from a very large amount of annual outlay, at present incurred by the system of farming pauper lunatics. This unfortunate class of individuals (including idiots) exceed, in the county of Middlesex, 2,400, and the asylum at Hanwell only accommodating 1,000, the necessity for the new establishment will be readily admitted. The asylum, when completed, will form a very handsome building in the modern Italian style, the extreme length being 1,884 feet by 144 deep. The centre of the building, which will be surmounted by a dome 120 feet high, will include the chapel, the committee-room, and the residence of the general superintendent; the right and left wings will be devoted to the male and female patients respectively, with a surgeon's residence at each end, and an infirmary beyond.

Burials in Towns.—Mr. Walker, well known for his active exertions to obtain the abatement of this nuisance, at a late public meeting, made the following statement:—"There are gentlemen present who accompanied me, some weeks ago, to a place in this town which came under the notice of Mr. Mackinnon's Committee. We were introduced by a stranger to the place, which, by the way, was guarded by a policeman, who, it appeared, had been called in to protect men in the exercise of what I shall venture to term illegal acts. Now, my eye being perfectly well practised in the mysteries of these matters, instantly caught sight of a grave over which a mound of earth had been raised, and I could see, from its appearance, that it had been violated to ascertain if the full price of money had been paid for it. I saw at once that the centre of the mound had been pierced by the boring rod. The iron instrument had gone through the centre of the bodies. Within 14 or 15 feet of this grave I counted twenty-seven similar holes made through a mass of human remains, all these holes passed through the centre of many similar remains to the one I first observed. This graveyard I shall unhesitatingly state belonged to an undertaker. His object in making these holes, which pierced the bodies deposited there, speaking from my knowledge of these matters, was in the first instance to dissipate the effluvia produced from the putrefaction of the bodies, and next to promote rapid putrefaction, so as to make every inch of ground a source of perpetual gain.

To this may be added the following Memorial, signed by the leading medical men of Waterford:—

"We, the undersigned, declare it to be absolutely necessary to the safety of the public, that no more interments should take place in the churchyards of this city. The state of them, and especially the older ones, is at once an outrage on public decency, as well as detrimental to the public health. In the cathedral churchyard, which is altogether uninclosed, and a public thoroughfare, as well as the resort during the night of bad characters, the earth is continually falling into the old graves, leaving passages or vents which lead to the remains deposited below, and serve for the escape of noxious gases; and when the earth is thrown up to form fresh graves, it is found so loaded with animal matter, as to be actually offensive to the nose as well as eyes. In Olave's Churchyard, the bodies have of late years been deposited in tiers, above each other, just under the east window of the church, till they are within less than three feet of the surface, and actually above the level of the ground within one or two yards adjacent; whilst at certain periods, and in certain states of the atmosphere, a putrid smell can be distinctly perceived in the neighbourhood. John's and Patrick's Churchyards are in much the same state; and we therefore submit, that it is the duty of every one, and especially of public bodies, to co-operate for the abatement of a nuisance so dangerous and disgraceful to our city."

And in Gloucestershire, also, the medical men are bestirring themselves, Mr. Mackinnon having presented a Petition to the House of Commons from the President and Council of the Gloucestershire Medical and Surgical Association,

representing a large body of practitioners, which sets forth :—

"That your petitioners are of opinion, that the interment of the dead in towns and populous districts is highly injurious to the public health, and that no measure of sanitary reform is complete unless this obnoxious system is at once and for ever abolished by legislative enactment. That your petitioners cordially support the efforts now making by the "National Society for the Abolition of Burials in Towns," and they desire respectfully to add their testimony and influence as experienced medical practitioners, in aid of a measure at once politic and humane, and worthy of an advanced civilization."

Irish Manufacture.—One of the partners of the firm of Bewley and Co., of Dublin, has had the honour of presenting to His Royal Highness Prince Albert several specimens of a novel sort of shaving cream, manufactured in Dublin. This invention, which is for purposes of the toilet, is a most useful one, and surpasses anything of its class hitherto produced by native industry. It has also the recommendation of cheapness to render it of general utility. His Royal Highness was pleased to mark his satisfaction to the representative of the firm by granting the sanction of his name by the usual warrant, and moreover to express his wish for the success of a manufacture which showed the skill and enterprise of Irish inventors.—*Times*, May 14.

French Physicians and the National Assembly.—Dr. Henry Courceau, Physician to the President of the Republic, has addressed the electors of the Department of the Somme; he proposes himself as a candidate for the representation of that Department in the new Assembly.

Royal Orthopædic Hospital.—The Ninth Anniversary Festival of this Charity took place on Tuesday, at the Freemason's Tavern, when not less than 200 gentlemen sat down to a very sumptuous entertainment. The Lord Mayor, in proposing the toast of the evening, shortly reviewed the history of the Charity from its establishment in 1840 down to the present time. Referring to the amount of prejudice which had impeded the progress of the Hospital hitherto, His Lordship remarked, that it was what all similar institutions, founded for the promotion of a department of medical science previously neglected, had to encounter in a greater or less degree, and that it would gradually give way before the obvious benefits derived. From the Report, it appeared that the number of beds in the Hospital is now thirty-six, and that the Committee are anxiously looking to the public for means to afford still greater accommodation. It also appears, that some progress has been made in the formation of a school for the study of the cure of distortions, and that the medical practitioners have extensively availed themselves of the facility which the Institution affords in this respect.

New York Academy of Medicine.—The regular annual meeting of the Academy of Medicine was held on the 3rd, and an adjourned meeting on the 9th of January, 1849, at which the following Officers and Standing Committees were elected to serve for the present year :—President, Valentine Mott, M.D.; Vice-Presidents, Isaac Wood, M.D., J. R. Manley, M.D., Galen Carter, M.D., and Thomas Cock, M.D.; Recording Secretary, J. L. Vandervoort, M.D.; Assistant Secretary, T. M. Franklin, M.D.; Domestic Corresponding Secretary, W. C. Roberts, M.D.; Foreign Corresponding Secretary, John G. Adams, M.D.; Treasurer, J. O. Pond, M.D.; Librarian, T. F. Cock, M.D. Committee on Admissions—Drs. F. Campbell Stewart, Ed. L. Beadle, William P. Buel, Gurdon Buck, and O. S. Bartles. Committee on Medical Ethics—Drs. J. W. Francis, J. R. Manley, Isaac Wood, A. H. Stevens, and J. P. Batchelder. Committee on Finance—Drs. A. C. Post, S. P. White, J. O. Stone, W. N. Blakeman, and J. C. Bliss. Committee on Publication—Drs. Joseph M. Smith, William C. Roberts, H. D. Bulkley, S. T. Hubbard, and M. L. Taft. Executive Committee—Drs. Galen Carter, J. R. Van Kleek, Joel Foster, J. G. Adams, and J. Anderson. The installation of Professor Mott as President of the Academy took place at the regular monthly meeting, February 7, on which occasion he delivered his inaugural address. The subjects chosen were cholera and ship fever.

Black Rain.—The *Dublin Freeman's Journal* gives the following extract from a report of the Royal Dublin Society:—"Professor Barker presented to the notice of the Society a bottle containing a portion of black rain which had been transmitted to him from Carlow, with a view to satisfy the scruples of many persons who appeared to doubt that rain of this description had fallen. He had received communications on the subject from persons residing in several of the districts in which the rain had descended, and he was in a position to state, not only that such rain had actually fallen, but to mention the space of country over which it had been diffused. The specimen which he presented to the Society had been sent to him from Carlow, accompanied by a letter, in which the writer mentioned that at the time of its collection it was uniformly black, and resembled ordinary writing ink; but he (Dr. Barker) found that after allowing it to stand for a short period, the black colouring matter separated from the water with which it had been mixed, rendering the colour of the rain much lighter than at first. The places in which this phenomenon occurred were Abbeyleix, Carlow, Kilkenny, and Athy, from which it would appear that the black shower extended over an area of more than 400 square miles. As far as he had been able to ascertain, it occurred about six o'clock in the evening of the 14th instant, being preceded by such extreme darkness that it was impossible to read except by candle light. After this darkness had existed for some time, a hail storm, attended with vivid lightning, but without thunder, occurred, and when this subsided the black rain fell. It was mentioned by his Carlow Correspondent that, upon examining a quantity of this rain, just after it had fallen he found it had an extremely fetid smell, and a very disagreeable taste; that it had left a stain on some clothes upon which it had fallen, and that cattle refused to drink it. At Abbeyleix and Athy, where the shower descended at the same moment, the appearance of the rain was precisely similar to that which fell at Carlow, but it was unaccompanied by the lightning which had been observed at the latter place. Dr. Barker then stated, that as yet he had not been enabled to make a complete chemical analysis of the rain."

MORTALITY TABLE.

For the Week ending Saturday, May 12, 1849.

Causes of Death.	Total.	Average of Five Springs.
All Causes	905	963
Specified Causes	903	959
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	206	198
Sporadic Diseases :		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	43	48
Tubercular Diseases	177	200
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	98	123
Diseases of the Heart and Blood-vessels	57	34
Diseases of the Lungs, and of the other Organs of Respiration	137	131
Diseases of the Stomach, Liver, and other Organs of Digestion	54	62
Diseases of the Kidneys, &c.	9	11
Childbirth, Diseases of the Uterus, &c.	9	8
Rheumatism, Diseases of the Bones, Joints, &c.	9	8
Diseases of the Skin, Cellular Tissue, &c.	..	1
Malformations	3	3
Premature Birth and Debility	21	21
Atrophy	17	17
Age	39	50
Sudden	11	11
Violence, Privation, Cold, and Intemperance	13	33
Causes not Specified	2	4

Medical Reform in Parliament.—It is reported that a Bill will be shortly introduced in the House of Commons, for the better regulation of the Medical Profession.

Cholera.—The cholera broke out at Gloucester last, and, it is rather singular, not many yards from the place where it first appeared in 1832. We are happy to say, that by the activity of the Medical gentlemen and city authorities the disease has not spread.

Measles in the Sandwich Islands.—Several thousands of persons have died at the Sandwich Islands of measles; and the mortality continued great at the date of the last advices.

TO CORRESPONDENTS.

We have received a letter from a correspondent who signs himself "Psychologist," in which he states his opinion that our Colleges ought to require of medical students certificates of having attended lectures on insanity, and the practice of a lunatic asylum. With this opinion we quite agree, for at the present time no subject is engrossing more the attention of the Medical Profession and the public. Our judges and barristers appear to place a very small value on the testimony of medical witnesses in matters relating to psychological science; and we think it, therefore, highly desirable that our corporate institutions should use their power to promote amongst medical students the study of mental diseases. Some of our large asylums have been opened to the Profession. Bethlem Hospital is no longer closed, but any number of students are permitted to see the practice there, by paying certain fees. The Medical Officers also deliver clinical lectures, and make pathological demonstrations in a room set apart for these purposes. The lectures of Dr. Conolly and of Sir A. Morison cannot fail of being highly useful to Medical Men; and we hope that ere long our large county asylums will also be open to them.

"Inquirer."—The Radcliffe Infirmary, Oxford, is recognised by the College of Surgeons.

"A Medical Student" asks us certain questions in reference to the Naval Medical Department, and appears desirous of entering the service. We would advise him not to have anything to do with the Admiralty at present. The repeated insults which have been offered to Naval Surgeons must be resented by the Profession. We rejoice to know that there are scarcely any applicants at present for the office of Naval Assistant Surgeon; and should volunteers not speedily be forthcoming, the Admiralty will have no other alternative than either to do justice to the assistants, or be compelled to receive unqualified persons into the service. We hope the Profession will look well to "my lords." We will not lose sight of them.

"Accoucheur."—The Irish College of Surgeons confers a diploma in midwifery. The candidate must furnish the Council with the following documents :—Certificates of having attended one course of Lectures on midwifery and diseases of women and children; of having attended the practice of a Lying-in-Hospital for a period of six months; of having conducted thirty labour cases, at least. The candidates are publicly examined on the organization of the female, the growth and peculiarities of the fœtus; the practice of midwifery; and the diseases of women and children.

"Dr. Kidd, Limerick," is thanked for his communication.

"Dr. Alfred Hall, Glasgow."—The request shall be early complied with.

"Veritas, Bow."—The Apothecaries Company will not prosecute a gentleman who holds only the College diploma. A private informer, however, has the power, as the College disloma does not entitle the holder to practice medicine. Much credit is due to our correspondent for having saved enough, out of his salary of 25*l.* to 35*l.* per annum, after twenty years' labour, to pass the College, and we are not surprised that he is anxious to save what he now possesses in order to commence practice on his own account.

"A Member of the College of Surgeons, London," is thanked for the compliment; his request shall be attended to.

"Inquisitor, Ballymena, Ireland."—(1.) The candidate for the office of Assistant-Surgeon must not be under 22 years of age, or, as a general rule, not above 30. The possession of an Edinburgh degree will do, but the candidate will also be required to pass an examination in the practice of physic by the Company's Physician, in which examination will be included as much anatomy and physiology as are necessary for understanding the causes and treatment of internal diseases.

"Lucretia."—We would advise our correspondent to use the pure flour of the wheat,—nothing can supersede this in point of wholesomeness.

"J. W." shall receive an answer next week.

". . Butler Lane," Ewell, Surrey, says :—"The last number of the *Medical Times* contains a short communication from Dr. Tuthill Massy, of Exeter, as to a remedy for enlarged spleen. The medicine which he suggests is, however, somewhat mysterious to me, and probably to other readers of your journal. Would the doctor, therefore, favour us with a little further information as to what medicine he may please to designate as hydrid.-potass., which has the wonderful property of removing enlarged spleens floating in the abdominal fluid? What can be this hydrid.-potass., of which we are told the strength varies very much, and which acts as a diuretic? This must have some profound and original meaning. Let us never forget, that irritation of the stomach is an alarming symptom in a delicate girl."

"Mr. Postgate," on belladonna in neuralgia, will appear next week.

"Mr. Ogden Fletcher's" letter is in type.

ORIGINAL LECTURES.

HUNTERIAN LECTURES

ON THE

GENERATION AND DEVELOPMENT OF THE INVERTEBRATED ANIMALS.

By RICHARD OWEN, F.R.S.,

Hunterian Professor and Curator of the Museum of Royal College of Surgeons, Corresponding Member of the Institute of France, &c.

[Reported expressly for the "Medical Times," and revised by the Lecturer.]

LECTURE VI.

GENERATION OF ECHINODERMA.—Progressive variation of the external characters of this class.—Its different orders.—Spontaneous fission of the Ophiuræ (brittle-stars) and Holothuriæ.—Alleged gynandrism of Synapta.—All other known Echinoderms dioecious.—Multiplied testes and ovaria of Crinoids.—Generative organs of Asterias, Echinus and Holothuria.—Development of the ovum and germ.—Metamorphoses of the Echinoderma.—Larval Pentacrinus of Comatula. Ciliated monadiform embryo and pedunculate larva of Star-fish.—Larval Pluteus of Ophiura and Echinus.—Predominance of fossil larval forms of Echinoderma in secondary strata.

MR. PRESIDENT AND GENTLEMEN,—We now come to the consideration of the highest class of radiated animals, which, although they exemplify, like the Acalephæ, the typical form of the sub-kingdom *Radiata*, yet differ very considerably in texture from the foregoing class, inasmuch as they are as remarkable for the density and solidity of their integuments, as the Acalephæ are for their soft, lacerable, gelatinous structure; and we consequently find them restricted to the sea coasts, and creeping at the bottom, not floating in the open ocean. From the fresh-water polype to the Echinodermal radiated animal, there is a great and rapid advance in organization; and, indeed, when we examine the internal structure of the Echinoderms themselves, many differences and grades are observable. In the star-fishes, there is but one aperture to the digestive system, as in the simple polype. From the digestive cavities, continued from the central mouth into the rays, proceed groupes of blind tubes; whilst in the sea-urchin (*Echinus*) we find from the mouth a small œsophagus, leading to a stomach and true intestine, which terminates at the opposite pole by a distinct vent. An intestinal canal with distinct mouth and anus is found in the Holothuria, in which also there is a distinct organ for respiration; and here we have the first instance of its establishment in tracing the *Radiata* from below upwards. Most of the present class are recognisable by a remarkable external character, namely, the spines of the integument, whence their name, "Echinoderms." But this character disappears in the softer-skinned family called *Holothuriadæ*. In these, however, we find a characteristic structure, in common with all the more typical members of the class, namely, the perforation of the integument by pores arranged in longitudinal rows, which give exit to small contractile tubes, closed at both ends; these tubes are filled with a fluid, and they form the chief organs of locomotion in this class of animals. This characteristic is more constant and general than the spines of the skin, and is finally lost in the vermiform Sipunculi, which make the transition from the radiate to the articulate sub-kingdom.

A few words may be premised on the disposition of the parts which constitute the external skeleton of the Echinoderms, as it may be requisite for the intelligibility of some of the details of their development. The complexity of their exterior framework is chiefly due to the manifold repetition of pieces of calcareous matter, according to the law of vegetative or irrelative repetition, which is common to all organs on their first introduction into the animal kingdom. In the star-fishes this calcareous matter is disposed in a coarsely reticulate manner upon the dorsal and lateral parts of the radiated body, and arranged to defend the tubular tentacles in a series of more compact and regularly-formed transverse pieces, which bound the sides of a longitudinal furrow along the under surface of each of the five rays. There is also a little body called the nucleus, resembling a miniature madrepore, near the angle between two of the rays. In the Echinus we find a more regular yet more complex arrangement of the parts of the external skeleton. It is a spheroid, with an aperture at each pole, and consists of longitudinal series of pentagonal plates, extending from one polar opening to the other; the spines are supported on these calcareous pieces, which differ in this, that whilst some are perforated others are not, and those which are perforated, alternate in double longitudinal rows with those which are not perforated. Besides, there are two series of plates, which are small, and less regularly disposed, in the integument stretched over the polar apertures; those around the mouth are called "oral" plates, the opposite ones are called "anal" plates. The anal orifice is immediately surrounded by five plates, each of which is perforated for the generation tubes, whence they are called "genital plates;" and at the exterior of these are five other plates, also perforated, but by the small nerves which supply the coloured specks supposed to represent the organs of vision; these plates are called the "ocular" plates. In addition to these plates, we find, in the star-fishes and in the Echinus, numerous little moveable calcareous bodies, which may either be bifurcate or trifurcate, pedunculate or sessile; they are called "pedicellariæ."

With respect to the generation of the Echinoderma the first mode to be noticed is that by spontaneous fission. This mode seems first to have been noticed by Montague in the *Holothuria* [*Chirodota*] *digitata*, which separates itself without violence into an indefinite number of pieces, apparently by muscular constriction; and he deems it probable that it thus multiplies itself by natural division. He discovered this Echinoderm on the coast of Devonshire. In a species of the genus *Synapta*, referred to the Holothuriadæ, M. Quatrefages states, that it, also, is in the habit of casting off segments from the extremity of the body, and that the segments so cast off begin to move, and ultimately acquire the form of the parent animal. Whoever has examined the Holothuriæ in a state of nature, must have been struck with its power of spontaneously ejecting the interior organs,—a property provoking enough to the Comparative Anatomist, who finds it most difficult to obtain a specimen in a state fit for the examination of its internal structure; for the moment they are touched they attempt to cast out the whole of their internal organs. Sir J. G. Dalyell, after witnessing this phenomenon, found that they had the power of re-producing the alimentary canal, and he witnessed another process, in which the parts of the entire body were separated by spontaneous fission. The brittle-stars (*Ophiocoma*) are remarkable for the promptness with which they break themselves up into pieces when laid hold of; and equally so for the power they possess of re-producing their arms. If a portion of the disc remain attached to a separated arm, the entire individual may be re-produced. But this is an exceptional mode of increase in the Echinoderma. The more ordinary plan is by the formation of ova and sperm, followed by impregnation. As a general rule, these reproductive elements are respectively developed in distinct individuals. But the genus *Synapta* offers an exception. The organs of generation are yellow cords suspended from the pharynx and floating freely in the abdominal cavity, where they exhibit vermicular movements. They are covered externally with a ciliated epithelium, and the thick walls of their cavity consist externally of a muscular layer; then a glandular layer in which the sperm-cells and spermatozoa are developed; and the innermost layer has a cellulo-glandular structure, in which the ova are developed; and thus is arranged the combination of male with female parts, which we shall find not uncommon in the hermaphrodite mollusca. In all other known Echinoderms, the male organs are peculiar to one individual, and the female organs to another; but the organs are very much alike in both sexes, and are very simple in their structure. In the Star-fish the generative organs consist of many-branched cæca, which are developed at the angles of the body-disc, from which the rays diverge; they number ten in the whole, and, in some species, terminate by special openings at the inter-radial spaces. Their development consists chiefly in the increase of their size, with a change of colour, to orange or red, till they fill nearly the whole cavity of the rays. The male organs are detected by the existence of sperm-cells, and the females by that of ova. The ripe ova also take on a brighter colour than the sperm-cells. The organs of generation in the *Echinus* are very similar to those in the star-fish; the sperm-sacs or ovaria diverge from the genital pores, and give off a number of blind sacs, which project and fill a great part of the globe when fully developed. The ovaria of the feather-stars (*Comatula*) are much more numerous, and are developed in the pinnæ, which diverge from each side of the arms. In the Holothuria, again, there is a different modification of the generative organs, inasmuch as they radiate from a single point. They consist of long and slender-branched cæcal tubes. The spermatozoa of the Echinoderms are commonly pin-shaped. In the Spatangus, the body is longer than in the others.

In regard to the development of the ova in the Echinoderms, and the changes of form which the young undergo in their progress to maturity, I shall begin with the lower forms, viz., the star-fishes, and here with the "feather-stars." Some years ago, it was supposed that, in our own seas a second species of that now rare genus, *Pentacrinus*, existed, and it was originally described as the *Pentacrinus Europeus*, the radiated head of this Pentacrinus resembling the form of the feather-star, or that star-fish to which the generic name *Comatula* is applied. We are deeply indebted to Mr. J. Vaughan Thompson for some valuable original observations on the development of marine animals, and, amongst others, for the discovery that the Comatula, in the larval state, are pedunculate—are, in fact, the "Pentacrinus Europæus," and that, at a certain period, their radiated head becomes detached, and constitutes a young Comatula. These attain their full growth in one year. The pedunculated larvæ are found attached to corallines and sea-weed, and move actively upon their little stalks. In what form the comatula quits the egg, prior to its development into the attached Pantacrinus, is not yet known.

Sars, about the month of March, found great numbers of a small kind of star-fish crouching under the rocks at low water, of different forms, but generally with their disc forming a prominent dome above them. The ova, as they become matured in this species, assume a comparatively large size, break out of the ovi-sacs, and escape by the respiratory aperture of the mouth; the ova are of a bright red colour, and are received and incubated, as it were, in the hollow of the dome-shaped disc; and in them Sars traced almost every stage in the development of the species. He commenced his observations in the month of February, 1840, at Florõe, in Norway, on the species called *Asteracanthion glacialis*. This has ten ovaria, usually whitish, then reddish, as the ova are matured. In these the chorion is strong and elastic, the yolk finely granular; there is no white or albumen. The germinal vesicle is large and distinct, and usually escapes entire when the egg is burst under compression; it shows the germ-nucleus or Wagnerian spot. The ovaria are grape-like bunches of pyriform sacs, with ova of different sizes: they being progressively developed. In each ovaria, two or three eggs were as large as all the rest put together. The thin, colourless chorion immediately invests the yolk, which is blood-red and opaque in the big eggs: in the small ones it is lighter coloured and clear, permitting the germinal vesicle and spot to be seen. In March he found seven or eight large eggs in each ovarium.

How they escape was not seen; the genital pores were too small to be clearly discerned.

Tiedemann thinks the eggs escape by the pores above the five dentated processes of the mouth, and Sars thinks so likewise; because he once, by pressure on the body of the star-fish, saw a red slimy filament, like the yolk of squashed eggs, come out of a little hole near the angle of each ray, above the mouth, and because the ripe eggs are always at the upper or free end of the ovarium, and not likely to traverse the stem or radius of the oviduct, which he

deems a tendinous band. Most likely they fall into the cavity of the body, and so reach the genital pores on the ventral surface. The Asteracanthion cannot have these pores on the dorsal surface (as Müller describes in the *Asterias rubens* and *Solaster papposus*), because the ova would fall into the sea, and not into the ventral concavity, into which they are received, as into a marsupium, and are hatched there. On the 17th March, Sars found the star-fish strongly contracted, and the disc raised into a dome shape, the mouth and its surrounding parts forming the pouch, in which the ova are hatched, and the young remain some time. Some embryos were one and a half line, others three-fourths of a line, in size: the ova and the monadiform young are loose in the concavity; but the further developed young are attached by a special pedicle to the walls of this improvised marsupium.

The impregnated eggs have the chorion separated from the yolk or germ-mass by a clear fluid. In the excluded ova the germinal vesicle had disappeared, and the yolk was seen in different stages of division. On the 7th March, 1841, at nine a.m., the yolk was seen in two hemispherical, not quite distinct parts. In the evening each of these were similarly divided, forming four lobes. At ten the next morning, each lobe had again divided, and thus eight spheroids were seen. In the evening of the 8th all the surface of the germ-mass resembled a mulberry. On the 17th March the ciliated embryos were seen, oval, blood-red, swimming about the marsupial chamber. They first develope two tubercles, then four tubercles, which are ciliated, and they swim, Rotifer-like, with these forwards. Afterwards the body becomes depressed. The next may be called the pentacrinal or polype stage. On the 3rd April they were seen with an organ of adhesion or pedicle, well developed; it is short, cylindrical, with thick round ends; four shorter processes then bud out, and a fifth much smaller tubercle.

Now, the smooth dorsal surface, and the ventral surface of the flattened body, may be discerned, with five double rows of small, clear tubercles, radiating from the centre. These become the ambulacral tentacles. The young attach themselves, like crinoids, by their quadrifid pedicle to the side of the glass vessel in which they may be put. When detached, they still can swim round the bottom of the glass by the cilia covering the pedicle and body, with the pedicle foremost, and the belly upwards. When turned with the back upwards they lay still. The whole yolk is here converted into the germ-mass, and then into the embryo.

On the 15th April, five corners began to grow out of the periphery of the depressed body. Ambulacral tentaculæ protrude from the tubercles. At the under surface and outer end of each of the arms or rays, one sees a small, round tubercle, which is persistent, and, from its constancy and early manifestation, important: it becomes the eye. The back is now convex, and raised clear from the arms. The quadrifid attaching pedicle still remains in the interspace between two of the arms, more towards the ventral than the dorsal surface.

April 23rd, the five arms were very distinct: the ambulacral tentacles were longer, and now the young creeps by means of them, and alters its position when turned on its back. The attaching pedicle contracts, and becomes softer and more contractile. On May 1st, it was reduced to two tubercles, and was more on the dorsal side, at the angle between the two arms; and the hitherto bilateral asteroid now becomes the completely radiated animal; the five arms lengthen, their small spines grow, the ciliograde powers are lost, and the young star-fishes creep away, and slowly acquire the mature dimensions.

The next series of metamorphoses which claim our attention are those which Müller traced out in the genus Ophiura. In 1835, this eminent physiologist and naturalist visited the coast at Heligoland, accompanied by some of his pupils, and they occupied themselves in investigating the minute forms of marine animal life. They met with some singular forms, and some, the results of their researches, were communicated to the Academy of Sciences at Berlin.

Three minute animals, about 1·4 or 1-2 line in diameter, were referred respectively to the genera *Mesotrocha*, *Vexillaria*, and *Pluteus*. The first of these afterwards proved to be the larva of a Nereis, the second of an Ascidian, and the third of the Echinoderm in question.

The *Pluteus* is compared, in form, to an easel; it is better adapted than the larvæ of the echinus for observation, because it is more transparent. It resembles Sars' larva of asterias, except that the processes are developed in one direction, and the creature is more bilateral; the processes are also longer, and have no relation to fixation. The body is conical and pointed above, and branches into eight arms below; these contain calcareous rods and *spiculæ*, which also occur, interlacing on the upper part of the body; the lateral arms are the longest, the antero-posterior diameter is much less than the transverse one. Each arm is provided with two ciliated borders. The obtuse points of the body, and the ends of the arms, are orange-coloured; all the rest is colourless and transparent. These *plutei* occur in great numbers in August and September, when they are 1-2 line long; they swim freely, with the processes turned forwards. The mouth and stomach are ciliated. A little contractile movement of mouth and pharynx may be noticed, but the streams of nutriment are seen, by means of indigo, to be directed by ciliary action towards the mouth. The small ganglions are situated below the mouth, from which nerve-filaments diverge. They are not luminous by night.

The first indication of the production of an ophiura, within the pluteus, is the appearance at the sides of the stomach and pharynx, or the granular germ-mass, so called, of certain cæcal winding tubes, with a double contour; they soon surround the stomach like a circle; they next project from the surface, like tubercles; then the whole takes on the form of a disc, with five short processes. The embryonal ciliated arms, or rods, take no share in the formation of this disc. Calcareous spiculæ begin to take a new arrangement on the nascent disc and arms. The mouth of the ophiura is a new formation; it is at first round, and quite distinct from that of the *Pluteus*, which disappears. Before the processes of the *Pluteus* disappear, the tentacula of the arms of the *Ophiura* are developed. Short processes, or pinnæ, next shoot out on each side the base of the elongating rays, or arms, and these processes move violently. The remnant, or case, of the ciliograde pluteus is absorbed or cast off, and the young ophiura is plainly manifested.

The transparent gelatinous larval animal, from its general resemblance to the *Beroïdæ*, would be classed with the ciliograde acalephæ, the only indication of its not being of this class being the appearance of certain opaque lines of calcareous matter.

In regard to the next family, the Echinus, the observations of Müller are more full and remarkable. Muller's attention was attracted by the circumstance of some of the minute plutei differing from others in certain proportions, and by the development of particular tubercles richly beset with cilia.

V. Baer, who led the way in experimenting and observing the artificially impregnated eggs of the Sea-urchins (*Echinus*), found them to be first developed into a ciliated monadiform animalcule, like that of the *Medusa aurita*. In the course of four days this had become metamorphosed into a minute transparent acalephoid creature which he compares to a Beroë. Here his observations ceased, the animals having perished on the fifth day.

In the autumn of 1845 Professor Müller discovered in the sea at Heligoland, the transparent acalephoid animalcules, which have been mentioned, referable by this mode of motion to the 'ciliograde' order, one of which, from its singular form, somewhat resembling a painter's easel, he described under the name of *Pluteus paradoxus*.

Returning in the following year to the same field of observation, he pursued with admirable detail the change of this species into an *Ophiura*, (Brittle star-fish,) and that of the other kind of Pluteus into an *Echinus*.

The larva of the Echinus, like that of the Ophiura, has a quadrilateral pyramidal body, of a colourless, transparent, or hyaline substance, dome-shaped above, slightly excavated at the base, the corners of which are prolonged into straight slender legs, strengthened by filiform rods of calcareous matter, reaching to the summit of the dome; the mouth is prolonged from the middle of the concave base into a four sided proboscis, the angles of which are also produced into slender processes shorter than the four outer legs. Were the creature to stand upon these it would resemble a table-clock case, and the proboscidiform mouth and appendages might swing to and fro like the pendulum. The larva is, however, a free-swimming animalcule, and propels itself, with the base and processes forwards, chiefly by means of strong cilia, grouped on two tubercles at the sides of the dome, which are compared to epaulets. In the centre of the dome-shaped body is a subspherical granular mass, apparently the remnant of the primordial germ-mass, which Professor Müller calls the stomach, and which doubtless surrounds the cavity to which the mouth and pharynx conduct.

The first evidence of the change to the Echinus is the formation of a circular disc, like a clock-face, on one side of the granular mass: five double lines, like pointers, radiate from the centre of this disc, and their extremities expand into circles with a double outline. These circles form the bases of as many hollow tentacles, like those that traverse the ambulacral pores of the adult Echinus, but which are here single, not in pairs. Triradiate pedicellaria appear, two on each side the disc, of the kind called "gemmiform" in the adult Echinus. The disc progressively expands, extending over the cellular mass to which it owes its origin, and developes tubercles, which push through the transparent dome of the Pluteus, and are transformed into spines and tentacles, both of which, together with the pedicellariæ, manifest their characteristic motions and combine these seemingly voluntary actions with the automatic continued vibrations of the ciliated epaulets of the larva; so that it can now both swim and creep. By the time the disc has grown over half the granular sphere little of the larva remains, except some of the slender calcareous rods: the perforated oviducal plates are formed round the pentagonal space, as yet imperforate, in the centre of the original disc, determining the anal pole of the developing spiny globe, close to which the cicatrix of the ruptured pharynx of the Pluteus is completed by the so-called "madreporiform plate." The mouth of the Echinus is quite distinct and remote from that of the Pluteus: it is first indicated in the centre of the naked or unspined moiety of the granular sphere by the formation of the hard summits of the five characteristic dental masses of the Echinus. The outer skeleton is at length completed by the progressive extension of the "ambulacral" and "interambulacral," or spine-bearing plates, and by the less regular "oral" plates.

Thus the Echinus is completed, and becomes either a male by the development of testes, or a female by that of ovaria. The ova are impregnated, and develope the monadiform embryo; this is probably metamorphosed into the beroiform Pluteus, which produces, by "metagenesis," rather than by metamorphosis, the young Echinus, which completes the cycle by growing into the oviparous adult.

A COURSE OF LECTURES
ON
SOME OF THE MORE IMPORTANT POINTS IN SURGERY.

By G. J. GUTHRIE, Esq., F.R.S.,
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(Published with the sanction of the Lecturer.)

Lecture IV.

ON THE TREATMENT OF HOSPITAL GANGRENE.

Delpech, in his "*Mémoire sur la complication des plaies et des Ulceres connue sous le nom de Pourriture d'Hôpital*," published in 1815, declared himself to be a localist, and decided in favour of

the use of the hot iron, or actual cautery. I have no experience of this candescent remedy, beyond what I observed when used by him at Montpellier, and Baron Larrey in Paris, in 1814.

"When this disease does not proceed rapidly, and is confined to the ulcerative form," Delpech admits, "it may be removed by stimulant applications, such as vinegar, the vegetable and mineral acids, the Egyptian ointment, &c. Of these, he prefers the vinegar applied on lint, after having rubbed or scraped off any false or pulpy membrane which appears to conceal the surface of the ulcer. Some good effect," he adds, "has been observed from the careful application of powdered charcoal to the whole surface of the sore," which, he adds, "ought not to be in the gangrenous, or pulpy, or putrid state, but merely ulcerative, or phagedenic; and not even then, when this peculiar ulceration assumes a deeply hollowed-out form, rapidly filled with an abundant and tenacious discharge." Of constitutional treatment he evidently thinks little, and, whilst he admits the propriety and necessity of treating every accompanying state of fever, whether it be inflammatory, catarrhal, bilious, remittent, &c., by its appropriate means, he does not seem to think they have much influence on the local disease, although he firmly believes that the suppression of the local disease materially assists, and arrests, in a great measure, such constitutional symptoms as may be dependent on it, unless influenced by some peculiarity of constitution.

He says, (page 86,) some surgeons of the Anglo-Portuguese army of Lord Wellington had assured him, that the mineral acids, and notably the muriatic, had been frequently employed in the British hospitals in Spain with success; and he particularly mentions M. Guthrie, *Inspecteur au Service du Santé*, as the person from whom he especially received his information; thus establishing the fact, that the use of the mineral acids in a dilute and concentrated state was known to, and had been essentially introduced into practice by, the surgeons of the British Army—a fact which does not accord with the received opinions of the day, which do not give to them the precedence they are thus shown to have merited. My old and valued friend, Mr. Boutflower, the only surgeon who accompanied me from Toulouse to Montpellier, has published cases which will show how well he understood the Protean nature of this disease, and how much the treatment generally had improved among officers of intelligence and experience:—

"In the case of John Boyle, 71st regiment, wounded on the 18th of June, 1815, by a piece of a shell which ran across the fore and upper part of the left thigh very superficially, which wound afterwards became gangrenous; large and repeated bleedings were had recourse to, free evacuation of the bowels, and pure muriatic acid applied to the entire surface of the wound. In addition to the bleedings, large quantities of calomel and extract of colocynth, and the neutral salts were given, and injections frequently administered. To alleviate the excessive pain, large opiates were prescribed. During the whole time the morbid process was going on, he absolutely ate nothing; but diluents, particularly acid drinks, were liberally allowed. Notwithstanding these profuse evacuations, he continued remarkably strong, and the blood was buffed with a large portion of coagulum to the last.

"This man ultimately recovered.

"A private, first battalion of the 79th Regiment, aged thirty-seven, was admitted on 10th August, 1815, into the General Hospital, Yarmouth, under Mr. Swallow, from Antwerp, with a gun-shot wound of both thighs: the ball entered about the middle of the left thigh, passed through it, and entered the right, from which it was extracted; the outer wound of the left thigh was pretty extensive, the edges hardened and ragged; discharge extremely offensive, and sinuses extending upwards and downwards for a considerable length, which, being laid open, the fascia was found to be in a sloughing state; the wound was now very extensive, measuring twelve inches in length and three in breadth. The whole surface of the wound was ordered to be kept constantly wet with the arsenical solution until an eschar should be formed, which took place in the course of twenty-four hours, after which stimulating dressings, with emollient poultices, were applied to promote the separation of the eschar, which separated in eight days, excepting at the upper part, which came off a few days afterwards; the wound then assumed a healthy appearance. Two days after the arsenical solution had been applied he was attacked with violent colic, which was completely relieved by warm fomentations and an anodyne, in a very short time. The medical treatment throughout has only been an anodyne at night, and attention to the state of his bowels, which are naturally constipated, and, at one time, a little stomachic medicine.

"William Hoyles, sergeant, third battalion 1st Guards, was admitted on 10th August, 1815, into Yarmouth Hospital, with a gunshot wound of the upper part of the thigh. He says that the wounds were looking well when he left Antwerp, and his health was good when he went on board ship, but that he caught cold when coming ashore, being very wet.

"The inner surface of the wound appeared sloughy, and the discharge was fetid and ichorous. He has had repeated attacks of fever, with furred tongue and constant sickness; pains over his body; pulse 120. He has had a fermenting poultice applied to the wounds, and has taken saline medicines; sloughing has exposed the muscular fibres. Stomach very irritable.

"After the wound was dilated to the extent of two inches, and the sloughing parts exposed, the arsenical solution, undiluted, was applied. Patient felt little pain from the application; he has had, since the wounds assumed their present appearance, a constant burning pain in them.

"A slough formed, and came away from the lower wound; after the application of a poultice, the wound assumed a more healthy aspect. The patient was placed on generous diet, and he was eventually discharged cured."

"Lorenzo Firentae, 3rd battalion King's German Legion, was wounded on the 18th of June, through the thigh, about two inches below the centre of the vastus externus muscle. The ball remained lodged, and the thigh was considerably inflamed. The fever being considerable, he was ordered calomel and jalap, and an antimonial saline mixture. Poultices were applied to the wound, and fomentations to the limb; afterwards tincture of myrrh as a local application. The sloughy wounds, however, did not assume a healthy aspect, till they were dressed with lint wetted with Fowler's solution of arsenic and water."

The following Report from Mr. Taylor, Surgeon of the 29th Regiment, engaged in the different battles which lately took place on the banks of the Sutlej, to Sir James M'Grigor, and of which he sent me a copy, is, I believe, the latest record the Director-General of the Medical Department of the Army has received on the subject of hospital gangrene. Mr. Taylor, who was an articled student of mine, and House-Surgeon of the Westminster Hospital, and of the Royal Westminster Opthalmic Hospital, and a highly educated man, greatly distinguished himself on this service. He carried out those precepts he had so often heard me inculcate in my lectures, and of the propriety of which his Report gives ample proof, on this as on all other points:—

"Hospital gangrene appeared amongst the wounded of the 29th Regiment a little later than in the hospitals of other corps. The disease declared itself on the 18th of January, in a stump case; and between that date and the 26th of the same month, fifteen cases had come under treatment. At first I could tell, by the peculiar dark, florid countenance of the patient, that his wound had taken on the gangrenous affection; yet I cannot say that there was, in these cases, any marked inflammatory fever. Subsequently, in the prevalence of the disease, this dark red colour of the face was neither well marked, nor by any means so constant. In many cases the disease seemed purely local, but in the great majority there was certainly much feverish, constitutional diiturbance accompanying the local affection, and often preceding it. My experience of the disease as it occurred amongst the wounded at Ferozepore, does not enable me to determine, satisfactorily to myself, whether it is essentially a local or a constitutional affection. I am inclined to place it in the former category; and there is no doubt whatever, in my mind, that the essential means of treatment are local."

Mr. Taylor, after describing the causes and appearances of hospital gangrene, says:—

"In the treatment of this disease I proceeded regularly on one plan, and found that so efficacious that I was not inclined to try any other. The plan adopted was, the application of the strong nitric acid, so as completely to cut off the diseased from the sound part, or so far sound part as only to be affected with inflammation. The acid, however, required to be rubbed in with the blunt end of the probe, so that it not only destroyed the cuticle, but killed the cutis vera, and probably the cellular membrane underneath. The narrow yellow ring of dead skin thus formed, separated like a piece of leather, generally carrying with it the whole slough, and leaving a clean, healthy surface, as well as edges to the wound. I never attempted to apply the acid to the surface underneath the slough, neither is such application necessary; the vital seat of the disease is on its circumference, however large its area. I must admit, that the disease sometimes crossed the acid boundary, and a second, and even a third application of the remedy was required, but this was rare. Neither was constitutional treatment neglected, but this varied according to the state of the patient; emetics, purgatives, saline medicines, and low diet being sometimes required; whilst in other instances, ether, ammonia, laudanum, and generous diet were administered.

"When speaking of the symptoms of this disease, I should have mentioned that a burning, gnawing sensation was sometimes loudly complained of. The application of the acid soon removed that pain, and the acid itself did not often seem to produce much suffering. In one instance, deemed a favourable one, I tried venesection, and I fear did mischief. Calomel and antimonials were useful. I did not try the arsenical solution. The change of air which the march of the wounded on their return to Kussowlee occasioned, certainly had very beneficial effects on all the gangrenous and sloughing sores.

"At the same time that hospital gangrene was prevalent at Ferozepore, some wounds took on a malignant fungous affection, which spread over the healthy surface like the hospital gangrene. The dirty fibrous-looking fungous growth rose considerably above the edges of the wound, partially overlapping them; these edges were inflamed, but not livid and vesicated as in the cases of gangrene; but here also the disease took the circular or oval form. The affection here noticed I observed only in wounds of the forearm and hand; Colonel Barr's wound, which was of the forearm near the wrist, took on this disease. The application of nitric acid in the same way as for hospital gangrene eventually checked its progress; one finger of a private thus affected I was obliged to remove. Colonel Barr's wound was a compound comminuted fracture of the radius from grape-shot, which penetrated but did not lodge. He was an exceedingly large, stout, fat man, and known to be of a bad habit of body; he had been twenty years in India. His death was occasioned by a sudden hæmorrhage from the radial artery, from the effects of which he never rallied.

"In no case that came under my observation did the gangrene directly prove fatal, though in many cases it contributed largely in bringing about an unfavourable termination."

M. Fabien, of Revigny, in the fourth volume of the *Revue Medico-Chirurgicale de Paris*, for October, 1848, has lauded the use of slices of lemon, the rind being previously removed, as an application in this disease; in places where lemons can be readily obtained, they may be used with advantage, particularly in that form of the disease which I have noticed as the ulcerative or mildest stage. M. Fabien, after applying the slices of lemon to the surface of the ulcer, covers them with lint, moistened with water, (*chlorurée camphrée*,) which water

contains, I presume, some chlorine and camphor, the latter article being, perhaps, useless. In cases of phagedenic ulceration of the mild kind, Dr. Emery, at Plymouth, in 1815, thought he had reaped much benefit from the application of honey, mixed with the fermenting poultice.

CONCLUSIONS.

First.—Hospital gangrene never occurs in isolated cases of wounds.

Second.—It originates only in badly-ventilated hospitals, crowded with wounded men, among and around whom cleanliness has not been too well observed.

Third.—It is a morbid poison, remarkably contagious, and is infectious through the medium of the atmosphere applied to the wound or ulcer.

Fourth.—It is possibly infectious, acting constitutionally, and producing great derangement of the system at large, although it has not been satisfactorily proved that the constitutional affection is capable of giving rise to local disease, such as an ulcer; but if an ulcer should occur from accidental or constitutional causes, it is always influenced by it when in its concentrated form.

Fifth.—The application of the contagious matter gives rise to a similar local disease, resembling and capable of propagating itself, and is generally followed by constitutional symptoms.

Sixth.—In crowded hospitals the constitutional symptoms have been sometimes observed to precede, and frequently to accompany, the appearance of the local disease.

Seventh.—The local disease attacks the cellular membrane principally, and is readily propagated along it, laying bare the muscular, arterial, nervous, and other structures, which soon yield to its destructive properties.

Eighth.—The sloughing of the arteries is rarely attended by healthy inflammation, filling up their canals by fibrine, or by that gangrenous inflammation which attends on mortification from ordinary causes, and alike obliterates their cavities. The separation of the dead parts is, therefore, accompanied by hæmorrhage, which in large arteries is usually fatal.

Ninth.—The operation of placing a ligature on the artery at a distance, or near the seat of mischief, does not succeed, from the incision being soon attacked with disease, unless it has been arrested in the individual part first affected, and the patient has been separated from all others affected by it.

Tenth.—The local disease is to be arrested by the application of the actual or potential cautery. An iron heated red-hot, or the mineral acids pure, or a solution of arsenic, or of the chloride of zinc, or other caustic which shall penetrate the sloughing parts, and destroy a thin layer of the unaffected part beneath them.

Eleventh.—After the diseased parts have been destroyed by the actual or potential cautery, they cease in a great measure to be contagious, and the disease incurs less chance of being propagated to persons having open wounds or ulcerated surfaces. A number of wounded thus treated are less likely to disseminate the disease than one person in whom constitutional treatment alone has been tried.

Twelfth.—The pain and constitutional symptoms occasioned by the disease, and considered as distinct from these symptoms, which may be dependent on disease endemic in the country, are all relieved, and sometimes entirely removed, by the destruction of the diseased surface; which must, however, be carefully and accurately followed to whatever distance and into whatever parts it may extend, if the salutary effect of the remedies is to be obtained.

Thirteenth.—On the separation of the sloughs, the ulcerated surfaces are to be treated according to the ordinary principles of surgery. They cease to eliminate the contagious principle, and do not require a specific treatment.

Fourteenth.—The constitutional or febrile symptoms, whenever or at whatever time they occur, are to be treated according to the nature of the fever they are supposed to represent, and especially by emetics, purgatives, and the early abstraction of blood if purely inflammatory, and by less vigorous means if the fever prevailing in the country is of a different character.

Fifteenth.—The essential preventive remedies are separation, cleanliness, and exposure to the open air,—the first steps towards that cure which cauterization will afterwards in general accomplish.

ORIGINAL CONTRIBUTIONS.

ANTEVERSION OF THE UTERUS AS A CAUSE OF STERILITY.

By EDWARD RIGBY, M.D., &c.; Examiner of Midwifery in the University of London; and Lecturer on Midwifery at St. Bartholomew's Hospital.

(Continued from page 572.)

Mrs. O., aged 44, mother of two children, one about seventeen, the other fifteen years of age; delicate form; brunette; sallow.

May 11, 1846.—Complains of much lassitude; pain of back and loins increased by the upright posture and by walking; appetite good, but much acidity of stomach. Bowels just now are confined, but they are exceedingly irritable, over action being easily produced. The fæces, when solid, come away in small flattened portions, with much difficulty and pain, and are usually accompanied with long ropes of mucus from the bowels. During the catamenial period there is severe pain on sitting down, and the discharge is very profuse; leucorrhœa during the intervals; tongue smooth, red, fissured.

In her early life the catamenia were always scanty, but three years ago became more profuse with clots, and were accompanied with severe pain, which did not come on until the discharge was fairly established.

Examination per Vaginam.—Os uteri quite backwards against the posterior wall of the vagina; the os tincæ is open; its lips are swollen; the cervix short and bulky. The body and fundus are distinctly inclined forward. Uterus feels large and not very moveable; pressure on the abdomen, especially at the right of the symphisis pubis moves the uterus. Uterine sound passes 3½ inches forwards.

Examination per Rectum.—Os uteri pressing against the rectum. I cannot feel any continuation of the bowel above the spot where the os uteri presses, but must repeat my examination.

Let her have a large enema of warm water every other night.

℞ Pil. hydrarg. gr. iij.; ferri. sulph. gr. ij.; extr. lupuli, gr. v. M. ft. Pil. ij. o. n. s.

℞ Succi taraxaci, ʒi.; liquoris calcis, decoct. sarsæ. co. aa. ʒiiiss. M. ft. mist. cujus sumat coch. mag. ij. bis die.

May 13.—Examined the rectum carefully. High up, just to the left of the median line of the sacrum I can feel the continuation of the gut; the edge of the constriction is irregular, and in part nodulated; and this portion is acutely painful to the touch. I introduced a large bougie, but it would not pass beyond the expanded sac formed by the lower portion of the rectum.

Rep. med.

May 18.—I passed a long elastic tube through the stricture, which disappears in great measure when I raise the uterus from its anteverted position.

Rep. med.

May 28.—I introduced the tube into the rectum, and passed it to a considerable distance above the stricture, which I am now satisfied is produced by the pressure of the os uteri against the rectum. I then pumped up two pints of warm water above this part, and, when it had been discharged, examined per vaginam. The uterine sound did not pass far, being caught in some corrugation or irregularity of surface, but the dilator (a much thicker instrument,) passed easily. I opened its blades slightly, and now passed the sound to the extent of 3½ inches. The uterus was quite moveable, and I easily brought it into the natural position. I have, therefore, determined to support it artificially, in the hope, that as the uterine congestion diminishes the profuse discharges at the catamenial periods will be controlled.

Rep. med.

May 30.—Introduced Professor Simpson's supporter with an ivory peg, shaped, as far as possible, to the cavity of the uterus; it passed with great ease, and produced no pain. The tongue still continues red and glazy. Rep. mist. taraxaci et liq. calcis. c. sarsæ ter die.

June 19.—She is greatly improved since last report; the sallow cachectic look has disappeared; the tongue has become natural. On examining, about a week ago, the uterus seemed smaller, but its posterior wall is thicker than the other parts. Rep. med.

August 14.—The uterus is still too large for the supporter, and has now and then slipped over the disc from which the ivory peg which supports the uterus springs. Shortly before a catamenial period, the instrument accidentally came away, so that the uterus was not retained in position at this time. I afterwards replaced it, but it produced great uneasiness, which abated very slowly. She returned home, and writes word that she feels and looks much better. A catamenial period has occurred exactly at the right time, without more pain than usual. The os uteri still shows a disposition to slip over the disc of the instrument, which causes a good deal of pain.

October 1.—Writes that she removed the supporter, and appears tolerably easy.

October 19.—The first appearance of the catamenia since the removal of the supporter, has passed with less suffering than usual, "it has been quite natural in colour, and proper in quantity." Her medical man has made an examination: he finds the position of the uterus is natural, and considers that there is no disease; but from the irritability of the bowels, and constant discharge of ropy mucus from them, he fears the existence of chronic inflammation of their lining membrane.

December 5.—The catamenial periods have passed more naturally; and her medical man says, that the uterus is "considerably smaller, in its right place, and quite natural." She feels stronger than she has done for some time.

I have quoted this case to point out the remarkable change which the uterus occasionally undergoes when retroverted or anteverted. The returning circulation is frequently much obstructed, the uterus becomes engorged and heavy, it increases considerably in bulk, and, therefore, aggravates the displacement, which, in its turn, increases the congestion still further. When once matters have gone to this extent, the pressure of the enlarged uterus on the adjacent parts produces more or less inconvenience, and occasionally mischief. In the present instance the rectum had suffered considerably from the constant pressure of the os uteri against it, and, for a while, I could not satisfy myself that a permanent stricture of the rectum from organic disease did not exist. The feel of the stricture, the quantity of long ropes of mucus, almost like tape-worms, the great irritability of the bowels, indicating a condition not far removed from chronic inflammation, or even ulceration of their mucous membrane; the red, glazed, and fissured tongue of the patient all combined to show that the bowel was the original seat of her sufferings; that even the anteverted state of the uterus might result from fæcal accumulations above the stricture, distending the upper part of the rectum into a large sac or pouch, which had thus forced the fundus uteri forwards. My first examination, therefore, gave me great reason to fear that the case was a very unfavourable one; for, not only was I unable to trace the continuation of the intestine through and beyond the stricture, but the increased size of the uterus, its thickened cervix, open mouth, and swollen lips, and withal, a pulpy, irregular feel of its surface, afforded, to say the least, great suspicion of malignant disease.

A subsequent examination showed that the obstruction in the rectum was not from general narrowing of the intestine, but from the pressure of the os uteri against it, for as soon as the uterus was raised, and held in its natural position, the stricture disappeared; and I presume, therefore, that the edge which I had felt during my examination of the rectum was some swollen corrugation of its mucous membrane, or perhaps congested varicose veins immediately

below the spot against which the uterus was pressing. A quantity of tepid water, thrown up by a long tube above the compressed portion of the bowel, in order to remove any fæcal accumulation which might have existed there, and thus caused the anteversion of the uterus by pressing it forwards, completed the chain of evidence. The uterus, it is true, was now more moveable on the removal of a moderate quantity of natural fæcal matter from the upper part of the bowel, but the great point was, that the moment the uterus was raised into its natural position, the sensation of a stricture entirely disappeared, nor was there any trace, either of a narrowing in the calibre of the bowel, or of a firm and very tender edge, where it was constricted. The fæcal accumulation, therefore, had not been a cause but a result of the anteversion, because the obstruction in the rectum, of which it was the consequence, was evidently produced by the pressure of the anteverted uterus against it. I cannot help attributing the general mucous irritation of the bowels to this cause, as I have not only observed it in other cases of anteversion, but also the same worm-like ropes of mucous or fibrinous matter in the evacuations which were seen here.

The introduction of the sound in anteversion is sometimes difficult, from the direction of the os uteri so strongly backwards; but this is usually effected by pressing up the fundus with the finger, which brings down the os uteri sufficiently for the purpose. It may seem rather inconsistent for me to say, that the sound did not pass easily, and that the dilator, a much larger instrument, did. This arises from two causes; firstly, the os uteri externum (os tincæ) was very open, and when this is the case, (and there is no organic disease) the os uteri internum is usually contracted; the os and cervix were also much swollen, so that the smaller instrument became entangled immediately below the contraction, whilst the blunt and more bulky dilator readily passed through.

The still further improvement in the mobility of the uterus was owing to a slight diminution of its size, which quickly followed its return to the natural position. It is by no means an unusual circumstance in retroversion, to find the lips of the os uteri and cervix swollen to nearly double their natural size in retroversion, from the obstruction to the returning circulation from these parts which the displacement produces. The effects on this swollen condition of the lower part of the uterus, by bringing it back to its natural position, are not less remarkable than instantaneous. The os and cervix immediately assume their natural size, form, and, I may add, feel. I have given a well-marked instance of this in the case of Mrs. B., (*Medical Times*, Nov. 29, 1845,) where the swelling of the os and cervix, and especially of the posterior lip, was such as to make me fear that I was touching a mass of organic disease, and where it entirely disappeared as soon as the uterus was replaced. I have seen a case of equal severity since, which I intend shortly to report, in illustration of the effects of the prone couch in retroversion. In anteversion, the anterior lip is mostly the one which is swollen and congested, and I knew a case where this local condition alone was discovered, and where the patient was duly victimised by scarification, nitrate of silver, and caustic potass, on the most approved French plan, for many months, without relief, and where the instant the anteverted uterus was rectified by the use of the uterine sound, the swelling and congestion of the anterior lip disappeared.

The application of the uterine sup orter was attended with no difficulty. The flat ivory pin produced no irritation, and, after a time, the uterus had decidedly diminished in point of size.

On account of the irritable state of the intestinal mucous membrane, I deemed it expedient to put her upon a course of lime water and sarsaparilla, and, wishing to raise the liver to brisker action, I added a drachm of extract. taraxaci to it. The value of taraxacum is peculiarly felt in these cases of long-standing mucous irritation, where the liver is torpid, and where it is highly undesirable to give mercury,—in three or four days time a flow of fresh bile is observed, and, when the remedy is continued for ten days or a fortnight, the effects continue for some time after the remedy has been suspended.

The reposition of the uterus had a most favourable effect upon the menstruation, which now came on at the right period, and was natural, both in appearance and quantity. From the size of the uterine cavity, the ivory peg of the supporter did not reach the fundus, and consequently the os uteri slipped over its disc, and contracted beneath it. This is an accident which occasionally produces a good deal of pain and irritation; for, when the os uteri contracts below the button of the instrument, it drags down the fundus upon the end of the ivory peg, putting the patient to severe suffering,—an oval disc will be therefore preferable to the circular one, and fairly guards against this accident.

I have seen this patient occasionally since, at distant intervals, and she has experienced no return of her former symptoms. After some months from her first wearing the supporters, her medical man considered that a decided diminution of the uterus had taken place, since which she has been under circumstances requiring much exertion of body as well as of mind, but there has been no return of her former symptoms.

CASES OF STRICTURE OF THE URETHRA, TREATED BY PERINÆAL INCISION.

By JOSEPH THOMPSON, Esq., Consulting Surgeon to the Nottingham Union Hospital, and to the General Dispensary.

(Read before the Medico-Chirurgical Society, Nottingham.)

[Continued from page 549.]

George Hunter, aged 43, was admitted on the 27th of February, 1839. He said he had been a soldier, and had suffered from stricture of the urethra upwards of nine years. About the same time an abscess formed on the right side of the perinæum, which gave way, and urine had discharged from it ever since, except occasionally for a short time, when it had been closed. Some time back, but not lately, when he evacuated his bladder, urine dribbled from the anus. Bougies were used nine years ago, but he did not know whether they ever passed the stricture. He was certain, however, that an instrument had not been got into his bladder the last five years, although many attempts had been made. At the time I first saw him there was a sinus at the right side of the bulb, which proceeded towards the membranous portion of the urethra, and when he emptied his bladder urine came through it in a *small* stream, at the same time that it passed, with great difficulty and in drops, along the natural passage. A small catheter, introduced along the urethra, passed through two tight strictures, (one opposite the scrotum, the other more forward,) and became obstructed at the membranous portion which it could not be made to pass. He was feeble and reduced; tongue smooth and rather red; secretions morbid.

April 4th.—As he had taken such medicines since his admission as his symptoms seemed to require, and as some persevering yet unavailing attempts had been made with instruments of different size to overcome the difficulty, it was agreed in consultation to-day that an operation was required, and it was performed in the manner before described, with this exception: when the urethra had been laid open in front of the stricture, as a small probe, which was passed with difficulty, did not appear to proceed in a proper direction, and as the finger in the rectum ascertained a deviation from the natural passage, I did not venture to divide the stricture upon it, but had recourse to the following procedure. A bistoury, with a sharp point, straight back, and narrow blade, was guided by the left forefinger, and placed upon the perinæal extremity of the strictured membranous portion, and having been made to pierce it slightly, held there, whilst the left forefinger was transferred to the rectum to ascertain the position of its prostatic extremity relatively to the point of the bistoury which rested on the stricture. This done, the instrument, with its edge turned outwards, the handle kept in the centre, and at such an elevation as to direct the point towards its ultimate proper destination, was thrust onwards from one extremity to the other, the finger being still in the bowel, and proper allowance made for the thickness of the parts intervening between it and the urethra. After the division of the stricture a female catheter was passed into the bladder, and (as urine flowed through it) removed, and a probe substituted as a guide to the catheter, which I intend to pass and retain in the bladder. But as some difficulty occurred, it was judged better to desist than prolong the operation by any persevering attemps at introduction. The female catheter was therefore re-introduced, and the wound dressed with a wetted lint, and a T bandage, both of which had a hole cut in them for the purpose of allowing the end of the catheter to come through, after which it was secured in the bladder. The patient was then put to bed on his back, with his knees and scrotum supported, and took an opiate.

Vespere.—Pulse 96; has not experienced any shivering or pain, except a smarting of the wound; urine comes through the instrument; tongue dry; skin moist; an effervescing powder to be taken every three hours.

5th.—Mane.—Slept five hours during the night; pulse 90; bowels not open since 3rd; skin moist; no pain. Capt. olei ricini ℥ss. statim. et cont. pulv. effervesc.

Vespere.—Tongue dry; bowels open once; pulse 100, and rather jerking; had a rigor at two o'clock, which lasted three-quarters of an hour. Cont. pulveres sed adde antim. tartar, gr. 1-6 singulis.

6th.—Skin hot and dry in the night, but he perspired towards morning, which afforded relief, and he slept a few hours; tongue dry; pulse 110; bowels not open. He is shivering; oil was taken early this morning, and he was ordered to repeat it immediately; to continue the powders, and when the bowels have been moved, to take the following:—℞ Sulphatis quininæ gr. iv.; ft. pilula quartis horis sumenda.

Vespere.—Has had three rigors during the day, and is now perspiring profusely; tongue dry; bowels open twice; pulse 112. Cont. pulveres (sine. tartar. antim.) et pilulæ.

7th.—The female catheter was withdrawn, cleaned, and re-introduced, as an unsuccessful effort was made to introduce a common one into the bladder, which was followed by slight hæmorrhage from the urethra.

Vespere.—Pulse 86; no shivering; skin moist; no pain. Cont. remed.

8th.—Bowels not open; going on well. Capt. olei ricini ℥ss. Cont. alia.

9th.—Not any shivering since the evening of 6th; pulse 82; tongue not so dry; skin moist; bowels open. Cont. pilulæ; pulv. effervesc. et capt. olei ricini ℥ss. mane.

10th.—Has some cough; urine alkalescent; pulse 78. Cont. pilulæ et ol. ricini; omit pulveres.

℞ acidi sulphur. diluti ℥iss.; syr. papav. alb. ℥vi; magnes. sulphates ℥i.; tinct. cardam. co. ℥ss.; aquæ distillatæ ℥ivss. M. capt. coch. ii. ampla ter die.

11th.—Cough much less; a bladder was fixed to the end of the catheter to catch the urine as it dribbled away.

12th.—Cont. remed.

13th.—Going on well; cough gone; bowels open. Cont. remed.

14th.—More fever; pulse 100; bowels open twice, from oil taken at eleven o'clock to-day; to continue the pills; omit the acid mixture, and take an effervescing powder at pleasure.

16th.—Bowels open twice; stools offensive and pale; pulse 96; a larger catheter was introduced through the wound. Capt. hydrarg. submur. gr. ii.; horâ somni, et olei ricini ℥ss. mane; cont. pulv. effervescentes et pilulæ.

18th.—Feverish; tongue rather dry; pulse fuller; urine scanty. To omit the pills, continue the powders, and take the following mixture:—℞. Misturæ minderer ℥8: solut. antim. tartar ℥ii. M. capt. ℥i. quartis horis.

19th.—Pulse 94; bowels open; tongue dry.

Vespere.—℞ hydrarg. submur. gr. ii.; extract hyosciam. gr. v.; ft. pil. h. s. sumend.

℞ pulveris rhei comp. ʒi. mane sumend. Cont. alia.

20th.—Skin cool and moist; pulse 92; bowels open once; tongue not so dry, no pain; had a better night; his cough has returned. Omit the mixture, continue the powders, and take the acid mixture prescribed on 10th.

21st.—The catheter was passed through the strictures, but could not be got into the bladder.

22nd.—Took oil this morning. Bowels not open; in other respects much the same.

24th.—He called Mr. Wilson, the resident surgeon, up in the night, on account of pain in his bowels, for which he took the following, with the desired effect:—

℞ Confectionis aromatic, ʒi.; tinct. opii, gtt. x.; aquæ ad ʒi. Ft. Haust. statim sumendus. Continue the acid mixture and powders, and take the pill (prescribed on 19th) at bed-time.

25th.—Rather better: has a burning sensation in his bowels, and his stools are still pale and yeasty. Capt. pilula horâ somni. Cont. alia.

26th.—Better. Bowels open twice; tongue becoming moist; pulse 80. Cont. pulveres and mistura acida.

28th.—Rep. pilula horâ somni sumenda. Cont. alia.

May 1st.—Pulse 80; skin cool and moist; bowels open; stools offensive and pale; appetite, which had been for some time bad, is improved. The catheter was now introduced without difficulty. The pill to be taken at bed-time, and the rest continued.

2nd.—Has had some shivering since the introduction of the instrument, and there is pain in the urethra; bowels open copiously once; tongue moist; pulse 108; urine plentiful. He slept two hours. Continue the pill, mixture, and powders.

3rd.—Bowels open; stools better. Intermit the pill, take the oil in the morning, and continue the rest.

4th.—Going on well. Bowels open twice; stools pale. Take the pill at bed-time, and the others as before.

May 5th.—The catheter cleaned. The wound has nearly closed, and as the granulations were too high caustic was applied. Capt. olei ricini, ʒss cras. mane.

6th.—Caustic applied. Capt. pilula horâ somni, et cont. alia.

8th.—Catheter taken out at three o'clock to-day. Bowels open; stools pale. Capt. pilula horâ somni et cont. alia.

9th.—Since the catheter was withdrawn all the urine has come through the natural passage. It was re-introduced this morning. Bowels not open. Capt. olei ricini et cont. alia.

10th.—Instrument taken out.

12th.—Going on well. Urine comes in a moderate stream, and none through the perinæum. He took a pill on the 11th, and will take one to-night.

13th.—Catheter passed to day, and left in.

14th.—Catheter withdrawn; wound perfectly healed. From this time the instrument was passed at such intervals as the disposition to contract seemed to require, and he likewise continued the medicines up to the 24th, when he was discharged, with directions to have a catheter introduced once in three weeks for some time, and it appears sufficiently frequent to keep the passage open.

[To be continued.]

THE PROGRESS OF CHOLERA IN LIMERICK.

By Dr. KIDD.

The appalling outbreak of cholera, of which I spoke in a late Number of the *Medical Times*, has, I am happy to say, as suddenly become almost extinct. The epidemic wave has palpably passed over our heads, and people begin to look again at each other with some little re-assurance and satisfaction; the destroyer has passed by, not, however, without leaving traces in its path,—not less than 4,000 persons out of a population of some 60,000 having been swept away already in its frightful onslaught.

The few stray cases occurring at present, like those preceding the recent outbreak, had more, I think, of the sporadic character about them. Ordinary every-day cholera, which one never fails ever and anon to come across in this very miserable and but too much neglected part of the world, indeed, I am almost satisfied, that local causes are almost entirely at present at work; and to understand such, a host of minor matters must be taken into consideration, of no very general or particular interest.

The waste of human life in this country for some time has been positively frightful, else one should shudder at this dreadful mortality; plague and famine have, indeed, done more for Ireland during the eventful year just passed than the sword for other nations of Europe. The waters of Lethe seem in some way to pass over her afflictions. Thousands, aye, tens of thousands, now sleep the sleep of death to whom life, a little month ago, were sorriest martyrdom. The disease has been spreading in all directions, where famine and fever had gone before, and marking out its victims with a relentless and ever exigent tenacity of purpose. When we are to have an end of such frightful scenes Providence alone can foresee; to the sensitive and thoughtful mind the thing is positively fearful.

The Plague of London, I verily believe, stripped of its embellishments, was not that frightful thing the desolating outbreak of cholera has been in this ill-fated city—*four thousand bodies having been buried within its walls in a month*—and allowing as many more to have recovered, giving us precisely one in every eight of the population as brought within its devastating influence; the vast majority living hitherto on the precarious bounty of public charities—their houses now level with the earth, and the little remnant of their most wretched families engulphed in that fearful abyss of all the social affections—the workhouse.

And why do I dwell on such things, some one says, in a Journal professedly medical? It is to impress on the professional reader at the other side of the channel, what must be expected, where want and a breaking up of the little social arrangements of life are permitted to explain, in some way, the difference of this frightful disease, under such circumstances, from the disease as described for us in India; to show the dreadful sameness of circumstances under which the majority have been seized, leading the unwary and illogical reader to the conclusion that contagion was at work. Such things are indeed part and parcel of the disease, as recently exhibited in this locality, without a description of which we could arrive at no correct conclusion, destitution and misery doing the work of contagion effectually.

Nor has the disease yet stayed its fearful ravages. The seeds scattered on every hand, are sure even still to come to a prodigal growth, and hundreds of destitute creatures, yet open to the malady, to fall sooner or later.

It will seem, however, a paradox to English ears; aye, and ears other than English, for I have read your intelligent Journal at the other side of the Rhine; that the richest part of any country should be the most wretched; but so it is with many parts of Ireland. Where the soil gives little as in Scotland, our friend, the Celt, must work. Here, on the contrary, the very exuberance of the earth leads to idleness and improvidence. What the ground gives unasked, the Irish Celt takes little trouble about—the district becomes over populated—a blight, as that of '46, succeeds and sweeps from him his chief means of subsistence, and the richest districts in the world become steeped in poverty, and overpopulated. Such is the explanation of the social anomaly under which this country has for some time groaned. Famine and fever follow in the sad track of the original visitation, and an epidemic finding the people weakened and broken in spirit fills up the ghastly scene. We must examine this chain of causes, indeed, in studying the history of the disease in this country.

The earlier history of cholera, in other countries, is hid, I need scarcely say, in very considerable obscurity; the first detailed account of its ravages are met with in 1817, in which year, every one is aware, it made its appearance in India, according to a popular impression for the first time; but, looking into the matter a little deeper, for the first time, perhaps, after some considerable epoch, as in many of the writings of medical and other authors, anterior to this period, we find it dwelt on at considerable length, under another name familiar to the reader. *Mordexin* or *Mordechin*, the Hindoostanee term for the disease. "The change of seasons," says Mandelo, describing the diseases of India a couple of hundred years ago, "is the cause of many diseases, but the most common are those which they call *Mordexin*, which kills immediately, burning fevers and bloody fluxes, against which they have, in a manner, no remedy but bleeding." In the writings of Zacutus Lusitanus, Franc, Bontius, and others, no indistinct traces of the disease are also to be found, as shown by Dr. Chambers, and more lately by Dr. Knox; that this disease, however, so described, proved as deadly, and was characterised by epidemic wanderings similar to the frightful disease of 1817, is, perhaps, not quite as clear; of its identity I am inclined to think there can be no doubt.

From what we further glean of the nature of the disease, from even that period, it would seem a visitation of no very stable or well-defined character, subject to changes from variety of climate, and modified in a thousand ways by topographic and other peculiarities. There is no other way, indeed, but geodetic, to account for the many conflicting and often opposite opinions and modes of treatment with which our modern treatises abound, and which give the subject such an air of uncertainty.

The opinion of all the men in India, for instance, who have written on the subject, seems in favour of the doctrine of the *non*-contagiousness of cholera. Since the disease has unhappily become better known at this side of the world, an impression of an opposite nature, I need scarcely say, has become very general, and facts of a somewhat striking character to bear out such an opinion have found a place more prominent perhaps than they deserve in the public eye; many of them, I am quite satisfied, merely exceptional, and many to be explained more correctly by a reference to some persistent and all-engaging series of influences, some such as those I have so often alluded to.

The *ensemble* of all the natural and physical circumstances in the midst of which we live, the excellent definition of "Climate" by Cabanis, the nature of the epidemic influence itself, the social and other relations of a people, among which this desolating scourge makes its appearance, must all be taken into account before we jump to a conclusion as to its communication from one person to another. The question of the history of cholera is one of intense interest—it is, whether the disease is really an old one, and whether we are to expect it at uncertain intervals. The question of contagion is one really not less so, and requiring the coolest and most logical examination.

It does not follow, then, because the same want of sanitary and other arrangements exists in any given locality, the inhabitants living in precisely the same way, and exposed to various physical and other influences of which they have no conception, that persons, under such circumstances, contracting disease much in the manner of persons contracting disease by contagion, that such persons have actually contracted the disease after that manner. It does not follow, on the other hand, if occasionally occurrences happen that seem to tend towards the doctrine of contagion, that the latter has really taken place. The old fallacy of *post hoc* and *propter hoc* may fascinate and delude the public ignorant of the real matter in hand; to the quiet, logical minded practitioner the thing is still in doubt.

PRACTICAL OBSERVATIONS ON EPIDEMIC CHOLERA, AS IT APPEARED IN DUMFRIES IN 1832, AND IN 1848.

By JAMES GRIEVE, M.D., Physician to the Dumfries and Galloway Royal Infirmary, Consulting Physician to the Crichton Royal Institution, &c.

The history of cholera, as it appeared in Dumfries, in 1848, presents no small analogy to that

which prevailed in 1832; indeed, in many respects, it proved an exact counterpart,—its rise, progress, duration, and decadence, the number of persons attacked, and comparative mortality, being, as nearly as possible, the same,—nor did the meteorological phenomena differ to any great extent, the malady continuing to rage with the same remarkable virulence, apparently independent of, and uninfluenced by, every possible variety of weather and of temperature. It is well remarked by the celebrated German writer, Hufeland, that the physician should not be the magister, but the minister naturæ, her servant, or rather, her assistant, ally, and friend, which observation applies with great truth to the manner in which cholera is generally treated; for there is, perhaps, no disease in which the nimia diligentia medicorum has been more unequivocally displayed, or been attended with more unfortunate results, certainly none in which the natural or restorative processes towards a removal of the disease are more frequently frustrated. This violation of the vis medicatrix naturæ is more particularly manifested in the use, or, rather, the abuse of opiates and stimulants in every phase of the disease; and if my experience, which has been considerable in both the epidemics which ravaged Dumfries, has not led me to a successful mode of treatment in every case, it has, at least, taught me to avoid the administration of heroic doses of medicine. Brandy and opium, besides being disagreeable to the feelings of the patient, I regard as pernicious in every stage of the malady, unless in the premonitory, or diarrhœal stage, when, indeed, they prove of service; but, if given freely in the subsequent stages, they invariably lead to a dangerous consecutive fever, and to a tedious and unsatisfactory convalescence. The disease may be divided into four stages, each of which requiring its peculiar and appropriate treatment. 1st. The premonitory, or diarrhœal stage; 2nd, the well-marked, or developed; 3rd, the collapsed; 4th, the re-acting, or consecutive fever. On being called to a person labouring under the first stage, my practice was to order him immediately to bed, to apply external warmth, in every convenient form, to the extremities, abdomen, and spine, and to administer the following draught, to be repeated according to circumstances:—

℞ Tinct. rhei comp. ʒvi.; tinct. cardam. comp. ʒiss.; tinct. opii camphorat. ʒss.; aq. cinnamon ʒvi. M.

This draught, in several cases, caused a profuse perspiration, and arrested the further development of the disease; if, however, these means proved ineffectual, and the disease passed into the second stage, I prescribed 10 grains of calomel, conjoined with a 1-4th of a grain of morphia, which, if rejected, the dose was immediately repeated until it was retained, after which no more medicine was prescribed until the patient passed into the third stage; but he was allowed to drink, *ad libitum*, of cold spring water, or of the saline powders, as recommended by Dr. Stevens, which, besides tending to assuage the burning thirst, were always grateful, and refreshing to the patient; if ice could be procured, it was equally appreciated by the patient, and had the advantage of being more easily retained on the stomach. The spasms of the extremities were best relieved by vigorous frictions with the dry hand, or with stimulating embrocations; if spasms seized the diaphragm or heart, the case invariably terminated fatally, notwithstanding every means that could be had recourse to. I tried the inhalation of chloroform, and, though it temporarily mitigated the spasmodic action, yet it always failed to avert the fatal issue. In the third stage, the patient was enveloped in an ample supply of warm blankets, and, as in the first stage, external heat was applied in every possible form; the restorative efforts of nature were most carefully watched, and the powers of the system supported by warm beef-tea, arrowroot, and sago, in moderate quantities. The diluted nitric acid I found a valuable remedy in this stage; and in some cases, where the circumstances of the patient warranted it, claret was allowed, and proved a grateful and salutary stimulant. The fourth stage is the one in which medical aid, when applied with judgment and discrimination, is most available; and so closely does it resemble typhus fever, that he who is conversant with the treatment of that disease will be able to turn his experience to good account in the management of this stage of cholera,—the great object being, by a cautious and symptomatic treatment, to subdue those local congestions which are so liable to take place; the brain, especially, is subject to subacute inflammation, and congestion, which is very insidious in its approach, and has a most fatal tendency; and it will be found, that the mortality from this cause is in the ratio to the quantity of stimulants and opiates employed in the preceding stages. It was the observation of this fact, in the epidemic of 1832, that enabled me, by avoiding the administration of any but the most moderate stimulants in the second and third stages, to treat with much greater success those cases which came under my care in the epidemic of 1848. If the patient was young, and if high febrile re-action co-existed with symptoms of subacute cerebral inflammation or congestion, a moderate bleeding from the arm had the most beneficial effects; in general, however, it was only necessary to bleed locally by means of leeches, or cupping from the temples, or from behind the ears; in the mere chronic or passive cases, blisters to the occiput and neck were preferable. Thoracic and abdominal congestion occurred much less frequently, and were more amenable to ordinary means of treatment. Gastric irritability, in consecutive fever, was a frequent occurrence, and was best relieved by a powder consisting of five grs. of trisnit. bismuth., and a few grains of magnesia, given every hour until the desired effect was obtained. Hiccough occasionally proved very distressing; pressure on the diaphragm afforded temporary relief; the liquor ammoniæ, in doses of ten drops in a cupful of water, repeated every quarter of an hour, usually gave more permanent relief. In consequence of the defective secretion of urine, diuretics were, in general, necessary: of these, the spiritus ætheris nitrosi, or bitartrate of potash, were, perhaps, the most efficacious, as well as being most agreeable to the patient. In convalescing from cholera, the powers of life are so reduced, that it is of the utmost importance to maintain the recumbent position until the strength is, in some degree, recruited. I have known too early a resumption of the erect position followed by serious, and even fatal, consequences. Diarrhœa was a preliminary symptom in every case which came under my own personal observation; patients are unwilling to admit, or believe, that they labour under cholera, and often denied that they had any such symptom; but I believe it will, perhaps, not always, but in a great majority of cases, be found so, on minute and careful inquiry. Persons of dark complexion, and of bilio-nervous temperament, appear, according to my observation, to be most subject to attacks of cholera, and to succumb more readily than those of fairer complexions and of more sanguine temperaments. Females are more subject to cholera than males. Children are also liable to the disease, but their convalescence is more speedy and satisfactory. I found the best effects from enveloping them in blankets wrung out of hot water, and keeping them so for an hour at least. This had the effect of throwing the little sufferers into a profuse perspiration, which, in many cases, was followed with a complete subsidence of all the urgent symptoms, the patient recovering almost without the aid of any other remedy. This plan, I believe, was suggested by Professor Christison, of Edinburgh, and it is certainly preferable to the ordinary warm bath. Unlike pyrexial and inflammatory affections, cholera is never ushered in by rigors, a fact which is of importance in the diagnosis of the disease. Another diagnostic mark is a peculiar earthy fetor attendant upon those affected with cholera, which, when once perceived, cannot again be mistaken; no such fetor is observable in the dead body. There is a circumstance which, so far as I know, has not been mentioned by any writer on cholera, namely, a peculiar benumbing or tingling sensation, exactly similar to a slight galvanic shock, felt on applying the hand to the skin of a person in the collapsed stage of cholera, and when the body is bedewed with a cold and clammy perspiration, extending from the extremities of the fingers to the elbow, sometimes even to the shoulder. Occasionally, the impression is so powerful as to deprive the arm, for a few seconds, of sensation and motion. This remarkable phenomenon is probably connected with some peculiar condition of the nervous system, and is worthy of the attention of the electro-magnetic and galvanic-current theorists. It may not be uninteresting to state, that no person afflicted with paralysis, local or general, partial or confirmed, was attacked with cholera. An interesting question here presents itself—To what cause, or causes, or conjuncture of circumstances, are we to attribute the unusual liability of Dumfries to cholera, and its extraordinary virulence and fatality? Dumfries is not peculiar in respect to locality, climate, or soil, nor in its contiguity to undrained marshes or stagnant water. Much has been said about the vicinity of Lochar Moss, and of its being inimical to the salubrity of Dumfries, but I think, on very inadequate grounds; for we have no evidence of its being insalubrious, even to those whose residences skirt the moss; and it has not been proved that those diseases which originate more peculiarly from malaria, or from exhalations from decomposed vegetable matters, are more prevalent there than in other districts around Dumfries. For many years I have been familiar with the statistics of disease in the county of Dumfries, and I never met with a case of intermittent fever, which had its origin in the neighbourhood of Lochar Moss; indeed, it has been generally remarked, that those dwelling on the banks of the Lochar, and in the immediate vicinity of Lochar Moss, are distinguished for their longevity and for their immunity from zymotic diseases.

The fair name of the river Nith has also been impugned on equally untenable grounds; so far from its being muddy and sluggish, corrupt and tainted, and redolent of pestilential vapours, it is a pure and clear, a "joyous and happy stream," adding greatly to the beauty and salubrity of the town. The prevailing characteristics of Dumfries, *quoad* disease, are defective drainage and sewerage, and there being no adequate supply of water, or other provision to carry off from the badly-ventilated closes and lanes, which abound with open dunghills, accumulated filth, and all sorts of impurities, teeming with noxious and putrid exhalations. We have scavengers it is true, but they are notoriously inefficient, being composed of half-witted lads, and men worn down with the infirmities of age, and whose operations are limited to the more public streets and thoroughfares. The necessity of an ample supply of water has now become obvious to all, and it is to its free introduction, by pipes, being carried into every house, and in sufficient quantity to flood the sewers, that we must look for the amelioration of those circumstances which conduce to the production of epidemic diseases, and without which all our efforts to improve the hygienic and sanitary condition of the town will prove nugatory. In regard to the *questio vexata*, Is cholera contagious or not? I have carefully, and without having any preconceived opinions to support, examined, and dispassionately weighed all the facts connected with the history of both epidemics, and I am bound to say that I have no rational grounds for believing it contagious; on the contrary, I am of opinion, that it has its origin in, and is propagated by other sources than the communication of the sick with the healthy, and that effluviæ arising from the human body have not the power of re-producing the disease. If it is diffused by contagion at all, it is unusual and exceptional, and under circumstances which science has as yet failed to recognize. I believe that the choleraic virus, or a materies morbi, exists in, and is disseminated through the medium of the atmosphere, but under what peculiar circumstances this morbific agent is generated, it is better at once to acknowledge our ignorance than to indulge in idle hypothesis and unprofitable speculation; it appears, however, to be diffused in a great many instances, independent of exhalations from decomposed animal and vegetable

matters, as we find it prevails occasionally in open and well-aired streets, where no such nuisances existed, or existed in such a minor degree as not to influence the general salubrity of the localities. I shall now endeavour to prove that cholera, as it prevailed in Dumfries in 1832 and in 1848, had a spontaneous or sporadic origin, and that no sources of contagion or infection were existent from which, in either epidemic, the first cases could have contracted the disease, and that its diffusion can only be satisfactorily accounted for by admitting the influence of epidemic causes.

In 1832, the first cases occurred on the 15th of September, and in 1848, on the 15th of November, and it has been proved, beyond a doubt, that neither of these individuals had ever been in contact with infected persons, or been in any district where cholera prevailed; in fact, on both occasions, when the disease broke out in Dumfries, the nearest infected town was Edinburgh, with which none of the individuals first affected, it has been satisfactorily ascertained, had any communication, direct or indirect. The next well-authenticated cases did not occur, as would naturally be supposed, if contagious influences were in operation, in the same house, or tenement, or in the same street or locality, or amongst the attendants and relatives, but in different parts of the town, with which there had been no personal intercourse or communication whatsoever; and I have not found, in my experience of both the epidemics in Dumfries, that those more particularly exposed to the influence of contagion by attendance on the sick; viz., medical men, nurses, and relatives, were more liable to be attacked than others not so exposed. Not one of our nurses in Dumfries were attacked with cholera, though engaged night and day, in all possible conditions of moral and physical depression, in waiting upon the sick. Upwards of eighty cases of cholera were treated in the Dumfries Infirmary, and, when the first case of cholera was admitted, there were about thirty patients in the house, none of whom took cholera, although no pains were taken to isolate them from the infected; on the contrary, several of them volunteered, and were permitted, to attend upon the sick, and continued to do so during the prevalence of the epidemic, which extended over a period of two months; and during this time, of all those in attendance upon the sick, nurses and medical officers included, only one nurse was attacked with cholera, and she, it has been proved, had, a day or two previous, been in the town, and thus exposed herself to epidemic influences. The Crichton Royal Institution, situate in the neighbourhood of Dumfries, was placed by the Superintendent, Dr. Browne, under a restrictive cordon, and no cases of cholera occurred in the Institution; this, however, can have little or no influence on the question of contagion, inasmuch as there were other Institutions, such as the Almshouses and the House of Refuge, in which no cases occurred, though no restrictive or quarantine measures were had recourse to. We have numerous and well-authenticated instances of persons residing in the surrounding districts and neighbouring parishes, who, having come into Dumfries for a longer or shorter period, but without having seen, or come in contact with infected individuals, have returned home, been taken with cholera, and without any extension of the disease to any of their relatives or attendants. Cases in point have occurred in the parishes of Dumfries, Troqueer, Tinwald, Caerlaverock, and Buittle; and I know of several instances among the poor, of persons having slept in the same bed in which cholera patients had died, with ut even the precaution of a change of bed clothes, and without any infection being incurred; in short, I have had occasion to observe, during my experience of both epidemics, innumerable instances of exemption from cholera under the most adverse and depressing circumstances. With the above facts before us, it is impossible not to recognise, in the spontaneous origin, the rapid diffusion, and, in Dumfries, equally rapid declension of cholera, a prevailing epidemic influence, and which contagion, *per se*, would fail to explain or account for. The *post-mortem* appearances presented by those who died from cholera have so often been described, and are so well known, that it is superfluous to enter upon them here. It is, however, worthy of remark, that, in every subject I had an opportunity of seeing opened, considerable organic changes were discovered, which must have existed long prior to the invasion, and apparently quite independent of cholera. This fact ought, in a great measure, to allay, if not altogether banish, such slavish apprehensions as would interfere with the discharge of personal or relative duties, from which no one should shrink at any time, and especially under such painful circumstances as those produced by the visitation of cholera. It is gratifying to be able to say, that, from whatever cause, the epidemic of 1848 did not give rise to the heart-rending scenes of suffering that were occasioned in too many instances in 1832, by those who were seized being wholly abandoned by their friends and neighbours,—deserted even in the hour of need by their nearest relatives, and committed over to the hands of unfeeling and heartless strangers. Those blessed with good health may be assured, that, putting their trust in the paternal care of the Almighty, they will be pursuing a much more safe, not to say more Christian, course, in discharging boldly every duty which religion, or kindred, or friendship may demand, than they would be in standing aloof from ignoble fear, and having recourse, perhaps, to preventive medicines, which, by disordering the digestive organs, produces a temporary state of debility, rendering them only more susceptible to be attacked with the prevailing malady.

I am unwilling to conclude these observations without saying, that, even on the supposition of cholera being contagious, religion surely should step in, and by the tranquil firmness and calm courage it is calculated to impart in the hour of danger, fortifying the soul against unworthy fears, and inspiring it with that moral heroism that would choose death rather than flight from duty. The man who fears God will not seriously fear anything else; and the influence of religion, in at once dispelling this slavish dread and exciting to active duty, is worthy the attention of the physician, even in his professional character, inasmuch as fear is allowed on all hands to be a predisposing cause of disease, and as the performance of those offices of kindness and charity, to which piety prompts, is so fitted to alleviate the sorrows of a scene of anguish and suffering. There can be no doubt that it is every day becoming better known and more generally conceded, that it is the native tendency of sound and enlightened religion to act favourably on bodily health, and, so far from impeding, it assists the physician, by the elasticity and cheerfulness it imparts to the mind, even in the cure of disease; and it will only be in accordance with reason, and in harmony with man's nature, as a whole, which comprehends an immortal as well as a mortal subsistence, when the minister of religion and the medical practitioner go hand in hand in endeavouring the alleviation of human suffering and the promotion of human happiness.

18, Buccleugh-street, Dumfries.

ON BELLADONNA IN NEURALGIA.

By JOHN POSTGATE, Esq., Kilham, Yorkshire.

Mr. Postgate, after referring to two cases in which quinine, sesqui-oxyde of iron, and arsenic produced only temporary relief to neuralgic pains, and the exhibition of belladona was followed by the best results, says,—In elderly persons of sedentary habits, pains and numbness of one or both lower extremities, frequently result from the pressure produced by accumulation of hardened fæces in the colon. I am acquainted with a gentleman whose colon is enormously distended, and suffers much from neuralgia of the lower limbs, if he neglects to keep up a sort of continuous action of the bowels, by repeated small doses of croton oil. In all cases of sciatica, it is desirable to effect, in the first instance, a free discharge of the contents of the bowels; purgatives should be given repeatedly, in order to secure at least two motions daily; perhaps no remedy is better adapted for this purpose than croton oil. When there are no circumstances to contra-indicate its use, it should be administered in doses of gutt. ss. to gutt. j., night and morning. It appears to exert a beneficial influence on the nervous system, which cannot, as the late Sir C. Bell observed, be explained by its purgative qualities alone. I have prescribed for several years in neuralgia, where the attacks return at regular intervals, extract of belladona, with great advantage. My plan is to induce as soon as possible its physiological effects on the system. "Manifested by pupils slightly dilated, sensation of dryness of the throat, and difficulty of swallowing," &c., I generally begin with grain doses of the soft extract every four hours, until the system is under its influence; and if the affection is not entirely removed, continue its use in smaller doses administered night and morning. I have never observed any unpleasant consequences or cumulative effects result from pushing the remedy to this extent. Should it fail to remove the disorder altogether, as a palliative, it relieves the pain, and does not, like opium, constipate the bowels.

PROGRESS OF MEDICAL SCIENCE.

GERMANY.

[Berlin Correspondence.]

HASSALL'S PARASITE.

In the *Zeitschrift*, *Band* 7, *Heft* 3, Henle corrects an erroneous statement of Hassall, who has described a peculiar kind of corpuscle found in coagulated fibrin of the heart as a parasite, and of an animal nature. Henlé refers to the description of this given in the second volume of his "Handbuch der Rationellen Pathologie."

Hassall states, that the corpuscles are of the size of colourless blood corpuscles, or even three or four times larger, and of an irregular form, which generally approaches the circular, and that they consist of a nucleus, of irregular shape, and of a number of concentric membranes. Acids, and especially the sulphuric, greatly assist their discovery. Hassall incorrectly ascribes their discovery to Gulliver; but the description and drawings of this Author in his translation of "Gerben's Allgemeine Anatomie," only treat of colourless blood corpuscles with many nuclei, and anucleate, collapsed corpuscles, which were probably clods of fibrin. Hassall adds, in a note, that he has found these concentric corpuscles in a thymus gland which had lain many hours in water.

Lately, Henlé has often found corpuscles to which (some optical illusions apart) Hassall's statement would completely apply, in an effusion which seemed to come from the glands of the larynx. This effusion contained, together with pus corpuscles, groups of large granule cells, containing fat and some pigment; and he thus had the opportunity of satisfying himself that these concentric bodies are formed by molecules of fat included in the granule cells. They are most numerous and complete when the granule cells are digested in acetic acid, after having lain for a day or two in distilled water. Under these circumstances, the fat within the cells runs together into large drops, or it breaks out and unites itself into small or large masses, which often adhere to the cells. These masses are mostly round, clear, and colourless; but they are rendered very distinct by lines which take a course parallel to their contour. These drops do not contain a nucleus, but the shifting of the focus causes their centre to become darker or clearer than their circumference, and thus gives a false appearance of one. In like manner the concentric striæ are purely an optical phenomenon, depending on the refractile powers of the fat; so that the same corpuscle, in different situations as regards the focus, appears now simple and pale, now striated and dark. Fresh granule-cells, treated with acetic acid, give rise to the same appearances, save that the striæ are usually fewer in number; and these are, also, no doubt identical with the concentric

corpuscles of Hassall. The presence of an acid is not essential to their production.

A figure, in a previous volume of the *Zeitschrift*, to which Henlé refers, quite corroborates this view. And we may add, that, besides the internal evidence of accuracy which his statement bears, there are, perhaps, few microscopists that have not, at one period or other, been deceived by bodies of this kind, for a longer or shorter space of time.

TREATMENT OF CROUP.

In *Casper's Wochenschrift*, of some weeks' back, mention is made of Itzigsohn's treatment of croup, which is a variety of the cold-water cure. Great stress is laid upon the exact number of towels, and the precise intervals of their application. Also bottles of hot water are to be applied to the feet, and lukewarm milk with sugar are to be taken internally. No statistics of the success of this method of treatment are given, and perhaps many English practitioners would think any statement of the kind unnecessary. The German redacteur considers the present treatment of croup very little to be depended on (!) and inclines to add to an iodine-paint treatment, the internal use of the same drug. One can hardly help imagining from such grave suggestions of remedies and statements of treatment, that either the diseases *or* the physicians of the two countries greatly differ from each other.

FRANCE.

ACADEMY OF MEDICINE.

The last meeting seems to have been of a very agitated character. The believers in the contagious nature of cholera had received two communications, which seemed to give credence to their opinions, and they hastened to produce them. The first related to certain persons who, leaving Paris on the 28th March, carried the cholera to Nogent le-Rotrou, where it became very fatal. The fact, communicated by Dr. Brochard, called forth one more wondrous still from M. J. Guérin:—A soldier left Paris with cholerine, and, although cured himself, he transmitted the disease to eight members of his family, of which six died. These certainly are startling facts, but still not conclusive. During the period that cholera reigned in Paris, in London, or in any other great city, thousands and thousands left it every day, travelling into all quarters. Scarcely, too, a day passed without the disease appearing in some new locality; but, because a traveller from either city had arrived in one of the newly-affected places, is it fair to conclude, that he brought the disease with him? If so, why did it not appear in other places where persons arrived from the affected capitals.

The President, M. Velpeau, and M. Bégin, seem to have protested violently against allowing such doctrines to go forth, without due examination, under the sanction of the Academy; and it certainly is very desirable, that the opinion, that cholera is contagious should not hastily be adopted. Nothing is more depressing than fear; and there is no doubt, that apprehension of any kind will produce a bowel complaint, and that this, at first simple and unimportant, will, during the period of an epidemic, assume its type.

THE EFFECTS OF NUX VOMICA IN INTESTINAL OBSTRUCTIONS.

It is notorious that certain obstinate cases of intestinal obstruction owe their difficulty to our ignorance of their cause; equally notorious that our practise is often empirical. In the "Transactions of the Medical Society of Rouliers," Dr. Ossieur has communicated some valuable information concerning the use of nux vomica in such cases. He says it produces a degree of excitement, more or less energetic, where there is deficient intestinal innervation, which often restores them to their natural action. Assuming this—and the fact is undisputed—we cannot refuse our assent to the doctrine that the medicine may act upon the muscular fibres of the intestines as it does on the muscles generally. In support of this view, Dr. Ossieur refers to the action of nux vomica in chronic catarrh, with relaxation of the mucous membrane, to lead colic, to prolapsus ani in children, and to atonic diarrhœa. He relates two cases of obstinate constipation, which, resisting all other means, yielded at once to the nux vomica.

ADULTERATION OF IODINE.

Herbergen observes, that in consequence of its high price, iodine is frequently adulterated. Thus, in one specimen, he discovered the black sulphuret of antimony; but he says the usual mode of adulteration is by artificial plumbago. The chloride of calcium is also used for the same purpose.

ON ABSORPTION OF THE PLACENTA.

Supposing the practitioner fails to remove the placenta, what becomes of it? A most interesting question, upon which Dr. Broers has lately thrown some light. Is it absorbed? Dr. Broers examines in detail the opinions of authors inclined to adopt this view of the question, and especially those of Naegeli, of Heidelberg. On the other side, he quotes Madame Boivin, who, contending strongly against it, asserts that Naegeli is an inaccurate observer. Finally, he completes his historic sketch, by pointing out certain timid writers who never decide upon any subject, who are always apprehensive that they compromise their name, doubt everything, and whose chief characteristic is indecision. Dr. Broers is of opinion, that the placenta retained in the uterus, is not absorbed but converted into moles, and he gives several drawings of such conversions. He concludes by observing that time will alone determine the question, but that it is not less true that there must be no small perversion of understanding in order to adopt the theory of absorption.

TOBACCO A PROPHYLACTIC IN CHOLERA.

Dr. Hurteaux, of Paris, has lately published some interesting remarks on this point. It appears that out of 2,000 workpeople engaged in the manufacture of tobacco, but 12 were attacked with cholera. What is the cause of this exemption from the disease? Are we to suppose with M. Vidal, that the emanations from tobacco are a true prophylactic in cholera? Or believe with Diémerbroeck, that tobacco is a preservative in epidemics? Or with M. Ruef, that, during the prevalence of epidemics, tobacco increases the power of resistance against miasmatic influences? Dr. W. Moore says, that cholera is curable by tobacco injections.

TREATMENT OF HOOPING-COUGH BY COFFEE.

Dr. Jules Gurzot, of Argenteuil, has lately published, in the *Union Médicale de Paris*, his experiences in the treatment of hooping-cough, by coffee. He asserts that coffee, taken hot, and sweetened with sugar, cures, in the space of from two to four days, the most marked and obstinate cases of hooping-cough. To a child under two years of age he gives, after each meal, a teaspoonful; under four years, a desert spoonful; and above that age a tablespoonful. He combines with this plan animal food, in the form of roasted meats, minced, if the child is too young to masticate, little milk, no vegetables, fruits, or sweets. He tells us, that he conceives coffee to be a specific in hooping-cough. For our own parts, we strongly recommend the use of alum in this troublesome disorder.

CASE OF TWINS, BORN AT AN INTERVAL OF TWENTY-ONE DAYS.

A woman, 35 years of age, was confined on the night of the 30th March, 1848. The placenta came away without difficulty. The size of the abdomen remained very considerable; the lochia did not flow, and, nevertheless, the Surgeon did not conceive the possibility of another child.

Dr. Prival, of Bédarrieux, was called in, and at once ascertained the presence of a second child. The one already born was full-sized, healthy, and took the breast with avidity. The mother would not remain in bed; she arose and occupied herself with her usual household cares. Twenty-one days after the birth of the first child, labour-pains again came on, and another child was born, as strong and healthy as the first.—*Union Médicale*, May 17th, 1849.

IRELAND.

[From our Dublin Correspondent.]

DUBLIN NATURAL HISTORY SOCIETY.

There was a Meeting of this Society on the evening of Friday, the 4th inst.

Professor ALLMAN in the chair.

Dr. Aldridge proceeded to give the continuation of his Essay on the Chemical Characters of the Tissues of Animals. He wished to remind the Members of that Society, that he did not profess to bring forward, on this occasion, any new facts; if there should seem to be any novelty in the views which he was about to bring before their notice, it would consist merely in the light in which he would present them; he did not claim originality, and his present attempt was simply to generalize and compile the observations of others. It might be recollected, that, at a former meeting of that Society (see *Medical Times*, p. 416) he had described the chemical means of distinguishing the principal tissues of which animals are composed; he had shown them that the ligamentary tissue, which is present in the so-called cellular tissue, as well as in the tendons, non-elastic ligaments, and fasciæ, is composed of interlaced fibres which dissolve in water, by prolonged boiling becoming converted into glue, and which swell and coalesce when subjected to the action of acetic acid; that elastic tissue differs in these respects from the ligamentary, whilst the fibrilla of muscles differ from both by their behaviour with nitric acid and ammonia. In all these tissues the primitive cells rapidly develope in opposite directions into fibres; but the structure of cartilage is peculiar in the animal organism; resembling that of some of the simpler vegetables, in which numerous mother cells are scattered throughout a homogeneous and definite basis. Cartilage is also distinct in its chemical characters, being neither albuminous nor gelatinous, but convertible, by ebullition, into the substance called chondrin. Out of the tissues enumerated, together with the nervous, all the organs of the higher animals are framed, so that it is a comparatively easy task to analyze the organic elements of any organ, by availing ourselves of the assistance which chemistry can afford to the microscope. But upon every surface of an animal, whether external or internal, there is constantly going on, as long as life continues, another process of organization distinct from that which forms the described tissues, but which is not inferior in importance. This exercise of nutrition consists in the perpetual construction of nucleated cells, that, unlike those which develope within the organs, have little or no tendency to elongate themselves into fibres. It has been said, that these cells are found upon every animal surface, both internally and externally; they cover the whole of the exterior, constituting cuticle, hairs, horn, scales, whalebone, tortoise shell, &c. Coating the mucous lining of the pulmonary intestinal, and genito-urinary canals, they are collectively called epithelium; and the same name is given to them when lining the ducts of glands, the interior of bloodvessels, or coating the free surfaces of serous cavities. If we examine the ultimate composition, or chemical properties, of these superficial cells, taken from different surfaces, we will find slight differences between cuticle and horn, whalebone and hair, but these differences are not difficult to explain. They are due to the fact, that the substances we examine are not pure proximate organic principles, but are mixtures of various substances in different proportions. There is the cell-wall, in which, the animal, is probably, as it is known to be in the vegetable kingdom, a combination of proximate elements; then there are the cell-contents and the nucleus, and, in many instances, an encrusting matter on the cell-wall, which serves to bind the cells together. The consideration of these facts will serve to show the absurdity of bestowing distinctive chemical names, or recording ultimate analyses of substances so complicated and variable. But there are sufficient evidences to show, that all these cellular formations belong to the same groupe; and among these proofs, one of the most singular is, that a kind of albumen constitutes always a chief

part of the cell-wall. This element can always be recognised by its behaviour with nitric acid and water of ammonia, treated with which it becomes a deep orange. Every one is familiar with the effect of nitric acid in staining the skin, and advantage is taken of this property in the dyeing of silk, which, on account of its albuminous origin, becomes of a deep yellow, when first immersed in nitric acid and subsequently in water of ammonia. Being composed of albumen, the production of these surface cells, whether cuticular or epithelial, is not difficult to understand; the albumen of exuded liquor sanguinis has but to coagulate for their production. On the papillary surface of the skin, we might suppose this coagulation to be effected by the acid perspiration, especially as we know that an analogous process is employed to coagulate albumen under other circumstances. Thus the spider's web is formed of threads which consist of albumen, coagulated by the acid secretion of the minute pore through which the secretion, previously liquid, is projected. The fluid contents of the pollen, also, is coagulated by the acid secretion on the stigma of the flower. But there are other reasons for thinking that the coagulation of excreted albumen into the cuticular cell-wall is not due to the agency of acids. The similar epithelium is produced, for the most part, amidst an alkaline secretion; and it will be seen, further on, that it is more probable that the cell-wall determines, primarily, the acidity of the perspiration, than that the latter property is the cause of the formation of the cell-wall. Another character common to all cells, is that of chemically modifying the blood or nourishing juice; as soon as the liquid portion of the blood gets into a cell, so soon does it begin to undergo chemical changes. Each little cell may be regarded as a chemical laboratory destined to form a product necessary to the perfection of the organism. Each cell is a gland, and those organs that we are accustomed to call glands are only more or less complicated arrangements for extending capillary surfaces, upon which these cells can form themselves. Upon each surface, a different chemical change is effected in the cells; in some, pigment is formed, as in the choroid in the youngest, and consequently least superficial cuticular layer, in negroes, supposed by some to be a distinct anatomical layer; and also in a similarly situated layer arranged in an areola around the nipple of pregnant women. Some cells convert the blood into mucus, others into bile, and others into urea, uric acid, and the various constituents of the urine. This chemical action of cells is co-extensive with their presence in both divisions of organised nature,—in plants as well as in animals. The blood of plants, or the ascending sap, as it is called, is a saccharine solution:—to form cells in the vegetable the sugar only suffers an isomeric modification; the cellulose or substance of which the cell-wall is composed does not differ in ultimate composition from sugar; but, as soon as the cell is formed, it acts chemically on its contents, and causes the production of a new substance,—albumen. In a similar manner, the chlorophylle which colours the herbaceous parts of vegetables is at first formed in cells; but those cells, like the epithelial, do not constitute any part of the permanent tissues, but are floating and evanescent; in time they burst, and permit the escape of their granular contents. It is thus, that the various kingdoms of nature shed light on each other's operations.

Dr. Aldridge continued to say, that in connexion with this subject, there was a point to which he wished to draw attention. It might be perceived, that both in the animal and vegetable kingdoms, the blood was capable of solidifying itself, and becoming organised into cells, without change in its chemical composition. In speaking of the blood, he of course alluded to the essential element of the nourishing juice; in one case sugar, in the other albumen; both these were capable of forming cells, the walls of which retained the chemical composition of the substance out of which they were made, although their properties more or less varied. There was this great difference, however, between the cells which have a saccharine, and those which have an albuminous origin. The saccharine cells constitute, by their aggregation, the fixed and permanent tissues of vegetables; the albuminous cells in animals, on the contrary, never enter into the formation of the permanent tissues. Those tissues may be gelatinous, chondrous, or fibrinous, but are never albuminous. The albuminous cells are the result of a normal hæmorrhage from all surfaces; and, from the very mode of their production, are destined to a constant and necessary exfoliation. None of the permanent tissues of animals have their chemical representatives in the blood. We do not find in that fluid gelatin chondrin, or the material of muscle, for the latter is not identical with fibrin. It is not exactly correct to call the muscles, the cartilages, or the ligamentary tissues permanent; but there is an obvious and essential difference between these elements of the animal frame-work, and the abrasive cells which coat the surfaces of the organs. It would appear that the blood of a vegetable need only to have its elements arranged in a new manner, to fit it for building up the various organs; but the blood of an animal must undergo a chemical change to prepare it for that purpose. The laboratory character of albuminous cells is the most universal amongst them; and in this they resemble the cells which generate chlorophylle. This resemblance is the more remarkable, inasmuch as chlorophylle contains nitrogen, thus betraying its albuminous origin. Yet, although albuminous cells do not enter into the construction of the animal frame-work, it is likely that all animal cells are originally albuminous. This is certainly the case in the ligamentary tissues, as is well exemplified during the formation of false membranes in serous inflammation. In this case the albuminous fluid poured out into the serous cavity, organises itself into a multitude of albuminous cells, but these in time grow into ligamentary fibres. The latter become glue by ebullition; the cells from whence they sprung could never be converted into glue by the most prolonged boiling. This affords us a clue to a particular stage in animal nutrition. The chemical preparation of the materials necessary for the growth of ligaments, tendons, areolar tissue, and, most probably, of cartilages and muscles, is confided to the laboratory function of albuminous cells. Henle supposes that ligamentary fibre proceeds from the development of the cell-wall, and that elastic fibre results from the development of the nucleus. But we can see, from the point of view to which we have attained, that it is neither the development of the cell-wall nor of the nucleus which produces the fibre; that the function of the cell is not merely to serve as a point of departure; but that it performs the part of a minute laboratory, in which is prepared the gelatine, the chondrin, or the muscular substance destined for the growth of the respective tissues.

From what had been said, the importance of these cellular formations in the animal kingdom would be manifest. They were the organs which prepared all the secretions; and which, moreover, produced those changes in the blood which fitted it for the purposes of nutrition. It had been said that all surfaces are clothed with these productions; but to this general statement the teeth, probably, constitute an exception. The blood-vessels are lined with epithelium, and the white and red corpuscles are analogous formations. The epithelium of mucous membranes are notoriously of three kinds; the pavement, the cylindrical, and the ciliated. The latter are covered with numerous minute processes like hairs, which constantly undergo an oscillatory motion when placed in a liquid. The members of the Society were familiar with the moving threads having club-shaped extremities, which are so constantly present in the spermatic fluid, and which have been so commonly considered as animalculæ, and named spermatozoæ. Certainly nothing can be more difficult, whilst watching their motions, swimming about apparently under the influence of a guiding will, than to avoid the opinion of their distinctive animality. But there were various reasons which led him (Dr. A.) to disbelieve that these threads are animalculæ. In the first place, the nature of their motion, gradually diminishing in energy until it ceases, but never intermitting without some external mechanical cause. Secondly, their little tendency to putrify in comparison with any true animalculæ; and, lastly, the extremely similar motions of the cilii of epithelium, even when broken off from the cells to which they had been attached. These considerations led him to think that these so-called spermatozoæ are really analagous to cilli; and this opinion is much strengthened by the examination of their mode of origin, as delineated by Wagner. They are first observed as a bundle of threads, contained within a cell; those threads developed in length, become curved like an *u*, and in time, by their elasticity, burst the cell which previously contained them, and then separate from each other. From this description, it would appear, that they differ from ordinary cilii, chiefly, in being produced within the cell-wall, instead of externally. It is probable that the same cells elaborate the fluid sperm, a chemical principle of a very peculiar nature. There is a difference worthy of note between the products of the cells coating external and internal surfaces. The cutaneous secretions are usually acid; the secretions from the mucous membranes are for the most part alkaline. There are apparent, rather than real, exceptions to this rule, such as the gastric juice, the urine, &c.; but generally the fact is as stated; and this is connected with a difference of electrical distribution, so that Matteuci, upon the introduction of a galvanometer, as an element of a circle, of which a mucous surface and the skin also constituted members, was enabled to produce a divergence of several degrees. Dr. Aldridge believes that this difference is owing to the relative facility of contact with atmospheric air. It has been already seen that cells are little chemical apparatuses, for changing the composition of the blood-elements; but that the aid of extraneous agents is frequently resorted to in accomplishing these metamorphoses is no less evident. Thus it is in the leaves and bark of plants, parts most exposed to the air, that the proper juices are formed. In warm-blooded animals, the iron of the food is combined in the capillaries with the first products of waste, to form the colouring matter of the red globules. Benzoic acid, when absorbed into the circulation, combines, with some of the elements of the urine, to produce hippuric acid. It must be admitted, therefore, that the free access to air is a cause most likely to modify the nature of secretion. Now, there is reason to believe that sugar and ammonia are among the primary products of the decomposition of albumen. It is not improbable that these compounds are common to all animal secretions. When sugar is in excess in the urine, it constitutes the disease named diabetes mellitus. A variety of sugar is known to be a constant constituent of milk. Sugar has latterly been detected as a very common constituent of bile and blood. Dr. Aldridge himself has lately shown that it is always present in the white of eggs; and in incubated eggs, sugar, identical with that of milk, has been detected. Now, if we suppose sugar to be a constant product of the laboratory action of albuminous cells, we will have to admit its presence both in the cutaneous and mucous secretions. But in the former case it will be secreted in free contact with air; in the latter case it will be more or less protected from the atmosphere. It is not wonderful, therefore, that the sugar secreted by the cuticular cells should rapidly become converted into acetic or lactic acids, or that the sugar secreted by the epithelium should be slow to undergo this change. Both secretions contain ammonia, which can readily be detected in them; but this gas escapes from the skin, while it is retained in the mucous secretion. These considerations explain the differences which exist between the two classes of secretion in relation to their chemical re-actions.

It is not, however, on surfaces only that albuminous cells exercise their important functions. It has been seen that they are the originators of all the tissues preparing within their cavities, the pabulum for the growth of each. It would appear, also, that they exert a considerable influence in deter-

mining the structure of organs. Thus the ducts of glands have usually been described as evolutions of the lining membranes of neighbouring mucous or cutaneous surfaces. But this observation does not appear to be borne out by the examination of the simple follicles of the intestines. Many of these will be found to be furnished with excretory orifices; but in some, none such can be detected. If the latter be regarded as a preliminary step in their formation, the production of a simple or conglomerate gland would seem to depend on what might be likened to one or many little abscesses, which, bursting on the nearest and most accessible surfaces, would produce a simple or ramified duct. This is what is known to take place in the ovary upon the escape of the ova; but, in that case, the termination of the fistula of escape soon becomes cicatrised, constituting the *corpus luteum*.

Dr. Aldridge concluded by saying, that the subject which he had brought before the Society was in itself so extensive and intricate, that he feared that the views which he had brought before its notice must have been rendered misty and obscure by the necessity for brevity of explanation. The subject was, however, one of deep interest, and it would give him much pleasure if he had succeeded in drawing attention towards it.

Professor Scouler said, that histology was a very recent science, and as such had already made very considerable progress. He considered the views just displayed to them by Dr. Aldridge as being possessed of great interest. It was desirable to maintain a well-defined distinction between the various departments of science,—between the effects of the physical, the chemical, and the vital forces. Dr. Aldridge had spoken of the differences of chemical re-action between the cutaneous and mucous secretions; yet it must be remembered it was from an internal organ, the lungs, that carbonic acid was expired. There was a marked difference between vegetables and animals not alluded to by Dr. Aldridge, which was, that vegetable tissues once formed were not liable to become again decomposed; whereas, in animals every tissue was constantly undergoing a process of decay requiring incessant renewal.

The Chairman said, that he did not think that the distinction spoken of by Dr. Scouler had any real existence. He believed the primordial utricle, the cell formed under the influence of life, was as liable to destruction in the vegetable as in the animal. No doubt this original cell soon becomes coated internally by deposition from its contents. In this manner a kind of cast of the original cell becomes formed, and this dead cast is, indeed, not liable to further changes; but the utricle, immediately formed through vital action, soon becomes destroyed.

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THE MEDICAL TIMES.

SATURDAY, MAY 26, 1849.

EXPERIENCE in medicine is not available to its most profitable extent, unless the mind of the observer be imbued with the spirit of Physiology. In the subjects with which medicine deals, no acuteness of the senses, no command of attention can save a man from error, unless the turn of his thoughts be already bent towards the truth. With all the pains he can bestow, he is incompetent to enlarge his knowledge by experience, otherwise than through the influence on his mind of the truths which he has already treasured up. Here it is idle to speak of a "*tabula rasa*." In all first attempts there must be an overwhelming mass of error. And the security that the observer shall go forward in the right path is in a ratio exactly proportioned to the amount of truth already acquired in the same direction. These remarks hold good whether the instance in hand be that of a philosopher seeking to improve medicine as a science, or that of a practitioner who is only desirous to render his private experience instrumental towards the increase of his skill in the treatment of diseases.

In this statement there is nothing paradoxical, as some may be ready to exclaim. For the cultivation of medical science, and the application of experience to practice, are in a far less degree dependent on the appreciation of the mere qualities of objects, such as form, size, colour, temperature, resistance, of which sense takes cognizance, than on the power to seize with judgment the relation of cause and effect, as often as it exists between successive phenomena. Now, mankind have an excessive natural tendency to believe that events which arise in succession, stand to each other in the relation of cause and effect—the *post hoc, ergo propter*. This is the source of most of the early errors in medicine, even more than in other branches of knowledge. And as it is a better acquaintance with the course of nature, a better understanding of the spirit of the laws of the universe, which have put to flight the belief in such errors as astrology, divination, and witchcraft; so nothing but the influence of the genuine spirit of physiology, derived from a large acquaintance with the laws which regulate the animal economy, can preserve from error our attempts to estimate the causes and effects then operating, in our observations on health and disease.

To this use of Physiology, it is not a sound objection, that every year teaches new views, which turn out either to be altogether false, or at least to require modification. For this is exactly one of the aspects, under which the science affords important lessons as regards the sources of fallacy to which all reasoning on the facts observed in animated nature is liable.

But to judge of the whole character of physiological science, merely by the occasional failures which it exhibits, while so many noble discoveries of modern times witness to its power of penetrating the secrets of nature, is indeed an unequivocal feature of littleness of mind. Already the day of very serious error in Physiology, it may be hoped, is past. There is no longer room for loose theory—the mere offspring of a lively imagination. Physiologists have at last abandoned what may be termed the extrinsic method—that is, the attempt to subject the phenomena of life to the general laws of physical nature,—and have entered on an intrinsic method of investigation, namely, by seeking the laws of life in the living body itself; and among the recent fruits of this method are the reflex action of the nervous system, endosmose, exosmose, and cytogenesis. Again, the rise of two new sciences, namely, the Anatomy of Minute Structure, as exhibited by the microscope, and Organic Chemistry, as distinguished from the chemistry of inorganic bodies, has circumscribed the province of imagination in Physiology within the narrowest possible limits. These two sciences promise to us, in time to come, key after key, in long succession, wherewith to interpret the phenomena of the living body. But there is no royal road here. Nature will not be deciphered but at the cost of persevering industry. It was once the fashion to believe, that the Vital Principle would one day be found out; by the knowledge of which all the complex operation of organic bodies would at once become as intelligible as the Principle of Gravitation has made the phenomena of the physical universe. We may almost predict, that no such universal key will ever be discovered; or, if it be within the range of man's power, that the attainment of it is very distant. The Vital Principle, from its very nature, cannot be made apparent, at present, in such a manner as to become a means of interpreting phenomena. Its existence can only be inferred. In the present state of our knowledge it cannot be defined even by its effects. It cannot, like the Principle of Gravitation, be made even the subject of exact hypothesis,—much less can it be brought to the ordeal of observation. There is one case which holds a place approaching what the Vital Principle may one day occupy. Thus one man judges that another possesses consciousness like himself, not by any process belonging to inductive science, but by inference from resemblance of that man's acts to his own. In like manner, when it shall appear, either that an explanation has been already obtained of every operation of living nature which is not dependent on mere chemical or mechanical laws, or on the laws of light, colour, or electricity, and these shall still remain an unresolved source of physiological activity in that part of nature, then that activity must be referred to the Vital Principle. It cannot, therefore, be defined even by its effects, like the Principle of Gravitation, till Physiology has advanced so far, that its proper effects can be ascertained.

The hope, then, of interpreting the phenomena of organic life by one great key, should be cast aside, while we patiently betake ourselves to the use of the several partial keys afforded by the observation of minute structure, of the phenomena of organic chemistry, and of such operations of the living body as reflex action, endosmose, and cytogenesis. In the contemplation of these, the true spirit of physiology is to be sought.

It occurs to us, that the attempts to decipher the Egyptian Hieroglyphics in some measure illustrates what we would inculcate as to Physiology. The Jesuit Kircher, in the early part of the 17th century, as many of our readers must remember, published an enormous work, his "Œdipus Ægyptiacus," in which he propounded a principle of interpretation wholly fanciful. Nevertheless, this principle was diligently applied by some laborious men for not much short of two centuries, bringing out what we now know to be arrant nonsense. At last, what may be called the spirit of the interpretation began to dawn—that is, it began to be suspected by those who took the pains to examine these inscriptions more closely, that the hieroglyphics were not symbols of things, but merely representations of letters; and finally,

by the indefatigable exertions of a well-known member of the Medical Profession, Dr. Young, and of the French savant, Champollion, the entire alphabet, letter by letter, was made out, and the means of deciphering many relicts of Egyptian antiquity afforded to the world.

In Physiology it was too long the practice to proceed on a plan not unlike that of Kircher in the case of these hieroglyphics, the results being sometimes hardly superior in quality; but having now acquired something of the genuine spirit of the science, and having obtained a key to some of its secrets, we are in a condition to apply both, as well to the advancement of our knowledge of the animal economy, as to the improvement of our experience in practice.

No man who practises can prevent himself from reasoning on the phenomena of the living body, and even from acting on the conclusions of his reasonings. How great, then, is the inducement for him to imbue his mind with that spirit which alone can keep his reasonings just.

PUBLIC HYGIENE.

ANCIENT AND MODERN WAYS OF DISPOSING OF THE DEAD.

The eloquent Archbishop Fènèlon once said, "To doubt when we should believe is as great an error as to believe when we ought to remain in doubt." By this is meant, that truth, when presented to the mind, should always exert a legitimate influence upon us. Had this maxim been a canon in medical science, to which all its disciples had rendered implicit homage, the entire healing art would have attained an eminence far greater than that which it at present occupies.

In a former article, we stated that conservative medicine had not received that attention from modern physicians which its importance deserves, and had they made a proper use of the ancients, it would not now be emerging from that obscurity in which it has been so long buried. Hygienic science has not been studied *as a whole* by the *savans* of the present day, and therefore its power to arrest epidemics and annihilate certain disorders, has yet to be tested by us. By induction, we have acquired some knowledge of what it can do; and we have no doubt that medical men now will soon be found following out the investigation in this department of their Profession till it stand developed in all its ancient grandeur.

We have considered the subject again worthy the attention of our readers at the present moment, in consequence of meetings which have been lately held in different parts of the country for the purpose of inducing the Government speedily to pass a law for the abolition of burials in towns.

The proper disposal of the dead is a branch of public hygiene to which the ancients paid especial attention, and in which they particularly excelled. By us it has been so neglected, that the greatest enormities have not only been perpetrated upon the mortal remains of our fellow-creatures, but they have been suffered to become sources of pestilential diseases. To Mr. George Alfred Walker we are indebted for having drawn attention to the condition of our cemeteries, and it is owing to his indefatigable exertions that the excitement originally produced by his important statements, has not diminished.

Burial was considered a matter of so great importance amongst the civilized nations of antiquity, that it was advanced from a simple hygienic requirement to a grand religious rite. There can be no doubt that people in their primitive simplicity consigned their dead to the earth; but civilization and necessity ultimately taught them to adopt means of reducing the body, by a rapid process, to its original elements, or of arresting at once its decomposition.

In the earliest periods of Egyptian history, hygiene had attained considerable eminence, and that branch of it which relates to the disposal of the dead was advanced to the greatest perfection. From the peculiar circumstances of the country, burial at certain times was an absolute impossibility. The public safety, therefore, required that means should be adopted to arrest at once the process of decay. Embalming was discovered, and this, which at first was only a hygienic requirement, became speedily one of the most solemn religious duties.

It is a matter of no small interest to the Christian and philosopher, to mark how the most important doctrines and splendid ceremonies of the ancient Mythologies have sprung from the discoveries of science. It is probable that the idea of an ultimate resuscitation of the body, after the lapse of a thousand years, arose from the practice of embalming. There was a necessity for this act, and it was enforced in the most powerful manner by the sublimity of the doctrine. The inhabitants of Egypt probably knew, from fatal experience, the dangers of putrid animal exhalations; and hence birds, fishes, quadrupeds and men, underwent, when dead, a process which seemed to bid defiance to the ravages of time. When embalming was too expensive, a species of *salting* was adopted, which answered the same purpose. And what was the consequence? For ages, no fatal epidemic ever scourged the country, but its inhabitants enjoyed a perfect immunity from that plague which, in a decade, now sweeps away large numbers of the degenerate inhabitants of the land of the Pharoahs.

In the discussions which took place three or four years ago, in the French Academy of Medicine, some of the most celebrated members of that body gave it as their decided opinion, that the origin and perpetuation of the Plague in Egypt are to be attributed to the neglect of the principles of hygiene, and especially to the manner of disposing of the dead; and they stated it as their firm conviction, that Egypt was capable of being now made as salubrious as it was in by-gone days.

Greece received from Egypt a knowledge of some of the most important sciences, and amongst them that of hygiene. That Classic Republic considered the duties relating to the dead of such great consequence that Pluto, who first instructed the people in the manner of performing funeral rites, was made a god, and had assigned to him a vast empire in the shades below. In the practice of the Greeks we see how science adapts itself to the wants of a people. In this country the same necessity for embalming as in Egypt never existing, it was scarcely ever practised. A process equally effective, however, was adopted,—that of consuming the body on a funeral pile. The Romans also learned this method from the Greeks, and in both countries the practice was enforced by the most sacred obligations. The superstitions of these great nations we explode, their science we commend; and we hope the Medical Profession of this empire will not rest satisfied till public hygiene has attained the same eminence amongst us as it did amongst the ancients.

The way in which we dispose of the dead is a blot upon our civilization. We thrust bodies together till the earth is saturated with decaying animal matter, from which the most baleful exhalations ascend. Public hygiene does not require us either to embalm or burn our dead, but that they should be interred in such a manner, and in such places, that they shall not endanger the health of the living. It demands that the "boring rod," used by the undertaker and the sexton, to dissipate the effluvia and promote more rapidly the putrefaction of bodies, be done away with; in a word, that our surcharged burying grounds be closed till the process of animal decomposition be completed.

It affords us much pleasure to find that the Profession is bestirring itself afresh on this subject, both in England and Ireland. The Medical men of Waterford have protested against the mode of interment in that City, and the Gloucestershire Medical and Surgical Association has petitioned Parliament to abolish at once, by a Legislative enactment, the interment of the dead in towns and populous districts. Sanitary reform cannot be complete without this; and every Medical man in the Empire should, without delay, memorialize the House of Commons on the subject.

WATER.

From the cases of poisoning by means of water passing through lead pipes and remaining for a considerable time in lead cisterns, which have been noticed in our Journal, we have been induced to turn our attention to the subject. The physical properties of water it is unnecessary, with the object we have in view, to describe. But we may observe that water presents different qualities, according to the sources whence it is derived. Hence we have rain water, snow water, and dew, all directly proceeding from the atmosphere.

Rain water is more pure than any other kind of natural water. Its specific gravity scarcely differs from that of distilled water, and in softness it approximates to it, so that it is in great repute as being well adapted to domestic purposes as well as the different manufactures. It is said to yield traces of muriatic acid, nitric acid, and ammonia, and evidently will be more or less impure as it is obtained from the densely-crowded city, or from the open country. In large cities it acquires a distinct impregnation from the atmospheric impurities, and though these are not easily to be detected by chemical analysis, they render it prone to undergo certain changes, during which much

fetor is disengaged. It is further alleged, that the rain which falls in spring, or summer, or after very hot weather, is less pure than what is precipitated at other seasons of the year.

Snow water is less impregnated with animal or vegetable matter, and hence it keeps much longer without decomposition. It has been found perfectly sweet after a lapse of eighteen months.

Dew varies much in its character; it is, however, generally less pure than either rain or snow water.

Spring waters include all those which arise usually from some depth below the surface, and which are used immediately, or at all events before running any distance. These necessarily differ much from the above-named waters, in so far as they pass through different strata of earth or rocks before they arrive at the surface, and consequently become impregnated with the more soluble of the earthy salts they have been in contact with. It thus happens, that while many of them are hard, some also are soft. This property of hardness is, indeed, common to all of them, but in a very different ratio. The chemical element which imparts to them this property is the sulphate of lime, and also the carbonate of lime. Water readily dissolves the former, 500 parts taking up 1, and the carbonate is retained in solution by the excess of carbonic acid.

Running waters are, generally speaking, comparatively pure. They do not contain much aëriform matter; their chief impregnation being the organic matter derived from the decomposition of the various animal and vegetable exuviæ with which they so often abound in the vicinity of large towns. No better illustration of this kind of water could be found than that of the river Thames, and the impurities which it holds are in a great measure removed by filtration.

Stagnant waters, or the waters from pools or marshes, are usually of a noxious character; and this depends on the circumstance, that they abound very much in vegetable and animal matter undergoing the varied stages of decomposition, while, being in a state of continued exposure to the atmosphere, they do not possess that agreeable freshness and coolness which are so distinctive of spring water. The decomposed animal and vegetable matters afford new products of an exceedingly deleterious property to the animal body; and, as these mix with the circumambient atmosphere, they generate those deadly diseases which are so prevalent in tropical climates. We may observe here, that these diseases are not at all in force when the country is swamped with the heavy falls of waters, for the natives then visit each other with impunity in their boats. When the waters, however, subside, and the sun re-acts on the decomposing vegetable and animal matter, then the chief danger arises.

It is recorded, in the annals of the late Peninsular War, that a very bad fever broke out in the wings of a barrack, which, singularly enough, was confined to the persons quartered there. The source of the fever was totally inexplicable, and gave rise to many false surmises. The mystery was at last, however, solved by the discovery, that the water supplied to all those in the quarter of the barrack referred to, was drawn off from a butt in which the dead body of a French heavy dragoon lay decomposing. On this cause being removed, as speedily did the fever subside. In like manner, a severe dysentery prevailed among a detachment of troops quartered in the north of Ireland. This was found to have originated from the water being impregnated with the remains of the excrement from the privies of the barracks; and, on adopting the proper means to prevent this impure stream mixing with the water supplied to the men, the evil was quickly put a stop to.

Waters, when they have a decided taste of saline matter, such as the water of the deep, or certain springs, receive the name of mineral, in consequence of the quantity of saline matter with which they are impregnated. These it is not our proposal to consider here; we may observe, however, that they are divided into two great groups, according to their temperature—the cold and the thermal. They are variously classified, according to the character of the predominant element: hence we have saline, in which the salts predominate; chalybeate, in which iron is the leading element; sulphureous, in which the impregnation is chiefly of sulphuretted hydrogen, &c.

As all waters contain other matters than the mere pure substance of water, it follows that they ought all to be held as impure in the literal sense of the word. But this would attach a very erroneous idea to the nature of water as destined by nature to fulfil the various purposes of man. The aëriform matter in water gives it a peculiar pungency and smack, without which it would be deemed totally insipid and be rejected for ordinary purposes. The stomach, indeed, as well as the mouth, repudiates distilled water.

When we say rejected for ordinary purposes, we would mean drinking; for it has not been shewn, that the absence of the aëriform matter affects the various purposes for which water is employed in cooking and in the manufactures. In all cases where the water is boiled for these objects, the gaseous matter will be expelled by the action of the high temperature to which it is exposed.

The impurities of water which may affect mankind are obviously of two sources: they may either be derived from the inorganic kingdom, or be the product of the organic kingdom.

The exact extent which the animal (human) economy suffers from the presence of the different earthy salts in water, is not determined.

In some constitutions, however, they may be beneficial, in others detrimental; but as all spring water contains more or less of the inorganic salts, it is evident that they are not injurious to mankind in a state of health, provided they do not exist in excess.

Whenever organic matter exceeds a trace in the solid matter obtained by evaporating a pint of water, we look with suspicion on the purity of the water, and examine the nature of the organic substance in order to see whether it be vegetable or animal. When water contains organic matter, it is sometimes discoloured, or at least its transparency is impaired; but water may be drawn from a well, perfectly transparent, and after it has stood for a few days in a bottle, the organic matter sometimes deposits in a ropy form, when the water has frequently a disagreeable taste and smell, resembling stagnant water; hence such water is not fit for domestic use, being in a putrescent state.

The source of organic matter in water has already been pointed out, and the mode of detecting its presence is not difficult, without having recourse to chemical examinations.

We now come to other deleterious substances capable of existing in water, and of a far more important nature than organic impurities; moreover, they are not so easily detected by our senses,—they have no smell, little or no taste, and are seldom visible to the eye. These come under the head of inorganic constituents, and are derived from materials used in transmitting and preserving water. If we were to use a pipe or tube of gold, there would be no more danger than wearing a plate of the metal in the mouth; but, if water contained one of the constituents of common salt (chlorine), a highly poisonous salt of gold would be formed. In like manner, lead, in its metallic state, according to Orfila, has been given in the dose of four ounces to a dog, without producing any poisonous action; but a salt of that metal, administered in minute doses, proves destructive to animal life. How necessary, then, is it to avoid *contaminating any article of food* (particularly bread, which contains so much water) with any poisonous corrosion of the metals. Besides lead, there are other metals, zinc, copper, and tin, equally liable to prove injurious to health when acted on by water. Tin, however, may be less liable to corrode than lead, zinc, or copper; but, under peculiar circumstances, it may be acted upon by water, and as it contains, according to M. Chevallier, 1·775 parts of arsenic, some caution may be required in its application.

We have now two points to consider: First, the cause of water acting upon leaden pipes and cisterns; Secondly, the reason the metallic salt is not always found in solution. Lead is not acted upon by perfectly pure water; but we never receive that liquid in this state, which shows, that the water supplied to us by nature must contain matter capable of corroding and dissolving the metallic salt in the water; or, as some authors assert, the corrosive matter is merely held in suspension, without being dissolved. The latter theory may be correct; but, as one of the chief solvents of lead is carbonic acid gas, it may be worthy of remark, that carbonate of lime and carbonate of iron are frequently found held in solution in water by that gas, but are deposited on boiling, and partially by exposure to the air owing to the escape of the gas: hence it is highly probable, that the carbonate of lead, which is formed in the interior of a water-pipe, and never allowed to dry, may be soluble in the water by an excess of carbonic acid gas; and when the water has been drawn, a portion of the gas escapes, leaving minute particles of the carbonate of lead in suspension. This theory appears the most rational; but, whether the salt exists in suspension or solution, the danger is the same.

Water sometimes contains nitrogen and oxygen gases, but in some localities the former is found associated with carbonic acid and without a trace of oxygen. The latter gas is one of the most powerful corroding agents; and, when it exists in water, the metal is immediately attacked by it, forming hydrated oxide of lead, which is dissolved by the water, but the carbonic acid, which usually exists in excess, immediately combines with the oxide, forming carbonate or subcarbonate of lead. We have now pointed out two solvents of lead contained in water; but the presence of a free acid in water has occasionally been found, making a third solvent of the metal.

The difficulty in making individuals understand the reason that the water of one locality is capable of forming soluble salts of lead, while in another there is no danger of solution, is explained by the fact, that the earthy salts, above pointed out, which always exist in water, act as protecting agents, or "preservatives." The presence of sulphate of lime, or sulphate of soda, prevents any bad result from the metallic salt of lead produced in the manner described. The proportion of one four-thousandth of sulphate of soda produces this beneficial effect; and the same is accomplished by the phosphate of soda, or hydriodate of potassa, in so small a quantity as the 1-30,000th part of either dissolved in the water. The theory of which is, that the salts mutually decompose each other. The carbonate of lead becomes the sulphate, or phosphate, or iodide, which are totally insoluble, and, therefore, are not taken up by the water. The carbonate of lead is in part converted into this insoluble matter, which supplies the place of the crust or film it had formed on the walls of the lead, and thus all further action between the lead and the oxygen, or carbonic acid gas, is arrested. Hence, in cases where water is gathered in cisterns, devoid of salts,—and of course there is danger to be apprehended of a soluble salt of lead being formed,—the addition of a small quantity of any of these salts are said to have the positive result of preventing any dangerous consequence.

It is necessary, however, to bear in mind, that phosphate of soda and hydriodate of potash are never found in ordinary spring water, and it would be impracticable to diffuse either of those salts in a well of water. If the surface of leaden pipes or cisterns were to be coated over with their solution, it is extremely doubtful whether the film would stand the test of age and friction.

Sulphate of lime may be said to exist in all water; but if the water does not contain a sufficiency of that salt, or some other sulphate, to form a good protecting coat of insoluble sulphate of lead on the walls of the pipes or cisterns, imminent danger would be incurred.

There is considerable doubt whether the existence of two or four-thousandths of a sulphate, even in conjunction with other salts (muriates or chlorides) in water, can be safely relied on as a protecting agency under all circumstances.

It is matter of history that, so early as Vitruvius, who flourished about the period of Augustus, the use of lead was objected to, through the apprehension of its being injurious to the body in consequence of the formation of *cerusse*; and it is our principal object to determine whether the nature of the London water generally, from its becoming impregnated with that metal, is such as to lead to any apprehensions of danger in the public mind. In the statement which was given by Dr. Bostock, inserted in the Reports of the Commissioners, the greater part of the impurities of the London water are ascribed to "mere mechanical admixture." (a) We would willingly subscribe to this document; but we have to observe, that the action of organic matters, and especially the compounds resulting from the decomposition of organized bodies, had not in those days been matter of such close investigation as they have in more recent periods; and therefore, while we admit the statement in gross, more especially as we have not witnessed any cases of distinct poisoning by lead reported, which could not have failed to have taken place in so large and populous a City were the *ordinary* condition of the water such as to render it poisonous, we are nevertheless in strict justice called on to state, that no inquiries have been made with a view to ascertain how far the formation of carbonic acid, during the putrefaction of organic matter, (independent of the special action which takes place from protecting salts,) may favour the formation of a soluble salt of lead.

Water exposed in reservoirs, or river water, may not contain so much uncombined carbonic acid as water which is pent up in the bowels of the earth: hence the London water may, by this means, together with the large quantity of protecting agents, be prevented from corroding lead. The Metropolis, however, is supplied with water from many sources, and as the nature of a soil differs in different districts, and in proportion to the depth, we are of opinion, that investigations should not be neglected.

While, then, London may boast almost a total immunity from the poison of lead conveyed in the service-pipes, it does not follow that accidental cases of poisoning from the lead may not inadvertently arise from the cover of the cistern being made of that metal, and retaining the vapourized or condensed water on its surface; for this water being analogous to distilled water, and being freely in contact with the air, will speedily affect the lead, and thus the poison may be introduced into the economy. The covers of the cisterns in Edinburgh are usually made of wood (which they should always be), and thus such an accident is completely obviated.

Nevertheless, we are not entitled to vaunt too much of the purity of the water, when we recollect the great bulk of organic matter contained therein. It cannot be supposed that water of such a description employed as a beverage can be as wholesome as that procured from the mountain rill. It may affect slowly the system, and particularly tend to induce that impaired condition of the digestive functions which is so prevalent in the Metropolis. In the old adage, the physical effect of water is well expressed—"*Gutta cavat lapidem non vi, sed saepe cadendo*,"—so the habitual use of such a fluid in the stomach, however insensible its action, is nevertheless not to be looked upon with indifference. In many cases where wells are sunk, the percolations of churchyards are pumped up, and no doubt much injury has arisen from the use of such water.

In the water collected from lead roofs there is no inconsiderable danger. There is likewise reason to believe, that the use of zinc utensils for a variety of domestic purposes, as well as for roofing, is not altogether without danger. By the French Commission appointed to examine the question, it was stated, that though the oxide of that metal be not dangerous, yet, in the employment of zinc for various domestic purposes, a variety of salts will naturally be produced from the numerous ingredients that are employed as food; "and it is impossible that these can be healthy, nor, indeed, can it be otherwise but that some will prove noxious."

The instillation of a very minute quantity of a salt of lead has been known, in some localities, to produce a complicated form of disease, without being marked as a decided case of lead poisoning. We therefore feel it our bounden duty to lend all the assistance in our power in promoting this important part of Sanitary Reform for the benefit of mankind.

(a) The term, "mere mechanical mixture," is of a very undefined nature. Sand, pure water, and pure oil, thrown together into a vessel from which the air is excluded, form a sort of mechanical mixture; they are, however, nevertheless subjected to the action of heat, electricity, &c. Water, however, (the common water, for instance, of the river,) contains, besides the absolute matter of water, various earthy impurities, in addition to the carbonic acid, the oxygen, and the nitrogen of the air; and even this admixture *might* be deemed as merely mechanical; but when, in addition thereunto, there are various organic matters, both vegetable and animal, *ipso facto*, necessarily running into rapid decomposition, which, in chemical language, means that they are all forming new compounds, acting and reacted on by all the surrounding matters, we think that these words are not, in strict language, applicable to water generally, which contains such matters, and least of all appropriate to the water of the *Metropolis*.

REPORTS OF SOCIETIES.

DEVON AND EXETER PATHOLOGICAL SOCIETY, AT THE MEDICAL LIBRARY OF THE EXETER DISPENSARY.

MAY 4, 1849.

Dr. WM. KANE, of Exmouth, in the Chair.

Dr. Tuthill Massy brought forward a parietal bone which he had taken from an old soldier. About its centre there is a depressed fracture, having quite the appearance of the fracture caused by a spent ball, not the star-like and complete smash you have from stones and other weapons, such as life-preservers, &c.

In this case the scalp adhered closely to the depression, which is about an inch in diameter. On making an effort to take off the calvarium, it was found adhering firmly in one point; the fibres of the dura mater had formed adhesions between the splintered internal table of bone.

Where the membrane covered the hemisphere on its inner side, it was quite healthy; corresponding to the depressed fracture there was a depression in the lobe of the brain; the cerebral substance appeared as if it had accommodated itself to the depressed bone; the convolutions did not appear compressed, nor were there any adhesions between them; the fibrous structure was not more compressed here than in the corresponding part of the other hemisphere; in fact, every part of the brain was healthy.

This man died of chronic bronchitis, and had no head symptoms, nor did he suffer, during life, from this depression.

From this case we learn not to be too quick in anticipating symptoms, and using the trephine; the antiphlogistic, or what may be called the expectant plan of treatment is the best until symptoms of compression call for trephining—an operation in its nature avowedly dangerous.

Professor Porter has remarked, in his surgical lectures, that trephining would be more successful in its results if not performed so late. Dr. Massy had frequently assisted Mr. Thwaites (the late surgeon to the County Limerick Infirmary, a neat and elegant operator,) in trephining men for depressed fractures, when there was not a single symptom, except the depressed bone, calling for such interference. The majority of those well performed operations proved fatal.

Mr. Thwaites was so great an advocate for the trephine, that at one sitting he removed a circular piece from the frontal, and one from the left parietal bone of one man; in fact, doubly trephining this man for two compound depressed fractures without symptoms of compression.

This case terminated most favourably; but, notwithstanding this happy result, we should not *anticipate* symptoms with the trephine. Such as cephalalgia, meningitis, cerebritis, and the sympathetically deranged stomach. If such symptoms arise, they may be successfully treated by the lancet, aperients, and alteratives.

Frequent convulsions, loss of memory, and coma, will call for an operation, which, in its turn, may produce fungus cerebri, delirium, and death; it is a sad and painful sight, when these patients tear off the dressings, and scatter their protruded brains about.

The few who do recover after such injuries and such operations often have the intellect so injured as to be quite unfit for the ordinary duties of life.

Since that distinguished surgeon Pott wrote, many valuable improvements have been made in treating injuries of the head both in this country and in Ireland; the names of Abernethy, Hey, Colles, and Dease, are familiar to all surgeons.

These four high authorities disapprove of the precipitancy with which Mr. Pott had recourse to the operation of trephining, and experience has fully established the truth of their doctrines.

Dr. Kane believed this specimen of morbid anatomy most interesting to the Surgeon, more so as the brain and its membranes were so minutely examined and found healthy.

Dr. Kane related the case of a sailor, one of the crew to his brother's yacht, who had a depressed fracture over the parietal bone; this man was an admirable seaman until he drank spirits, and a very small quantity made him quite insane.

Dr. Massy mentioned the case of a soldier, who, while fighting at the Kiber Pass, received a bullet on the peak of his cap, which fractured the frontal bone; he was trephined, and made a good recovery; but on his drinking a glass of spirits he became quite insane, kicking, prancing, and fighting with his kindest friends.

The sailor was not trephined, the soldier was; yet in both we had the same unhappy symptoms.

REVIEWS.

Natural History, Pathology, and Treatment of the Epidemic Fever at present prevailing in Edinburgh and other Towns. Illustrated by Cases and Dissections. By JOHN ROSS CORMACK, M.D., Edinburgh, &c. Pp. 182. 1844.

Additional Remarks on the Edinburgh Epidemic Fever of 1843-44. By JOHN ROSS CORMACK, M.D., Edinburgh. Pp. 8. 1849.

The Scotch Epidemic Fever of 1843-44: its History, Pathology, and Treatment. By JOHN RICHARD WARDELL, M.D., Edinburgh. Pp. 114. 1848.

The importance of the subject induces us to deviate from the rule we usually observe, to notice no Work originally published as separate papers in contemporary journals. A good history of an epidemic is a most valuable contribution to practical medicine. The Scotch epidemic fever of 1843 and 1844 has been fortunate in securing two such historians as Dr. J. R. Cormack and Dr. J. R. Wardell. Of the lucid and concise Work of the former gentleman we shall present to our readers a brief abstract, pointing out as we proceed the points on which Dr. Wardell differs from him.

The ordinary symptoms of the disease were as follows:—The patient was suddenly seized with rigors, headache, pain in the back and limbs, and loss of muscular power. The rigors were soon followed by dry, burning heat, and this by profuse sweating. The pulse from the outset varied from 90 to 120. The tongue, at first moist and white, after two or three days became dry and somewhat brown. Nausea and vomiting were common symptoms during the first two or three days. Pain at the scrobiculus cordis usually accompanied these symptoms. During the first four days an uniform symptom was severe muscular and articular pain. The cerebral symptoms were limited to want of sleep. On about the fifth day there was a sudden abatement in the severity of the symptoms, often a complete cessation of them. This improvement was generally ushered in by a copious sweat, or by epistaxis or diarrhœa. From this time till about the fourteenth day the patient steadily improved. On or about the fourteenth day, reckoning from the beginning of the disease, a relapse occurred. This second attack was occasionally followed by a third, and even by a fourth. The relapse was usually rather less severe than the first attack. Dr. Cormack then proceeds to describe a highly congestive form of the disease, in which yellowness of the skin was the most constant and marked symptom. Occasionally it was associated with black vomit; and our Author enters into a lengthened comparison of this form of the affection with the yellow fever of hot climates, and appears to come to the conclusion, that the yellow fever, or, rather, one form of yellow fever, and the epidemic Scotch fever, are identical. On this point, Dr. Wardell comes to a different conclusion; yet the arguments adduced by the former, although not conclusive, are, we think, sufficient to warrant a further investigation into the point. It was in this highly congestive form of the disease only that death took place. The most remarkable appearance noted in the *post-mortem* examinations was effusion of blood into the submucous cellular tissue of the gastro-intestinal canal. This pathological condition was present in all of the eight cases examined by Dr. Cormack. How many subjects Dr. Wardell opened we have no means of ascertaining; but we cannot forbear referring to the manner in which he has detailed the appearances found after death. With respect to the important fact of the presence or absence of ulceration of Peyer's patches, Dr. Wardell states, "in scarcely any or no instance was ulceration there (*i. e.* near the ileoccecal valve) found in this fever. This morbid condition was not at all common in the fever of 1843-44."

What can Dr. Wardell mean? It surely was a matter of the highest importance to determine if this lesion *ever* occurred in the epidemic, and, if so, its frequency, and the peculiar symptoms present in the cases that presented it. This mode of speaking of morbid changes it is which has caused French pathologists to hold so lightly British testimony with respect to the identity or non-identity of different fevers. Dr. Wardell follows Dr. Christison in assigning to Louis an opinion he never held. In no part of that great man's greatest work does he express himself as regarding "a disorganization of Peyer's patches as constituting the true pathology of certain types of fever." What he really states is, that a peculiar lesion of Peyer's patches is the anatomical character of the continued fever seen in France. But the anatomical character is merely the structural deviation from health, which is the invariable concomitant of that disease; and to define that character for any given disease, is clearly not to express the pathology of that affection.

The peculiarities of the epidemic distinguishing it from typhus were as follows:—

"1st. The sudden and violent invasion of the disease.

"2nd. Bronzing, leadening, or purpling of the countenance before and after seizure.

"Dr. Wardell was unable to perceive this peculiar hue of the face, and appears to suppose that Dr. Cormack must have fallen into some error in the matter.

"3rd. The almost uniform occurrence of one or more relapses.

"4th. The unusual number of cases with yellow skin, black vomit, and hæmorrhage.

"5th. The short duration of the pyrexial state, and its mode of termination.

"6th. The severe muscular and articular pain.

"7th. The rosy, elliptical eruption, resembling measles, is absent in every case."

We would remind Dr. Cormack, that the eruption in measles is neither rosy nor elliptical. These terms appear to have been borrowed from the French, "*taches roses lenticulaires.*" The rose spots, however, of the fievre typhoide, or typhus abdominalis of the German, are really of a rose colour, as different in tint as possible from the mulberry or port-wine hue of the eruption of measles, or of true typhus fever. We fear that Dr. Cormack, too, has been beguiled by Dr. Christison, whose article on Fever, in the Library of Medicine, has served to render the confusion heretofore existing on the subject worse confounded.

Seeing that the most elaborate and accurate descriptions extant of any disease are those of typhoid fever by Louis and Chomel, we must seriously protest against Dr. Cormack's proposal to limit the expression Typhoid to diseases simulating typhus fever. The word has already received its signification, and Dr. Cormack can only cause confusion by this attempt to restrain its meaning. He may rest assured, that the application of the term Typhoid fever to fever with lesion of Peyer's patches, is, to use a convenient phrase, "*un fait accompli.*" With respect to the relative pathology of the epidemic, Dr. Cormack regards this, as well as every other form of fever, as a mere modification of the same disease. Dr. Wardell, on the other hand, asserts that it was an entirely new disease. That it was totally different from typhus fever, in its symptoms, we think both authors have sufficiently shown; and that its origin was distinct from that of the ordinary typhus of Edinburgh, we believe Dr. Wardell to have unequivocally proved.

With the following extract, in the spirit of which we cordially concur, and with the earnest wish that its Author may himself more closely adhere to his own idea of what should be taken as a basis for calculations, we conclude:—

"Those authors who have contested for the fundamental identity of all descriptions of fever,—that is, their origin from one poison,—have done so rather by rearing their theories on hypothetical assertions, than founding their doctrines on the unassailable basis of fact. It is this kind of argumentation which impedes the progress of science, by encumbering her path with vague and speculative notions, instead of rigidly appealing to facts and taking the data of impartial observation for our guide."

Letters to a Mother on the Management of Herself and her Children in Health and Disease; with Remarks on Chloroform. By J. T. CONQUEST, M.D., F.L.S., &c. &c. London, 1849. Small 8vo. Pp. 351.

More than thirty years ago Dr. Conquest urged upon the Profession the propriety of giving the young married woman some useful information as to those requirements which her prospective maternity, &c., would infallibly demand of her, and offered some familiar and practical suggestions upon the duties and cares which would daily augment within her sphere. After the labours of an extensive practice in obstetrics, and its allied branches, our Author again comes before the public with a revised and amended edition of his work, and which, so far as it relates to the *domestic* management of the health, &c., of a married woman, and

of her offspring, may be well recommended to the careful consideration of all whom such things may concern. Its sphere of utility, then, is thus no circumscribed one.

Dr. Conquest subdivides his work into twelve *letters*, the first five of which more especially relate to the health of the mother during and after pregnancy. Six of the remaining twelve treat of the hygienic management of her child, and the seventh letter refers to the "diseases and accidents of infancy and childhood."

In his third *letter*, Dr. Conquest enters at some length upon the subject of chloroform, and its utility in parturition; and, though evidently a keen advocate for its employment, cautiously qualifies his commendations in the following terms:—

"Nothing can justify the *indiscriminate* employment of chloroform; this would be equally as unwarrantable as its condemnation. It ought not to be used in any case of labour in which the pains are only moderate, and in which the process is likely to terminate in a reasonable time, and when unattended with the danger sometimes resulting either from difficulty or duration; and even then it should be resorted to only towards the close of cases accompanied with intense and exhausting suffering. If employed in such cases the labour is completed with comparative exemption from distress, and an amount of calmness and security is enjoyed of which no one who has not witnessed it can form any conception; and it is a remarkable, although not a very satisfactorily explained fact, that whilst mischief has resulted from the use of this invaluable anæsthetic agent during the non-existence of pain, (as precursory to an operation,) if intense pain exist, it is an innocuous medicine. It is also a curious fact, that it is unnecessary to exhibit chloroform to such an extent as to render the patient wholly insensible; but that all the advantages may be secured without inducing perfect insensibility, and, therefore, if judiciously used, it may be employed without hazard. In several instances in which I have administered it, my patients have been alive to all that has been occurring about and to them, although free from suffering; and, in several cases, the recurrence of otherwise almost unendurable pains has been cheerfully sustained under a full consciousness of their existence."—P. 61.

We earnestly trust every reader may weigh well the cautions of Dr. Conquest whilst dwelling on the flattering picture he likewise paints of the value of chloroform. Whilst speaking of the value of ventilation and of pure air as relates to the hygiene of children, our Author thus turns to account and warning the late misfortunes at Tooting:—

"The unfortunate children in this establishment were placed in a condition worse than the monkeys in the Zoological Gardens; the beds closely packed, one beside the other, so as to be, in truth, but one continued bed; the fire-place boarded up increased the mischief, by preventing any air getting out of the room; the room became a perfect poison-manufactory; each little child robbed the air of its life-sustaining principle, and gave back but the impurities of its own body; no fresh supply of air could enter into that air-tight place, but on went the abstraction of the life-sustaining fluid, on went the return of the vitiated air, tainted and loaded with the emanations from the lungs of the helpless occupants. Slowly but surely did the poison operate, depressing the powers of, and firmly fixing itself in the citadel of life, till the ruthless destroying cholera came and seized the victims thus prepared for destruction, and completed the deadly task." P. 191.

Whilst cordially recommending both the purpose and general execution of Dr. Conquest's Work, we must yet pass our animadversions on some portions of the Author's Physiology and Chemistry, which appear to us as rather savouring of the thirty years ago. At Page 14 it is stated, that the menstrual secretion is "a fluid resembling blood in its appearance, but not in its character." If we understand this statement aright, we beg to refer Dr. Conquest to the works of M. Brierre de Boismont and of Mr. Whitehead, in which he will learn quite a different story. At Page 102, and several other places, Dr. Conquest repeatedly asserts, that in the milk of the cow the constituent sugar is "greatly in excess," as compared with that in the milk of woman. If our Author will read Dr. R. S. Thomson's experimental researches, he will be favoured with an opposite view of the matter. At Page 329 we are informed, that albumen converts corrosive sublimate into calomel, "which, acting on the bowels, carries itself off by purging." Dr. Pereira will help Dr. Conquest slightly in his chemistry, as also on another point. At Page 318 it is recommended, "the prompt administration, even by the ignorant and unlearned, of five drops of laudanum, or ten drops of henbane, to the infant above one year of age, and double the quantity above two years," in cases of shock from a burn or scald. To a child thirteen months old, even under the circumstances mentioned, five drops of the tincture of opium form rather a dangerous weapon to be used by the persons alluded to.

POOR-LAW CONVENTION.

A Deputation, consisting of Drs. Hodgkin, Vallance, White, Lord, Ebsworth, Nottingham, Ross, and several gentlemen from the provinces, had an interview, on Thursday, May 24, with Mr. Baines, the head of the Poor-law Board, on the subject of Medical Relief. The topics pressed most prominently upon the notice of the Chief Commissioner were, the extreme and wide difference between the payments in particular districts, compared with others; the payments, in many instances, *decreasing* in proportion to the increasing duties of the Medical Officers. The complaints made are universal, and it was urged implicitly, that there was no hope of amendment from the Boards of Guardians generally, though individual Boards had acted fairly to their medical officers through the prominent representations of injustice brought forward by this Convention. The position of medical men to Boards of Guardians was adverted to. Annual elections were degrading, and all appointments should be made permanent to give decisive *action* to every officer inclined to do his duty. Under annual appointments the composition of Boards of Guardians made the medical relief administered to the poor subservient to the liberal or illiberal feelings of the members who sat and watched over the Union purse-strings. The Deputation, after mentioning the incidental heads, the withholding orders for midwifery, in cases where other members of the family were being attended for sickness, and placing all the objects mentioned in the Report of the Committee, and the Petition to Parliament, *seriatim et gradatim*, were courteously replied to by Mr. Baines, who regretted the presence of so many grievances amongst men who devoted their lives and best energies to promote the interests of the sick poor. He would address his attention to the subject, and try and remedy the defects complained of.

The Deputation withdrew, highly satisfied with the proceedings, and it only remains now for Poor-law Medical Officers to second the efforts of the Committee.

OPEN SHOPS AND HOSPITAL SURGEONS.

[To the Editor of the Medical Times.]

SIR,—Though not personally interested in the differences which lately occurred between the Committee of the Royal South London Dispensary and their Medical Officers, and which led to the simultaneous resignation of the latter, yet, agreeing entirely in the principle by which those gentlemen were actuated, and as an old servant of the Charity, I trust you will permit me to make two or three observations relative to the remarks you offered on the subject in the last Number of your Journal.

Justly condemning the vending of quack medicines by Medical men, you make a reservation in favour of those who keep open shops, but at the same time decline that branch of the druggist's business. In this it appears to me that you do not fully appreciate the bearing of the question at issue. In the first place, your reservation is useless, inasmuch as an open shop, without quack medicines, would be profitless to its owner, and I much doubt whether such a thing exists. But, even if it does, it equally involves the objectionable principle of joining the profession of a surgeon with the trade of a druggist. It was against this principle, that the Medical Officers of the Royal South London Dispensary contended in their resignation, and the adoption of which, by a large body of the Medical men of the metropolis, operates more powerfully than anything else in keeping the Profession *down* in the estimation of society.

So long as the Medical man persists in identifying himself with the tradesman, he cannot expect the public to draw a distinction. The shopkeeping system is not more opposed to the best interests of the Profession than it is to the interests of society. The time was, when the same man who shaved your chin would draw your tooth, and cure you of the phthisick. This state of things might be suited to the condition of society by which it was tolerated. Modern advancement despises the barber-surgeon school—of which the surgeon-druggist is a relic—and requires the professor of a learned science to devote his time and attention exclusively to its pursuit. A clergyman is prohibited by law from engaging in trade, and the honour of his profession deters the lawyer from keeping a law-stationer's, or any other shop. It is to the high standing which these two professions have *assumed* that they owe the greater respect with which they are regarded by society. Until the Medical Profession adopt the same principle, and carry it out with equal strictness, it will never rise much above its present unworthy position. A few such exemplifications of self-respect and uncompromising honour as that displayed by the Surgeons of the Royal South London Dispensary would do more than anything else towards bringing about this desirable reformation.

I have the honour to be, Sir,
Your obedient Servant,
S. YELDHAM,
Formerly Senior Surgeon to the Royal South London Dispensary.

9, Stamford-street, May 24, 1849.

ON DR. STEVENS'S SALINE TREATMENT OF ASIATIC CHOLERA: BEING THE SEVENTH LETTER OF E. A. TURLEY, M.D., IN CORRESPONDENCE WITH G. ROSS, ESQ.

MY DEAR SIR,—I was in London only during the first period of the existence of the pestilential cholera there; but, on the information I possess on this subject, derived from one who was a busy actor in the scenes he describes, I can place the most implicit reliance. The following statement, then, contains the true history of the introduction of the saline treatment into the Free Hospital, in Greville-street, in 1832. About the middle of May, and after the first irruption of the cholera at the Coldbath-fields Prison had ceased, one of the Governors of the Greville-street Hospital, having heard of the successful treatment of cholera that had lately been employed at the prison, by means of which the medical attendants there had saved nineteen out of every twenty cases, desired to see it tried in the above Hospital. He took great pains to ascertain the truth of the reports, and, having convinced himself of their accuracy, he consulted some other Governors of the Hospital; this conference ended in a firm determination that the cholera patients admitted there should receive the advantage of this new treatment. Mr. Marsden was then consulted; he asserted, that the saline treatment was all quackery, and refused to have anything to do with such empirical trash. At this period there resided near to both the prison and Greville-street Hospital, Mr. Whitmore, a medical gentleman, who having been almost a daily visiter at the prison, was so convinced of the efficacy of the new treatment, that he employed it successfully in his private practice. Mr. Marsden having refused to adopt such quackery and trash, Mr. Whitmore was requested to give a fair trial in their Hospital to the new practice. Mr. Whitmore consulted Dr. Stevens on the subject, and then agreed to treat the first twelve cases, provided that the medical attendants of the Hospital would give him their free consent. By the interference of the Governors this condition was agreed to; and Mr. Whitmore having received a promise from Dr. Stevens that he would assist, he willingly undertook the task. An hour was agreed upon, after which the first cases admitted were to be subjected to the saline treatment. The experiment commenced on the 20th of May, and such was the interest the Governor felt in the result, that he left an order that he should be sent for on the first case coming in at whatever hour of the night it might happen.

At what hour of the day the first patient was admitted is doubtful; it appears, however, that Mr. Marsden, instead of sending for Mr. Whitmore and the governor when the patient was first presented, made his own experiments on the case, and only sent for Mr. Whitmore late in the night, and after his own treatment had failed. The saline treatment, therefore, was not used in this case, until Mr. Marsden considered the patient to be in a hopeless condition.

The case was a very severe one, and Mr. Marsden admitted that it would not recover under any mode of treatment he had seen tried. Mr. Whitmore said, that bad as it was, he had seen worse cases recover under the new plan, not only in the prison, but also in his private practice. The saline treatment was then commenced, and in less than three hours the patient had so far rallied, that Mr. Whitmore pronounced him to be almost out of danger. This was, I believe, the first cholera patient who had rallied from a state of such complete collapse in that establishment,—a most welcome circumstance to the kind heart of the governor who had so much interested himself in trying to counteract the sad fatality of this disease. Even Mr. Marsden admitted he had never seen so miraculous a change from any known treatment of cholera, and that he had now before him a strong fact in favour of the new plan of treating cholera, and facts are:—

"Chiels which winna ding,
And downa be disputed."

Early on the following morning, Mr. Whitmore sent a note to Dr. Stevens to the effect, that he had been called by Mr. Marsden, the surgeon to the Institution, and a governor, Mr. Claines, to superintend a case, under the same treatment which had succeeded in the prison.

Immediately after the receipt of this note, Dr. Stevens went to Mr. Whitmore, and they proceeded together to the Hospital, where the patient was doing well; the symptoms of collapse had entirely vanished, without leaving any consecutive fever or bad symptoms of any kind. From this time both Dr. Stevens and Mr. Whitmore attended every fresh case that was admitted into the Hospital. They came in slowly, but most of them were of the worst description; still, under their treatment, everything progressed favourably. On the 25th inst., three female patients were admitted, all exhibiting the severer symptoms; they were all subjected to the same treatment, and all soon recovered from the state of collapse. Indeed, so energetic was the treatment, and so successful the result, that, by ten o'clock in the morning of the 30th, the remaining cases were all believed to be out of danger. Mr. Marsden had visited these and the other cholera patients early that morning, and from what he had already witnessed, no doubt now existed on his mind that the new saline treatment in cholera was, indeed, a most important discovery. According to the original agreement the saline treatment was to be put to the test in twelve cases; it had now been tried in ten, of which only one patient perished, a case affording little or no hope when admitted. There was now every reason to believe that the remaining two cases would also recover, leaving a mortality of one death and eleven recoveries. After Dr. Stevens, Mr. Whitmore and two other medical gentlemen had examined the above cases, Mr. Marsden entered the ward, and addressing himself to Dr. Stevens, made the following observations in a very impressive manner, as if he felt sincerely the truth of every word he uttered. He said, "Dr. Stevens, I candidly confess that before I had seen this new treatment of yours fairly put to the test of experiment, I not only thought but spoke of it with the most thorough contempt; but now, after having seen it tested in so many severe cases, I frankly admit that even you yourself are not more convinced of the worth of the saline treatment in cholera than I now am, and such being the case, if you and Mr. Whitmore will leave the management of the cholera cases to me, I give you my solemn promise, that in future every case of cholera admitted into this hospital shall be treated in the same manner, and I pledge you my honour, that at the cessation of the present epidemic, the result shall be made known not only to yourself but to the public." All this being said in a way that satisfied Dr. Stevens that Mr. Marsden was serious, he exerted his influence with Mr. Whitmore to cede over the treatment of the future cases to him who was truly the legitimate medical attendant at the hospital. So long as Dr. Stevens remained in England no man could act more uprightly than did Mr. Marsden. In a letter, dated October 10, 1832, to the Editor of the *Medical Gazette*, giving the results of the treatment of the Greville-street Hospital, he says—"It is right to remark, that the saline treatment in this Hospital was first adopted by Mr. Whitmore, of Coldbath-square, in a patient that was abandoned by myself as a hopeless case—although this person recovered, and, by the like plan, many lives were prolonged, yet no uniform success ensued until the saline powders were faithfully administered every fifteen minutes, night and day, with an unlimited quantity of cold water. Hot saline baths were an important auxiliary, in fact, they never failed in relieving the cramps and exciting the extreme circulation, and thereby diminishing the lividity of the extremities. In every attack of the disease that was not followed by purging and vomiting, all remedies were found perfectly useless, as all such individuals died generally within six, never exceeding eight, hours, from the seizure, which, to me, affords ample illustration of the important effects of vomiting and purging in the collapsed stage of complaint, or even in the early stages, when the function of the liver is arrested. It is worthy of remark, that out of 13 patients, from the age of 10 to 20 years, only one was lost, and this died after a long struggle, having been injected nine or ten times with the saline fluid, rallying more or less after each addition to the venous fluid, the pulse being perceptible at the moment of death. In the 315 cases, there was not one who had bilious diarrhœa. From the above facts, it is quite evident, that until the saline medicines, hot saline baths, and water without limitation, was steadily and faithfully administered, almost every case, in the second stage of the disease, terminated fatally; while, on the other hand, nearly every patient who had not been previously treated by other remedies, but with whom the saline only had been pursued, almost every one survived, as the preceding report sets forth (that out of 81 cases in a state of collapse only 7 deaths). With the above facts before me, I must be not only blind to justice, but to all sense of honour and candour, were I not publicly to acknowledge, that until this treatment, suggested by Dr. Stevens, was forced upon my notice by stubborn facts, I not only treated it with disdain, but with determined opposition, yet I feel that I have been amply repaid, inasmuch as I have been taught a salutary lesson, never again to treat with indifference the suggestions of any man, without due reflection and careful investigation. Notwithstanding all the conflicting opinions that have appeared respecting Dr. Stevens's hypothesis, whether true or false, I care not; but I do feel, that to him alone is the Profession and the public indebted for the path that he has opened, the beacon that he has lighted, in the vast labyrinth of humoral diseases—for the new era that has commenced in both the pathological and therapeutical sciences—and for having thus cleared the threshold and opened the gates, from whence we view the distant light glimmering over the darkness of past ages, yet sufficiently bright to stimulate every scientific inquirer to a thorough cultivation of this unknown portion of human diseases."

In this letter Mr. Marsden establishes, in a language which cannot be disputed, Dr. Stevens's claim to all the merit belonging to the discovery of the saline treatment; and it is to be regretted, that, by his silent acquiescence, in the attempt made by others to deprive Dr. Stevens of what was so justly his due, Mr. Marsden should have subjected himself to an imputation that may fairly be brought against him.

I remain, my dear Sir,
Very faithfully yours,
EDWARD ASTBURY TURLEY.

Ivy House, Worcester, May 5, 1849.

SAFETY OF INFANTS IN BREECH PRESENTATIONS.

[To the Editor of the Medical Times.]

SIR,—Permit me to respond to certain interrogatory objections raised by Mr. Lancashire to the plan of ligaturing the funis early, in feet and breech presentations, stated by me in the *Medical Times*, on the 14th of April; and, in so doing, I shall answer the questions consecutively, and as succinctly as is compatible with their importance.

1. "Allow me to ask if children really do die from loss of blood in breech and feet presentations?"

To this question I can confidently say, Yes; for, in a very great majority of these cases that I have seen, the children have been *exsanguineous* and *flaccid*, and the placenta *gorged with blood*. In this opinion I am very glad to say, that I have the support of Dr. Richard King, who has written a very interesting monograph entitled "Preservation of Infants in Delivery." As most writers on obstetricy have been content with stating that a child dies from asphyxia, without giving any physical description of its appearances, the term, I conceive, has been frequently misapplied, for Dr. David D. Davis, in his "Principles and Practice of Obstetric Medicine," in defining *asphyxia*, in children, says "the child is *pale*, apparently *exsanguined*, *flaccid*, *and immobile*, and to all appearances without sensation. M. Bandelocque says, in *asphyxia* the infant comes into the world *exsanguine*; and how very different is this from asphyxia described by Mr. Lancashire, where the children have "bloated countenances, livid lips," &c., &c.; in fact, the state in which adults appear when asphyxiated. From this disagreement in the symptoms of asphyxia, which is supposed to be so common, we may infer, that children have been said to die from asphyxia, when there were not any symptoms to warrant such a conclusion. Again, I think it would be much more difficult to kill a child in the uterus, or vagina, from asphyxia than syncope, if we may reason from analogy; for Dr. Edwards, in his work "On the Influence of Physical Agents on Life," translated by Dr. Hodgkin, gives numerous experiments, in which the offspring of animals have been allowed to remain under water and other fluids, for periods, varying from a few minutes to more than an hour, without their being asphyxiated: then, is not the human offspring subject to the same laws? Moreover, we know that when a child is in the uterus, or vagina, after the rupture of the membranes, it is not entirely excluded from the air; then how can it be so readily asphyxiated?

2. "Is it not questionable whether or not hæmorrhage can take place into the placenta in so great a degree as to endanger or cause the death of the child?"

Undoubtedly, hæmorrhage may take place into the placenta, just as easily as into the lungs; for if we look at its anatomy, we find it composed of ramifications of the umbilical arteries and vein, connected together by *loose cellular tissue*, which will allow of its becoming gorged with blood, which is equivalent to hæmorrhage, inasmuch as the blood does not again return into the circulation, when the current along the vein is obliterated. Moreover, experiences teaches us that such a state may and does exist for most obstetric writers put the *congested placenta* down as an abnormal state. As to the *degree of hæmorrhage*, Dr. F. H. Ramsbotham, says: "It is almost incredible how small a loss of blood is sufficient to destroy a newly born infant." Then what "*great degree*" of hæmorrhage does it require to destroy the child? I mention, the effect is the same, whether the child loses blood from a carelessly tied funis, or by the arteries into the placenta. On this account they are equally liable to produce syncope, and equally fatal to the life of the infant.

I do not know upon what grounds Mr. Lancashire states, that "in most cases of breast and feet presentations we have the funis on the *stretch*. Why exclude natural labour? For how much more frequently do we find the funis coiled round the neck than round the extremities, and how much greater would be the danger to the child in natural labour, if this *stretching* had anything to do with the mortality of the children; for I think that it does not make the least difference in the stretching of the funis, whether the feet or head present, in as much as the distance from the umbilicus to the placenta, whether measured along the chest and face, or along the abdomen and lower extremities, is about the same; hence there is no fear of the cord being stretched in this way. Why do accoucheurs direct us, when the funis is coiled round the neck, to slip it over the shoulder? *Not to avoid stretching the cord*, but, as Dr. F. H. Ramsbotham says, so that it may not "cause the placenta to be dragged away from its attachment, or cause inversion of the uterus. But the chief danger is to the infant, as the circulation through the funis will be stopped by the compression of the vessels, and the same compression may close the trachea to such an extent as to prevent the ingress of air into the lungs." How Mr. Lancashire makes it out that "*stretching* of the cord is equivalent to pressure, so far as regards the impediment to the circulation of the *arteries*," I cannot say; and if it is the case I must confess that previously I never saw it recorded, nor have I been able to find it since; and why he excludes the vein from participating in this impediment, I am also ignorant. Moreover, it seems to me so contrary to physical laws, or laws of the animal body. As the arteries are, according to his own description, wound in a spiral manner round the cord, if the funis be stretched, the diameter of the spire must be diminished, and consequently, the

vein which is enclosed in the spire, will be compressed, and have its current impeded. Again, we know, that the current in a small arm of a large river, is not, by its contraction *impeded, but increased*. Lastly, although the calibre of the radial artery is much less than that of the aorta, yet the current is *not impeded*. Then, why should a diminution in the calibre of the arteries of the funis impede the current of blood? so long as the propelling force continues to act, and so contrary to the physical laws.

3. "Have we ever pressure on the vein, and not on the arteries, during the process of parturition, in the class of cases under consideration?" I did not state, in my former communication, that we had pressure on the vein, and not on the arteries. Still I can conceive the possibility of one of the arteries at least *escaping the effects of pressure*, whilst the vein may have its current obliterated, for we have the thickness of the funis, and the impulse of the fœtal heart on the blood, both tending to keep the arteries patulous, and to overcome slight pressure, whilst the vein may have its current obliterated by the same pressure, because it does not possess valves, its tunics are thinner, and if the placenta be separated from its uterine attachment, there is no longer the *vis a tergo* from the maternal circulation to propel the blood along the vein, and to keep it patulous. That pressure does exert itself differently on veins and arteries is well seen in the frequent occurrence of œdema of the lower extremities from pressure of the gravid uterus on the iliac veins, whilst the iliac arteries are scarcely, if at all, interfered with, although more exposed to pressure than the veins; and as the umbilical vein is less favourably situated for resisting pressure than the iliacs, why should we not expect the same effects from the same causes?

I am, Sir, respectfully yours,
J. OGDEN FLETCHER, M.R.C.S. Eng., &c.
Dale-street, Manchester, 1849.

PROPERTIES OF THE INDIAN HEMP.

[To the Editor of the Medical Times.]

SIR,—Deeply interested in medical pursuits, and, consequently, a diligent reader of your admirable Journal, my attention was attracted to page 571 of the last Number, to the article entitled "Tincture of Indian Hemp in Sanguineous Uterine Discharges," as giving the experience of Dr. Churchill in the use of this medicine, which he said, "Dr. Maguire, of Castleknack, had *discovered* in this class of cases by accident." The efficacy of this medicine, in such cases, has been long known to the "homœopathists," being particularised by Hahnemann, who does explain its *modus operandi*, which Dr. Churchill says he does not pretend to do. If you turn to *Jähr's Homœopathic Manual*, Part I., No. XLVI., p. 121, you will find ample details of the *modus operandi* of *Cannabis Sativa*, long used by the votaries of infinitesimals—from the "mother tincture" up to the thirtieth solution, or dilution.

First, among the diseases in which its exhibition is said to be frequently indicated, you will find dysuria, hæmaturia, and *other affections of the urinary organs*—urinary calculus—*acute gonorrhœa*—leuchorrhœa—sterility—abortion, &c.

Secondly, as to the *modus operandi*. It appears, in your paper, that Dr. Maguire had prescribed a *small dose* of the tincture of Indian hemp for a poor woman labouring under *some form* of *neuralgia*; and, on inquiring into the effects a few days afterwards, the patient declared that it had cured both her complaints, and then, for the first time, informed Dr. Maguire that she had been suffering from *menorrhagia*." The specific neuralgia is not mentioned; but doubtless the "general symptoms," as given by Jähr, include the ailment. He says, "Acute drawing and contractive, pressive pains, with sensation of paralysis or shocks, and deep shootings in different parts, or else a sensation as if pinched with the fingers;" again, "palpitation of the muscles of the face," painful jerks in the abdomen," "shocks and pressure towards on the outside in the region of the groins." For nephritis and neuralgia Jähr prescribed *cannabis*, (the aforesaid *hemp*,) when the symptoms are "a drawing pain from the kidneys to the pubis, with great *anxiety* and *uneasiness*.—P. 439, Vol. II., c. xviii., *Urinary Organs*; sect. i., *Clinical Remarks*. In fact, you have only to read the "indications" of *cannabis* in their *materia medica*, to find that these homœopaths have got the wind of Dr. Churchill, and eke of Dr. Maguire, of Castleknack.

Your paper also states, that, "in some cases, the beneficial effect was accompanied by a slightly unpleasant feeling in the head, resembling that from an extra glass of wine." Precisely, in like manner, says Jähr, "attacks of vertigo on walking, or when standing for some time, to such an extent as to cause falling"—also "congestion in the head, with throbbings in the brain, cheeks red and hot," manifestly the usual symptoms of "a drop too much;" and, lastly, Dr. Churchill says, that "five drops produced an extraordinary degree of nervousness and a sense of sinking, almost of dying, which gradually passed off." Jähr said long before, "Great anxiety of heart—sadness—indifference—disposition to be easily frightened—*mania*, sometimes gay, sometimes serious or furious"—*ib. ut antea*, p. 122.

But surely every one knows that this plant contains a narcotic secretion of vast energy. The readers even of the "Penny Cyclopædia" must know that if one remains for any length of time amongst a plantation of young hemp, head-ache and vertigo are often the result: in hotter countries these effects are much more violent, a kind of intoxication being speedily produced. Oriental nations have taken advantage of this to add another to the list of intoxicating drugs, which they contrive to substitute for the forbidden wine of western people. The powdered leaves, mixed with some kind of aromatic, are infused in water, and drunk, when a drowsy, ecstatic feeling comes on, which is said to be much more agreeable than that produced by opium. The leaves are also mixed with tobacco for smoking; but having tried the thing, I can only denounce it as a vile abomination and insult to the fumigating and consolatory weed. Herodotus, you are aware, enters largely into the intoxicating and other effects of hemp.—Book iv. 74, 75.

The list of diseases for which its *pathogenetic properties* seem to adapt it, according to the homœopaths, is pretty extensive, namely, "hysterical complaints—sufferings induced by fatigue and physical exertion. Mania and other mental affections; scrofulous ophthalmia; cataract; obscuration of sight, and specks in the cornea; gastric and bilious affections; gastralgia; induration of the liver; colic; encysted ascites; obstinate constipation, &c., as before, with "catarrhal affections of the respiratory organs; *pneumonia*; asthmatic complaints, and carditis."—Jähr, *ut antea*. In other words, hemp has a powerful effect on the circulation of the blood: a potent medicine within, and a useful article without. It clothes our bodies; gives wings and cordage to our ships, and cures our ailments. S—z.

RESIGNATION OF THE MEDICAL OFFICERS OF THE ROYAL SOUTH LONDON DISPENSARY.

(COPY OF RESIGNATION.)

GENTLEMEN,—As it has been deemed advisable to abrogate an old-established principle which was uniformly adhered to in the election of your Medical Officers, we, the undersigned, comprising the whole of your Medical Staff, feel it to be inconsistent with the duty we owe to our Profession, to retain, under these circumstances, the appointments with which we have been severally entrusted; we, therefore, respectfully beg leave to resign those duties which have been for some time past entrusted to our charge. In so doing, gentlemen, we cannot but express our regret that the necessity for such a step should have occurred, more especially as we believe that the character of this and similar Institutions depends in a very great measure on the status and zeal of the Medical Officers; and we most sincerely hope that the appointments which we now resign into your hands will be found not to have suffered, either in character or importance, during the time they have been entrusted to our care; for in this, as in all other matters connected with your Institution, we have been actuated by one principle alone—namely, the most earnest desire to perform our duty.

(Signed) SAMUEL OSBORN.
WILLIAM WOODS.
HENRY JOHNSON.
CHARLES LINTON ALEXANDER.
PETER BERRELL.

To the Committee of the Royal South London Dispensary.

April 11th, 1849.

(COPY OF PROTEST.)

GENTLEMEN,—A certain principle having been uniformly adhered to in the election of your Medical Officers, namely, the ineligibility of gentlemen keeping an open shop for the sale of drugs, &c., which principle was adhered to and enforced by a guarantee at the last contested election, and under the influence of which principle the whole of your Medical Staff have undertaken the duties of their several appointments,

It is, therefore, with much sorrow, that we, the undersigned, comprising the whole of your Medical Officers, feel it to be our duty to protest most respectfully, but most earnestly, against the vote of the majority of a Committee assembled April 3, 1849, abrogating this old established principle; and in accordance with this protest, we respectfully solicit the Members of the present Committee to consider the construction and meaning of the 27th Rule, and to favour the Medical Officers with their decision on this contested point.

(Signed) SAMUEL OSBORN.
WILLIAM WOOD.
HENRY JOHNSON.
CHARLES LINTON ALEXANDER.
PETER BERRELL.

To the Committee of the Royal South London Dispensary.

April 11th, 1849.

GOSSIP OF THE WEEK.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, 17th May, 1849:—Edward Pilkington, Henbury, Cheshire; Henry Taylor, Bury St. Edmund's.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College, at the meeting of the Court of Examiners on the 18th inst.:—Messrs. William Henderson, Bath; Nathaniel Stenson Wood, London; Samuel Partridge, Darlaston, Staffordshire; Charles Andrew Poole, Sloane-street; Robert Creighton, Dublin; Henry Duncan Smith, Sandwich, Kent; Thomas Thrush Frankland, Northallerton, Yorkshire; Thomas Charles Marrett, Bath; Frederick James Gant, George-street, Westminster; Thomas Lowrey Ridley, Newcastle-upon-Tyne; and George Wilson, Dublin. At the same meeting of the Court, Mr. John Eccles Hamilton passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College, his Diploma bearing date June 23, 1845.

OBITUARY.—Died of fever, caught while in the discharge of his duties as a Poor-law Medical Officer, in the district of Wolverhampton, W. L. Grundy, Esq., aged 29.

UNIVERSITY COLLEGE, LONDON.—At a recent session of the Council the following legacies were announced:—For the College, 100*l.*, duty free, by Mr. Thomas Dyson, of Diss, Norfolk; for the Hospital, 500*l.*, by Mrs. Kennedy, of Pennsylvania, near Exeter; 250*l.* by Mr. Charles Filica, of Park-crescent; and 500*l.* by Mr. John Curties, of Devonshire-place. Mr. Dyson's legacy has been paid by his executor, Mr. Thomas Lombe Taylor. The 300*l.* bequeathed by Dr. Fellowes "to be added to the permanent endowment of the Hospital," has also been lately paid without deduction of duty.

ROYAL OPHTHALMIC HOSPITAL.—The annual dinner of this Charity took place last week, at the Albion Tavern, and was attended by upwards of seventy gentlemen. The Lord Mayor presided; and, amongst the company present, were the Sheriffs of London, Dr. Russell, Dr. Farre, the Rev. S. R. Cattley, the Rev. H. Christmas, Mr. Pilcher, and the Rev. J. Ellis. The toast of the evening, viz., "Prosperity to the Institution," was coupled with the "Health of Dr. Farre," and was proposed by the Lord Mayor in a very effective manner. He stated that, since the establishment of the charity, upwards of 200,000 patients had been relieved by it, and that the sight of 250 patients, born blind, had been restored through its agency. Dr. Farre, in replying to the toast, pointed out that the Hospital had educated, in a thorough knowledge of the diseases which affect the eye, 1,496 medical gentlemen, in which number many of the most eminent names in the Profession were comprised. It had been the parent and model of many similar Institutions, not only in this country, but all over the world. In India and China, the wonderful results which these branch Institutions had achieved, had exercised the most powerful influence on the minds of the natives, and, to a very great extent, in

consequence, medical men in the east were becoming the pioneers of civilization. Dr. Farre concluded by proposing the memory of John Cunningham Saunders, the founder of the Charity, whose talents and untimely death he dilated on with affectionate regret. The Secretary, during the evening, announced a list of subscriptions, amounting to more than 700*l*.

Society for Relief of Widows and Orphans of Medical Men in London and its Vicinity.—This Society has received a donation of ten guineas from a Benevolent Fund at the disposal of the Council of the British Medical Association.

The following is the official Report of the state of the workhouses of Ballinasloe, for the week ending Saturday, the 5th inst.:—In the house, 4,474; admitted, 281; total, 4,755. Discharged, 414; died, 490; total, 904. Remaining, 3,851; Receiving out-door relief, 928. In a single week, nearly 500 human beings have died in the workhouses of Ballinasloe; but the *Ballinasloe Star* states, on the authority of a clergyman, that the real amount of deaths was 609 within a single week. And this brings us once more to the Nenagh Union, where there is too much ground to apprehend the same calamitous state of things, if measures be not at once adopted to change the system pursued by the Guardians. In order to avoid out-door relief, the Guardians of that Union have crowded the workhouses to such a degree, that the mortality has been increasing to a very alarming extent. From the 24th December to the 8th instant, the deaths in the Workhouse amounted to nearly 1,000; and in Clonmel Gaol, 40 deaths have, as yet, occurred from cholera alone, within the last month.

The Cholera in Paris.—The *Journal des Débats* does not give a very favourable report of the past week. The number of new cases is still very large, but the mortality is on the decrease, as appears from the hospital returns of the week, which give 1,021 new cases, of which 372 proved fatal, whilst 307 patients were enabled to leave the hospitals. The increase in the number of new cases, is ascribable, for the most part, to the fearfully sudden changes of temperature which have been recently remarkable, and the effect of which—to borrow the phrase of our Parisian contemporary—was to upset, so to speak, the physiological equilibrium. A seasonable change will, it is hoped, put a period to the ravages of the disease. The *Union Médicale* shows, that the number of persons attacked without precursory symptoms is very small; whence it follows, that, in the majority of cases where the disease assumes a malignant form, the sufferers are chargeable with "gross carelessness and unpardonable negligence." In other words, the disease is generally preceded by certain premonitory symptoms, and, if attacked in time, may be subdued with very little difficulty. To neglect these providential warnings, is literally to court destruction. The *Union Médicale* Tuesday says, there is a rapid diminution of the cholera in the capital.

Cholera and Gun Powder.—At the express desire of the authorities of Galway, the soldiers of the 68th Foot lately fired twenty rounds of blank cartridge in the square, for the purpose of purifying the air, and thus checking the spread of cholera.

Statistics of Consumption.—We learn from the statistics of the Hospital for Consumption, at Brompton, that the liability to consumption, as compared with their liability to all other diseases, appears to be—tailors, 19 to 15; bakers, 45 to 28; indoor servants, as 24 to 12; printers and compositors, as 100 to 27; clerks and shopmen, 314 to 78.

Irish Manufacture.—We regret that we were led, inadvertently, into an error last week, in quoting, from the *Times*, a commendatory paragraph respecting a new species of manufacture recently introduced into this country from Ireland. We attributed the invention of this valuable compound to Messrs. Bewley and Co., whereas we should have said, Messrs. Bewley, Fisher, and Co., a firm quite distinct from that first-named.

Lunatic Asylums, Ireland.—We are glad to perceive the Government at length recognising the principle of the necessity of appointing medical men to the management of these Institutions. On Saturday last, Dr. J. Fitzgerald, of Bruff, a gentleman, we are informed, in every way adapted to the important office, was appointed Governor of the Limerick District Lunatic Asylum, in place of Mr. Jackson, deceased. We trust this is the initiative of a better system, recognising, as it does, the principles of our Morisons and Conollys; and we hope, as stated in our last, that before long, the attendance on such Institutions will be required for all candidates for medical degrees at our different universities.

Shocking Case.—On Tuesday week Mr. Swann concluded, at Mansfield, Nottinghamshire, an inquiry into a case which throws some light upon an iniquitous practice which it has long been suspected has been carried on to a great extent in this district. On the Friday previous a young woman, named Elizabeth Bailey, aged 23, and unmarried, died of a miscarriage, having on the previous day communicated to Mr. John Senior Turner, the surgeon employed, that she had been subjected to certain foul practices. The nature of these was explained by a companion named Mary Ann Oscroft, who said she had known the deceased thirteen years. About three weeks ago the deceased asked her to go with her to a man that "cured" all women in her condition. Witness tried to persuade her not; but she said that if she would not go with her she would get somebody else to do so. Witness then consented. On the Tuesday evening they went at half-past eight o'clock to the house of John Sansome. They knocked at the door, and Sansome came. Deceased described her situation and said, "You know what I come for." He did not reply, but conducted them to a bed-room, where he performed an operation upon her. Deceased asked how much it was to be, and he replied, "Seven shillings." The money was paid, and the two women then went home. The deceased, after suffering great pain, died as stated above; but, before she expired, her declaration *in articulo mortis* was taken by Richard Golding, clerk to the magistrates. It was exactly to the above effect. She said she did not know Sansome before, but he was a little old man. William Picker, superintendent of police, apprehended the fellow, but he denied all knowledge of the offence. Inspector Richardson searched his house, and found a number of surgical instruments in a desk, and several boxes containing different coloured powders, but not the instrument he was sent to look for. The jury returned the following verdict:—"That the deceased died in consequence of having had a miscarriage, but whether it was caused by any violence used towards her by John Sansome, or by other means, or by natural causes, no sufficient evidence appears to prove." The magistrates, however, have committed Sansome to take his trial for the offence.—[Why was there not a *post-mortem* examination? Ed. *Med. Times.*]

Resurrectionists in America.—Mob Law, &c.—The American papers just arrived contain accounts of the mode in which the people of St. Charles, Illinois, dealt with a surgeon who was presumed to have disinterred the remains of a young lady, and how, subsequently, with the judge who would have committed the offenders for trial. We make the following extracts:—"A Dr. Richards and his students, of St. Charles, Illinois, by the reckless manner in which they supplied themselves with subjects, caused a serious outbreak on the 19th ult. A company of men, relatives of a young lady who had recently died in De Kald County, and whose body had been stolen from the grave, procurred a search-warrant, and searched the dissecting-room of Dr. Richards. They did not succeed in finding the body, but discovered hair and other evidences which satisfied them that it had been under the hands of the operators. The relatives returned home, and in a few days came back to St. Charles, with a company of two hundred men well armed and equipped. They made an attack on the house of Dr. Richards, which was returned from the house. In the fight Dr. Richards and one of his students were dangerously wounded by balls. The mob broke the windows of the house and injured the furniture, after which it dispersed." * * * "We learn," says the *Chicago Tribune*, published some days after the above, "that the excitement in St. Charles has not abated much. After Dr. Richards and his student were shot, the party remained in St. Charles, and three or four of them were arrested. The justice informed them he would have to commit them for examination; but they refused to go to prison or give security, alleging they were ready for trial, and would appear whenever he called for them. This determination, backed by one hundred rifles, there was no resisting, and the justice was overruled. We hear, further, that the mob will be satisfied with nothing but Dr. Richards' life, or the body of the lady that he is said to have stolen from the grave. On Saturday, two days after the doctor was shot, they razed his office with the ground, and proceeded to Warrensville, to search for the body of the lady, it having been alleged that he had secreted it in that village, but they were unsuccessful."

Leamington.—On the 28th instant, Peter Hollins's masterly colossal statute of that well-known physician, Dr. Jephson, will be publicly inaugurated. Among the events of the day, Mr. Serjeant Adams (the Assistant Judge) will preside at a public dinner, at the Regent Hotel. This will be followed by a floricultural exhibition (open to all England) on the ensuing Thursday; and musical performances, by the Tyler family, and other amusements, will complete the programme on the occasion.

Comparative Height in Stature.—M. Quetelet gives the medium height of the French people as five feet three inches. The English average is said to be five feet seven inches and a-half.

Extraordinary Case of Somnambulism.—On Monday night, Pollard, a policeman, met a young man, seventeen years of age, the son of Mr. John Topping, butcher, walking in a state of nudity, on the Bury and Bolton road, towards Bolton, at a rapid speed. He was so fast asleep that when the policeman stopped him, he was unable to awake him, but, by turning the sleeper's face towards Bury, he walked him to the police-station, where he was placed before a warm fire. Here every means likely to awake him was carried out without success, and at last he was taken home by his mother and servant still asleep.

MORTALITY TABLE.

For the Week ending Saturday, May 19, 1849.

Causes of Death.	Total.	Average of Five Springs.
All Causes	1033	963
Specified Causes	1022	959
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	236	198
Sporadic Diseases:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	49	48
Tubercular Diseases	187	200
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	123	123
Diseases of the Heart and Blood-vessels	40	34
Diseases of the Lungs, and of the other Organs of Respiration	169	131
Diseases of the Stomach, Liver, and other Organs of Digestion	58	62
Diseases of the Kidneys, &c.	11	11
Childbirth, Diseases of the Uterus, &c.	9	8
Rheumatism, Diseases of the Bones, Joints, &c.	8	8
Diseases of the Skin, Cellular Tissue, &c.	..	1
Malformations	5	3
Premature Birth and Debility	27	21
Atrophy	13	17
Age	43	50
Sudden	10	11
Violence, Privation, Cold, and Intemperance	34	33
Causes not Specified	11	4

TO CORRESPONDENTS.

"Omega."—Hydrated per oxide of iron may be made in a few minutes, by adding carbonate of soda to any salt of red oxide of iron. Arsenious acid mixed with this becomes arsenic acid, and the iron is converted into protoxide. From this circumstance the per-oxide has been employed as an antidote in cases of poisoning by arsenious acid,—the arseniate of iron exerting no injurious action on the system.

"An Old Subscriber" wishes to know if a foreign diploma, purchased without examination will entitle the possessor to practise in the provinces as a physician? A degree obtained in this manner is of no value, as it is neither a proof of medical knowledge nor a title to practice.

"Inquirer."—It is doubtful whether Gonorrhœal Ophthalmia is always caused by contagion, as it has appeared in persons who have been careful not to touch their eyes with anything soiled by the urethral discharge.

"Double Qualification."—(1) We cannot state what kind of Medical Reform Bill will be introduced into the House of Commons. (2) We think it would be unjust to prevent those now legally entitled to call themselves surgeons, enjoying hereafter this privilege. (3) There is no intention of converting the College of Surgeons into a College of General Practitioners.

"Mr. Heath."—The College of Pharmacy in New York is composed of Chemists and Druggists, and was chartered in 1831.

"Electron."—The Maynooth battery was invented by the Rev. Professor Callan. It is constructed of cast iron cells, in which a porous porcelain cell, with a zinc plate, is inserted. The porous cell contains dilute sulphuric acid. The cast iron cell contains a mixture of strong nitric and sulphuric acids. This is one of the most powerful batteries.

"M.D."—Our correspondent is a legal medical practitioner, but his qualification does not render him eligible for a union appointment.

"Delta."—Blistering paper is made by soaking the material in Acetum Lyttæ.

"A Young Surgeon."—The swelling may be punctured without danger.

"Guyensis."—The appointment rests with the Directors of the East India Company. The passage out will cost about £100.

"Rusticus."—No fees are demanded to see the practice of the Parisian Hospitals. Our correspondent has only to present his diploma in order to obtain admission into the wards.

"Galen."—Chyle does not take the hue of the colouring substances mixed with the food.

"M.R.C.S., Eng."—The Royal College of Surgeons of Edinburgh is a College of General Practitioners.

"Lector" asks, "Can the degree of M.D. be obtained from St. Andrew's University without examination? If not, can legal medical practitioners be admitted to examination without residence?" The University does not grant degrees without residence, and any one possessing a diploma from the Colleges of London, Edinburgh, or Dublin, or the Faculty of Physicians and Surgeons of Glasgow, or the License of the Apothecaries' Society, London, will be admitted to examination.

"Socius."—Address a letter to Mr. Balfour, at the College of Surgeons.

"J. J."—The title of Chemist is no protection against a prosecution under the Apothecaries' Act.

"Adolescens."—The *litre* is equal to about an English quart.

"H. G."—A candidate for an Assistant-Surgeoncy in the Army must be unmarried, not beyond twenty-six years of age, or under twenty-one.

"Williams."—Any of the shipbrokers will give the required information.

"J. L. G., Walden."—The strength of Prussic Acid, directed by the British Pharmacopœias, differs considerably. That of the London College contains about 2 per cent. of real acid; Edinburgh, 3·8 per cent.; Dublin, about 1·6 per cent.

"Amicus."—One of the most simple methods of concentrating Alchohol is by putting it into a bladder. Spirit of sp. gr. 0·820 so placed, if left for a few days in a warm room, will be found to have its sp. gr. reduced to 0·800. The water permeates the bladder, and evaporates from the outer side; but, the alchohol remains.

"A General Practitioner."—The College of Surgeons has not agreed to have its Charter modified so that the members may elect their officers.

"A Subscriber" has forwarded a copy of an Aberdeen diploma, with a request that we would translate it. If our time allowed us to do so, we do not even then see how our complying with the request would benefit or gratify our readers.

"Dr. J. Scott, Boulogne," received.

"Mr. S. Gibbons, Congleton," is thanked for his suggestion.

"Medicus, St. Alban's," received.

"Blue Jacket."—We are not aware that the Admiralty has lately received "one or two unqualified persons" as Assistant-Surgeons into the Navy. We are sure that such a proceeding would be condemned by the whole Profession. The old surgeons' mates are quite extinct.

"M.R.C.S., Usk."—The gentleman mentioned has nothing to do with patent medicines. It is the practice of many notorious quacks to advertise their nostrums in connexion with the names of well-known physicians and surgeons. By this means the sale of the article is increased, while the law affords very little redress to the medical gentleman libelled.

"Mr. Clegg's" paper will appear next week.

"Mr. G. J. Wills, Crewkerne."—The communication was received too late for the present Number.

We should be glad if our Correspondents would write on only one side of the paper.

"Mr. Clegg, on the Application of Leeches to the Os and Cervix Uteri," shall appear in our next.

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LECTURE IX.

Treatments — Bleeding continued — Emetics — Bowels — Liver and Spleen often masked—Skin—Kidney—To address primary organs, but not if you suspect organic disease - How to address organs secondarily affected; those which, on general grounds or on the special evidence of the case, afford best prospect of compensating function — Consistency of the views enunciated with the different practice of different men.

From the foregoing remarks, then, it may be inferred, that bleeding would be beneficial or otherwise *in fever*, just as it ministered to the organ which was primarily or chiefly concerned in representing the disordered condition of the body or otherwise; or suppose the disordered condition to be represented *simply* by general plethora,—(not, in fever, I apprehend a very frequent condition,) then in so far as it restored that which was plus, to the ordinary standard or the natural power of the various organs; for, unless bleeding do one or the other, it would, according to the views which we have been submitting, be useless or injurious, as further reducing power, the depression of which it was instituted indirectly to relieve: and here, we think, lies the only safe principle of bleeding in fever, which we will now consider a little further. The conditions of the body, in respect to the quantity or distribution of the blood, it is true, may be very complex; but they seem, after all, reducible in practice to three: there is either a state of general plethora, a plethora of particular organ or organs, or both in combination; and, as it appears to us, on the presence or combination of these conditions will depend, not only the propriety of bleeding, but the mode and extent of its employment. *Prima facie*, this view appears defective, inasmuch as it refers to *quantity* without calculating anything relating to the *quality* of the blood; but in the present state of our actual knowledge, we cannot abstract blood safely, or with definite object, on any less simple view; for, although there can be little question, that in various cases of poisoning by gases, and in certain cases of fever, the blood may be, so to speak, charged with matter foreign to its normal composition, or without being actually charged with foreign matter, have *the affinities of normal elements* in a very loose or disturbed condition, still we have no means of ascertaining anything, I think, at present, sufficiently positive or definite on these points to direct us in relation to bleeding in *fever*; but I conceive it quite possible that the investigations which are going on, more or less closely connected with this subject, may, by-and-by, put us in some more decided position in regard to it. In the mean time we are certain, that in all cases there is a relation between the power of an organ and the *quantity* of blood sent to it, which it is of the utmost importance to preserve *within that range* to which any improper congestion is met by proportionate secretion.

In a young and plethoric subject, bleeding may be very proper, because nothing reduces the power of the body to resist injurious influences more certainly than a congested state of the various organs; so, in states where the *general* plethora may coexist with evidence direct or constructive of congestion of a particular organ, bleeding *may* be proper; but, in regard to the former case, it should, in relation to the quantity abstracted, be recollected that in no state of system is that debility more readily induced, which you seek to relieve than a too plethoric state. Plethora is itself an injurious influence, requiring the *utmost power* of a healthy body to dispose of without disease, and the opposite state to it is merely another form of injurious influence, charged with a circumstance always implying difficulty, viz., sudden change of conditions where neither are healthy. Bleeding, therefore, even in the *plethoric* in fever, requires great circumspection. The treatment of the body according to our views, is the adjustment of balance between the circulation and secreting powers of individual organs; and, again, the *balance* between one organ and another. It is very easy to correct one unbalanced state, and produce another. A little too much blood abstracted produces weakness and re-action, the very things we strive to avoid. Therefore, the adjustment of quantity to the case in fever is a matter of much greater consequence than can be loosely conveyed in our ordinary modes of expression as so many ounces, more or less, and so on. In bleeding *in fever*, it seems to me, we cannot too much recollect that one false step can hardly be recalled, and that, in avoiding, on the one hand, a practice so *cautious* as to be inert, or so *resolute* as to be dangerous, there is no safety even for the most experienced, but, guarding himself from generalization, and applying the principle on which alone we contend that bleeding should be instituted according to the *special* evidence of the case. Where we determine—I mean in fever—that there is no general plethora, but congestion of a particular organ, general bloodletting will be usually out of the question, because we cannot hope to relieve the oppressed organ without the abstraction of a quantity of blood, (be its *quality* what it may,) greater than the system can afford, while contending with an injurious influence. Here, I think, the analogy, and for all practical purposes, the *identity* of medical and surgical fever is close and instructive. In the worst accidents in surgery, we never bleed without recollecting the œconomy of blood necessary in relation to the repair, which the accident has rendered unavoidable. I know it may appear difficult to identify such a thing as a crush of a cart-wheel in any of its relations with the mysterious disturbance of an inappreciable miasma; but rely on it, it has not been necessary to institute two distinct laws in regard to them; that the *law* by which the system deals with both is the same; the interfering influences of the same kind; and that success in both cases depends on definite conditions of the body, varied in different cases, just as they interfere more or less, with that for which we have no general expression but the word "power."

In some states of local congestion, no doubt the abstraction even of a very small quantity of blood *from the part* would be of great service, and hence the employment of local bleeding has obtained a place in the treatment of fever; but with the exception of bleeding from the hæmorrhoidal vessels in states of congestion of the portal system, our power in this way is limited and uncertain, and, probably, with such exception, our views will be more readily obtained by dry cupping, together with such modes of derivation to the surface as do not institute a necessity for the more elaborate processes of vesication, ulceration, or suppuration. Mustard poultices, of convenient strength, and other rubefacients, according to our principles, would better than blistering, tartar emetic plaisters, and such like applications; as fulfilling the intention of derivation of blood from the *loaded organ* without necessitating ulterior processes, which are so many requisitions for *power*. From the foregoing sketch it would appear, that our principles lay bleeding in fever under very severe restrictions. Practically it would for the most part limit it to persons of plethoric habits, in whom the plethora itself may be the direct depressant of power, or indirectly through an unbalanced state of functions of which it was the cause; a state which, as we contend, is in so many cases that element which the body contributes to the constitution of fever. There is one other practical fact which further impresses the necessity of caution, and well-defined objects in bleeding in fever, which is that (excepting where blood is drawn, with we trust a rare indiscretion, at a period, or in a case, where it is wholly inadmissible) the real invasion of power which it may truly enough constitute may for a time be masked by that tendency to re-action which bleeding is apt to induce. On the whole, Bleeding to be useful must be definite in its object, and instituted with great precision in relation thereto; if it is to be useful, it must be opposed to *general* plethora without producing an opposite condition, and to congestion of *individual* organs without so far affecting the general circulation as to reduce the powers of the body. These conditions no doubt will frequently require the utmost tact and discrimination; and we are not surprised to find, that the results of bleeding in fever are more often found to afford arguments tending to the total abandonment of it as a remedy in fever, than such as placing it in its true position; viz., as a remedy requiring the utmost discrimination in its employment, as one of those which we must regard as of exceptional rather than ordinary application, but which may be occasionally of great importance.

There is perhaps no remedy which has excited more influence in the relief of fever, as well as in apparently cutting it short, than emetics; but it is equally true, that like all others it has been frequently inefficient and sometimes mischievous.

Inasmuch as emetics act more or less on so large a portion, and very often on the whole of what are usually designated the digestive organs, and as fever, as is here alleged, derives one element from an unbalanced, or otherwise disordered condition of the various organs of which the digestive form so large a portion, we readily perceive how these agents may exert a very extensive influence in the treatment of fever; but, as it is obvious that emetics may act directly, indirectly, powerfully, or not at all, on the organ primarily affected, and as the stomach, though, no doubt, in many cases, yet is by no means constantly or necessarily a primarily-affected organ, so it is consistent with our views that emetics may be highly beneficial, may even cut short a fever, or be of more measured, or only temporary benefit, or injurious; for when they act neither directly nor indirectly on the primarily-affected organ they only reduce power; they may, therefore, form a portion of the general or special treatment, or both, just according to the case. In all cases of fever, as the evacuation of the matters contained in the alimentary canal is a most desirable measure, so emetics, as contributing, in many cases, more efficiently to carry out this intention, will be of *general* use, the repetition or continuance of them, so as to form part of the *special* treatment of the case, will depend on the conclusion the facts and symptoms justify as to the organs primarily affected, together with the probable *condition* of those organs, as being merely disordered in function or diseased in structure. Emetics are also beautiful illustrations, when used as sudorifics, of the facility of acting on organs through their sympathies,—a principle of which, as long ago as I published "The Unity of the Body," it will be seen that I have practised and recommended the extension, with the best results in the treatment of other diseases; although for the reasons, perhaps, above hinted at, actions of other organs do not so frequently appear to cut short the fever in which they appear to be frequently concerned, yet instances are not wanting in which the induction of efficient action from the bowels, and in other cases liver, have been immediately followed by permanent remission, and subsequent disappearance of the febrile symptoms. In acting on organs even primarily affected, as I shall presently observe, our mode of proceeding must always have reference to the existing power of the patient, if any organic disease be present; or, if we *are late in the case*, we may only act on the organ to increase its disorder; or, if we produce secretion, only, have, instead of the wonted relief, that *ultima moriens* of effort of which I suspect the black vomit of tropical fevers to be an example.

The bowels (a) will sometimes retain fæculent

(a) I suspect the bowels to be seldom really primarily-affected organs, yet the positive evil of fæcal accumulations *practically* places them under such circumstances, in that category. The skin and liver are usually primarily at fault,—in some cases mental affections. In either case the primary organ should be administered to specially during our attempts to *empty* the bowels.

matter, under frequently-repeated excitation, and yet, when the contained matters have been successfully discharged, the fever shall rapidly subside. Very small and repeated doses of purgative medicine, so that the action be as gentle and gradual as may be, is the only mode of certainly accomplishing this object, where there have been accumulations of long standing. In detecting this state of things, often very obscure, a tolerably certain guess may be made by the history of the case, accompanied by a careful examination of the course of the large intestines. Those who have been consulted in the curious complications, both of general and local affections, including abdominal tumors so called, which have either wholly depended on, in one class of cases; and wholly consisted, in the other, of curious accumulations in the large intestines, will at once acknowledge the necessity of attending to the condition to which I am referring; for I have seen fever sustained by this state of bowels, wherein more than usual care had been taken in effecting, as it was thought, the evacuation of the contained matters at the commencement of the attack. The results of slowly-occurring accumulations of the bowels has, since the attention of the Profession was more directed to the subject, probably as much by Dr. Hamilton's book on Purgative Medicines as by any one thing, have rendered most of us alive to the very multiform and powerful influence which this condition exerts in the causation and maintenance of disease; and, perhaps, few books would be more useful than a good digest of the accumulated facts on this important subject.

LIVER AND SPLEEN.

Whoever, for one moment, reflects on the various relations of the liver and spleen, must at once perceive, that the condition of these viscera must exert a very great influence in all states of disease. It is true that, in the structure of the spleen, we meet with a very peculiar condition, in all respects unlike anything else in the body. It is true there are other organs in which no excretory duct is found, but in the variation of size, which the peculiar structure of the spleen so readily admits of, and which seems to occur in the exercise of its ordinary functions, we see a condition which, whatever else it may do, must certainly, in many cases, relieve the liver from very serious degrees of congestion where the excretory function of this organ is abridged or suspended; and it is probable that, in the varying conditions of those organs of which the structure of the spleen so obviously admits, may be found that apparently thin veil which, when all the facts are considered, alone appears to conceal from us the proximate cause of the apparently mysterious phenomena of intermission; a question which I had promised myself to take up as a distinct subject; but experience impresses, amongst other things, the *ars longa, vita brevis*, too strongly to encourage one in new undertakings. An additional interest, in regard to the portal system, arises from the various modes in which its disorders are masked or concealed.

I have seen every organ in the body the seat of symptoms which have been clearly demonstrated to have been proximately dependent on disordered conditions of the liver or spleen, in cases where neither of these viscera exhibited any symptoms of disorder in the usual sense of that term. Cases in which the history clearly enough showed that the body had been subjected to influences, moral or physical, or both, which have well-established effects on the portal system, without there having been any evidence of corresponding increase of function in the liver, though not *uncommonly* with the presence of greater activity in some other organs.

In all cases of fever, determination to the surface of the body must be regarded as a thing of the *first* importance, because it is very obvious that, *quoad*, it must relieve *every* organ, and, consequently, that which is primarily or principally disordered; and it is consistent, therefore, with this fact, that the skin is the only organ the action of which is at all times salutary. You cannot say this of any other organ whatever, and I need not remark that it is perfectly consistent with the views of fever here attempted to be set forth. Nevertheless, we must not lose sight of the *special* treatment of this important organ. It is reasonable to believe, and I think many cases show that sometimes the skin is a *primarily* affected organ. I do not mean those cases in which the fever is ordinarily referred to "catching cold," because I do not (as I formerly explained) believe, that in many of such cases, the skin *is* a primary organ; but in cases wherewith a presumption in favour of previously well-balanced function, the skin evidently plays a very important part in the case; and wherein the type and the termination of the fever appear to have more than usual relation to the phenomena it exhibits. Many cases of scarlatina strongly suggest that the skin should, in addition to the importance it holds in the *general*, form the subject of a more than usual *special* treatment. I suspect, that in many cases the varying results of cold or hot affusions rendered chemically stimulating or not, as the case may be, have their explanation and adjustment depending on a more searching investigation as to the *order* in which the skin is affected, and, consequently, the other measures which should accompany those specially addressed to it. Thus, according to our view, the affusion by warm, cold, aqueous, simple or stimulating, according as the skin were primarily or secondarily affected, would be accompanied by excitants to the stomach, liver, bowels, or kidneys according to the relations which the organs were shown to have to the skin in the causation of the case. On this would depend *power*, and on it that re-action from cold affusion, or in *its absence*, the necessity of the more direct stimulus, as represented by hot, or medicated ablutions, or those which combine these properties.

The conclusion, then, as to the organ primarily affected will be determined by carefully considering the *history* of the case in relation to the nature and duration of the injurious influences to which the body had been primarily at any time subjected, and your knowledge as to the organs on which such injurious influences usually impinge; secondly, on your examination of the symptoms. I mean, as to whether they are placed in primarily, or, as I believe will be more frequently the case, in secondarily affected organs. You can hardly be wrong in combining with your treatment excitation of the skin; but, at the same time, your measures addressed to it will in either case be most auspiciously conducted by simultaneous excitation of organs *in the order* in which they appear to have been affected, excepting only, as will be presently observed, such organ, (if any,) in which there shall appear to be reasonable grounds for suspecting organic disease; in such case, it is better to excite some other organ, whose physiological relations afford most probability of direct compensating action.

Supposing, then, that you have decided on the organ primarily disordered—say the liver, or any other—what is next to be done? I should say, endeavour to act on it so as to excite its secretion, and so combine your agent as to oppose, as much as you can, the tendency that there always is in the body to transfer an influence directed to a torpid organ to some whose susceptibility is more vivid, or whose relations are more healthy. In general, this is, in my experience, best done by selecting some remedy of known tendency, and if it goes off by some other organ, combining it with some narcotic in small doses; in which case, it will probably excite the organs we intend, and sometimes the skin also. Notwithstanding, however, the great importance of acting on an organ primarily affected, there are conditions which sometimes render great caution necessary, and at others render it more safe and judicious to act on *compensating* organs. This condition doubtless requires great discrimination, because it implies a knowledge always difficult, sometimes impossible to obtain, viz., whether the organ be altered in structure; and again, supposing that to be the case, to *what extent* is it so? There is no doubt that considerable alteration in the structure of an organ is not inconsistent with the execution of a considerable *portion* of its functions; and it is equally certain, that there are structural alterations which render it necessary that the duty of an organ be reduced to its *minimum*. Now, on these conditions, will the practice depend? If an organ be structurally sound, or if a *larger* organ be but partially changed in structure, it may sometimes be excited, only with more or less caution, as the case may be; but if the evidence induce you to suspect that the organic change be very considerable, or that it pervade the whole organ, you had better restrict your appeal to it though a primary organ, to such measures as combine very moderate stimuli; or, if of a more active character, to a *single administration*, whilst you establish by dry cupping, &c., determination to the surface in the neighbourhood of the organ in question. Organs which are structurally affected, have *passed, so to speak, that phase which* enables them to deal with the injurious influence represented by medicine, by *secretion*; and, if exerted, they will only take an action of deposition which may be either consolidation, effusion, suppuration, as the case may be; and, although one is hardly allowed to hazard an opinion on cases of fever that one has not observed, I cannot help thinking that, in these extensive organic changes which the fevers of tropical climates so often furnish, some cases may have been exasperated by organs already in states of great organic change, having been stimulated into action by medicines with which they have had their power of dealing in the manner described, (that is, secretion,) by reason of the extensive alteration of their structure. In almost every organic disease with which we are acquainted, we invariably see the fatal termination depending proximately on some recent excitement of the diseased organs. On the other hand, we see life as constantly sustained by the function of the diseased organ being reduced in harmony with its extent of normal structure; for, whether it be in cases where the habits of life of the patient be reduced to his powers, or, by the greater activity of some other organ, practically it comes to the same thing, that the duty of the affected organ *is* reduced. As it is of great use to refer both to the practice of medicine and surgery in proof of every proposition, I may add that organic diseases of the lungs and urinary organs in all stages, whether of quiescence, progress, or termination, equally illustrate this truth. How many thousands with diseased lungs have fallen victims frequently to the additional requirements on these organs consequent on a check to an organ engaged in a concurrent function (the skin)! How many have lived even to old age where the habits of life have been such as to reduce the functions of the lungs to the smallest requisition, whilst that of the skin, or third lung, as I have called it, has been commensurately facilitated! So, in regard to the urinary organs, how many have fallen victims to recent excitement of these organs, of which experience had already convinced them of the danger, and which might have been evident, had that wonted prudence, of which the patient had proved the success, been sustained!

I would press, therefore, the most minute attention to every circumstance that can lead to the knowledge of the actual state of the organs, both functional or organic; for the more I think or see of the matter the more I feel that the treatment of the actual state of the body, by putting it in the most natural condition, and thereby evolving its maximum of power, is the real mode of dealing with all influences whatever of which the matter of fever, whether it be some poison from without, with whose nature we are unacquainted, or the not less deadly poison of suppressed or retained excretion. To revert once more to the general nature of fever, the phenomena of hectic, both in medicine and surgery, appear to me to be strikingly demonstrative of the general nature of fever, as well as of that element contributed by the state of organs and the important link it forms. In Hectic you see injurious influences, which the powers of the body are unequal to repair; here the fever is indeed *continued*, ending only with the life of the individual; but if the organ, even in this state, be of a kind that may be dispensed with, the

fever yet may cease, and life be preserved. The removal of a limb (though probably had the case been as rightly treated, it might not have been necessary) has shown how truly *continued* fever, has been *continued* contest; whilst if the organs are unsound, how fruitless is the removal of limbs in states of irreparable disease. We constantly see the very same state of external disease, with hectic fever, getting well and proving fatal, the only difference we find being in the internal organs.

It is no matter whether the disorder of the body be supposed to be merely functional or organic, it matters not whether we practise an empirical curriculum of mercury, iodine, sea air, &c. &c., in the same case, or whether we go to work with more definite objects; the hectic of local diseases, as they are called, is alone got rid of by means which *correct the functions of the body*. So, in regard to epidemics, we must refer these essentially to the state of the body in those in whom they occur. It is impossible otherwise to understand the phenomena of their partial distribution, because such vast numbers are placed under so exactly the same circumstances, that nothing but the most violent hypothesis could refer the distribution of fever *solely* to the influence from without. It is of the utmost importance to find what this state of body is, and in the absence of our discovering the whole truth, it is, at least, a step to demonstrate, as I contend may be done, a state which shall reasonably account for the phenomena,—which shall be consistent with that in which all men agree, as well as with all in which they differ,—which shall be equally consistent with the history of measles, scarlatina, small-pox, &c., our ordinary visitants, and with the facts of our rare inflictions, cholera and plague, and which shall seek no test less true or searching than a clear and definite application of the principles it teaches, at the bedside of the patient.

I have said nothing in regard to the special treatment of that important organ in fever, the kidney, because it will be sufficiently understood from the general principles, if I have made them clear. It saves, as a compensating function, very many cases of fever, and hence the value universally and justly attached to its freedom of action; and I know of hardly any febrile condition past hope whilst the kidney continues free. With regard to direct stimulation of these organs, it is in general a safe combination with the general treatment; special or powerful excitement of it must depend on the special evidences of the case. The differences of opinion in fever have generally been in regard to what I call the special treatment. Men agree as to a regimen, &c.—they differ in regard to bleeding, purging, emetics, &c., &c.

When we perceive the necessity of ministering to *different* organs in different cases, in different modes and degrees, we at once perceive how the advocates and opponents of each mode may be in certain cases right, and in others wrong. We see how any mode may be right in a given case; how impossible that any can be right in all; however difficult it may at first sight appear to those who have been accustomed to look at fever as a combination of symptoms, or the remedy, a copious pharmacopœia; I hope we are beginning to get something like positive views in Medical Science, and that sketches of truth may now be only received with a wholesome distrust and suspicion, as endeavouring to improve and define our practice, will further advance, and be matured into admitted truisms. There are a few other points remaining to be briefly discussed, such as cutting short fevers, by acting on the matter of fever from without or otherwise,—the prevention of fever,—the relation of fever to inflammation, and sanitary matters. The cutting short of fevers must always be uncertain, because, although, according to our views, the conditions would be clear and definite, it is equally so that we can, in comparatively few instances, have them at command. We cannot, for example, always discover the primary organ,—we cannot *always* influence that or compensating organs to act at will, neither can we, in many cases, be assured of the extent to which previous disorder may have lowered the powers of the œconomy; but that it is to the state of the body we are to look, and not to the matter of fever *ab extra*, I think the whole facts of the subject, as well as the well known phenomena of intermittents alike impress; for long after the atmosphere of miasm shall have been removed, or people removed from it; months after, indeed, persons shall have *the* fever; which, I think, clearly shows that the miasm itself acted by disordering the function, and to which some accidental or additional disturbance has now produced this characteristic fever. Just as a man addicted to alcohol, long after he may have relinquished the use of this poison, which may, for the first time, in fever, evince serious, dangerous, or fatal exemplifications of the states of those organs on which it too surely acts. The unloading of a congested liver, or even a loaded bowel, is by no means always a simple affair. The very amount implies the necessity of some time, for we always act with a state of power which the loaded state of the organ itself contributes to impair. The cutting short of fever, therefore, in the ordinary sense of the term, will probably be accomplished chiefly in cases where we act powerfully at once on the *primary* organ, or where, if we act on a compensating function, the compensation shall be such as to equalise the functions of the body.

This certainly takes places occasionally in those critical discharges into which fevers have been sometimes resolved; a resolution, be it remembered, which in no fever has ever been constantly represented *by any one organ*, but which, in almost all fevers, has been, at different times, connected with this critical activity in every different organ in the body. So that, whether you think with me, that these discharges have taken place from organs primarily affected, or from secondary organs taking or compensating actions, or refer them back to the principle which would regard the phenomena as the mere determination of the effects of the injurious influence, *ab extra*, by secretion, it is equally clear, that either view would be equally reconcileable with the views which I have endeavoured to unfold, both as to the *general* mode in which the body deals with injurious influences, or that which, by the interfering influences which impede it, constitutes what we call fever. But, whilst the absolutely cutting short of fever may be of comparatively rare accomplishment, I am perfectly persuaded, that, by a more definite and clear practice, almost all fevers that are curable at all, may be indefinitely abridged; and that long and toilsome contest, in which a patient is left struggling, and the multiform sequelæ, which too frequently result from so much exhaustion, be prevented.

The remaining points will be briefly described in the next and *concluding* Lecture.

ORIGINAL CONTRIBUTIONS.

REMARKS ON VENEREAL DISEASE.

By F. C. SKEY, Esq, F.R.S.

The disagreements of doctors are, perhaps, more thoroughly exemplified on the subject of venereal disease, both in reference to its nature and to its treatment, than on any other given subject connected with Medicine; and when we consider the largeness of the field for investigation, its perfect accessibility to all, and the value of the stake to the community, this fact, to say the least, is a remarkable one. Whence the difficulty? Some would refer it to the different character or quality of professional minds, in which different and sometimes opposite deductions are born of the same data; some, to the natural leaning towards, and adoption of, the opinions of others; partly based on the consciousness of weak judgment, and partly on a natural and inherent respect for authority. *Omne ignotum pro magnifico*, will apply to the invariable adoption by the student of the views and opinions of the master; and, as masters differ, so, in like manner, will the crowd of followers differ also; for it is, perhaps, in the long-run, a useful element in the human mind, that one man thinks without acting, while the thousand and one followers, act without thinking; and, so long as the world will prefer an authority to a reason, this system must prevail. The world does not like to think. It is irksome, and often unprofitable; besides which, the exercise of thought and reflection, which raise a man in the scale of his being, are followed by another evil, which no one will voluntarily encounter —viz., responsibility. Responsibility demands moral courage, and few possess it; so that, on the whole, taking into consideration all the evils attendant on mental independence, and contrasting them with the advantages to be obtained from the possession by each man, of a harbour of refuge, which he can readily make in every emergency, viz., the authority of his teacher, there are few, indeed, who will try the hazardous, and often profitless, experiment of thinking for themselves.

The above train of thought has occurred to my mind, in the endeavour to account for the differences of opinion that prevail on the subject of venereal disease, both in relation to its nature and its treatment; and, though I would not arrogantly denounce the opinions of those who differ from me in their adoption of time-worn doctrines, yet I cannot dispossess my mind of the belief, that, had others entered on the same career of investigation that I have done, they would inevitably have arrived at the same conclusions; and I dare say those who have arrived at different and opposite conclusions, will apply to me the self-same reasoning. But, while I grant my own liability to error, and acknowledge with all candour that my own experiments may have diverted my mind from the direct channel of truth, I will at least claim for them the merit of *simplicity*, and I think I may add of *success* also. *The true principle of the healing art consists in the power of developing and awakening the influence of nature in the cure of disease.* I profess the adoption of this principle in the treatment of venereal diseases. I do not rely on any large amount of extraneous, or foreign assistance from specific medicines, for I am satisfied it is often not required. Nor do I stand alone, either in my views or practice. The principles which guide me I imbibed, in the first instance, from Mr. Abernethy, who first pointed out the fallacy of the doctrines of the day on this subject, and whose mind was peculiarly formed to simplify the complicated views that prevailed, and to reduce them to order and harmony. Unhappily, during the latter period of his life, he became idle and indifferent to this and other matters connected with his profession. In speaking, therefore, of "my views," I am no monopolist. In reporting my own sentiments, I believe I speak, for the most part, the opinions of others, who though a small, constitute a strong minority in the Profession, and I have the satisfaction of knowing that the views of practice which twenty years experience have taught me to be correct, are invariably adopted by those whose desire for knowledge has directed their steps in the same path of inquiry as that I have trodden.

Mr. Hunter's opinions are constantly alluded to by practitioners. I consider that Mr. Hunter's opinions, so far as they are known, are irreconcileable with the state of things at the present day. Mr. Hunter professed to know a venereal sore by its induration. Now it is notorious, that comparatively few of the sores at the present day have induration at all! I constantly hear it said, "I suspected the case to be venereal from the character of the throat." Mr. Hunter says, *he cannot distinguish a venereal sore throat from a common sore throat!* Mr. Hunter apparently treated all venereal sores with mercury. Twenty years' experience have taught me, that 99 out of 100 venereal sores are better cured without, than with mercury; and when I say "better cured," I mean permanently and radically cured, cured in a shorter time, and cured without blemish to the constitution.

I am quite prepared to justify and to defend my heterodoxy. I rely on no specific in the ordinary acceptation of the term; but happily I have the fullest reliance on Nature herself. I think I derive more solid benefit from the almost unassisted power of nature alone, than others acquire from the poison of mercury. I am quite alive to the difficulty of stamping this truth on the public mind for reasons

I have already given; yet the fact is so indisputable that I feel confident that time will eventually confirm it. I do not assert, that all forms of venereal diseases are curable without mercury. For example, the Hunterian chancre. And, by-the-bye, what is the Hunterian chancre? Who knows it? Who can define it? I never heard the same definition from two people. For my own part, I read Mr. Hunter's work with some attention, and I am at a loss to follow the description. I do not know it. Yet all the world talks with amusing familiarity of Mr. Hunter's sore, as though it were definite as a small-pox pustule. But I am well acquainted with a form of chancre characterised by intense induration, to which induration, ulceration *succeeds;* and this disease I cannot cure without mercury. But be it observed, this is a most rare form of the disease; and of which, out of some hundreds of cases that I have attended, within the last year, in the out-patient wards of St. Bartholomew's Hospital, I am satisfied that I have not seen half a dozen.

The first principle I wish to establish is, that the very large majority of venereal sores are what may be termed *simple sores*, and that such are the effects of a poison *of the least active and virulent kind*. That the poison becomes early exhausted in the progress of the sore, which assumes a simple, inoffensive form as soon as the first stage, or that of ulceration, has passed away. This sore, presents, however, peculiar characteristics throughout its progress, which alone distinguish it from ordinary sores.

In a future paper I will describe this common sore more in detail, but at present I wish to say a few words on the origin of venereal sores. The opinion almost invariably prevails, when a patient exhibits a primary sore on the genital organs, that that identical sore has been obtained from the infected source. I believe there is no opinion more erroneous. *Venereal sores are*, for the most part, *self-generated* in the male. A sore may become the product of any form of irritating secretion in the female, as may gonorrhœa also. This is an opinion I have long entertained, and every year's experience more strongly confirms my conviction of its truth. I am prepared to affirm my belief that, having intercourse with a woman without venereal disease, a man shall acquire one or more venereal sores, of one or other character, or even gonorrhœa. Unless this doctrine be founded in truth it would be difficult to explain the existence of venereal disease at the present day; but I am satisfied that it is founded in truth, and a most important doctrine it is. The records of surgery, if consulted, clearly point to the fact. I appeal to the writings of Abernethy, Rose, and Evans, and others. Mr. A. gives, at length, the case of a gentleman, who, having visited the mistress of his friend, got a bad venereal sore, on three several occasions. All this time, a period of nearly three years, this woman was domesticated with the man who kept her, and was never suspected by him, as being the subject of venereal disease. Mr. Rose tells the well-known story of a Portuguese opera-dancer who, undisturbed in her professional avocations, gave venereal disease of a formidable kind to a host of British officers, during the Peninsular war, who had connexion with her. Mr. Evans, from whose excellent work on venereal disease I also quote from memory, relates the fact, that while the army of occupation resided at Valenciennes, he had more than 100 soldiers in hospital from venereal causes, and that the usual examination of the women of the town, at the moment, exhibited but three examples of disease among the entire sisterhood. The natural deductions from these facts are suspended by oblique reasoning. The direct and simple inference from these data bounds off from the direct line of truth, by the obstruction of a prejudice. It is more natural to believe what others have believed before us, and because they have believed it, than to admit a fact so glaring as that which the above reports distinctly point to.

In the cases reported by Mr. A., of course the woman had disease during the three years of her residence with the man who kept her, only he never found it out, and she herself was incognizant of its existence!

The Lisbon danzatrice, also, must have had some remote venereal sore that, perhaps, remained stationary for years, and did not incapacitate her for the pursuit of her profession, or six or eight hours' active exercise each day; and the case of Mr. Evans, although, at first sight, difficult of solution, may be explained on the supposition, that a hundred soldiers really had casual knowledge of the three or four women, and that every man took the infection!

Unfortunately for such views, these cases do not stand alone. To the unprejudiced mind, examples come forth every day in every year. I could quote twenty in my own practice; but then the prejudice of authority is against their admissibility. The public mind is made up—the doors are closed—it is too late. Now, I beg with all deference to the professional public, to deny the foregone conclusion. It is not too late, and, if the door be closed, I will force it; and I will begin by a quiet appeal to the private impressions of every man who reads and thinks. I would ask whether the idea has never crossed his mind, when examining a case of primary sore, not acquired from what is called promiscuous intercourse, but from a woman occasionally known to the affected person, such as another man's mistress, for example, or of that large class who, having become victims of seduction, still hold a certain position of respectability, although in a humble walk of life, and who yet retain much of the natural purity of their early lives, uncontaminated by vicious example, and the society of the reckless and profligate victims of unrewarded rascality. In these women, the tie which binds them to society is yet unbroken; they are yet members of its institutions, and subject to its laws, from the open infraction of which they would as incontinently shrink as would many who profess higher aspirations, and affect more exemplary and rigorous morals; and I believe more so. From intercourse with such women following the pursuits of dressmakers, milliners, housekeepers, attendants on young barristers in chambers, &c., disease is often contracted. I have yet to learn, that chastity, although it may be termed the brightest jewel in the woman's crown, is the key-stone of *all* her moral virtues; for it is not until she is made the subject of the frowns and denunciations of the world, that she becomes degraded in her own esteem, and reckless of the future. In the truthful assurances of such persons, I am content to extend a large amount of confidence, so long as I find no benefit in, and, in fact, no motive for, deception. To judge of the value of evidence, we must weigh collateral circumstance, position, character, motives; but, to denounce a person as a liar, merely because his statements militate against our opinions, is the weakest refuge under which intellect can shelter itself.

To such persons, it is of more value to be freed from disease, than to be freed from the suspicion of liability to its contamination. A lie is so gratuitous a folly, that common sense revolts from resort to it. These people assert, that they are free from disease of any kind—they have never had disease. Again and again I have examined such cases with a speculum, without detecting either venereal sore or venereal catarrh. I have induced others to do the same. Within the last three months, a medical man, who consulted me relative to a sore, volunteered the opinion, that the woman in question could not be the subject of disease. Three several times did he examine her, and detected nothing. A patient in St. Bartholomew's Hospital, the subject of rheumatic gonorrhœa and articular rheumatism, declared, that he had got the disease from his wife, and that he would drive her out of the house on his recovery. I asked him, "Have you any other reason to suspect your wife's fidelity beyond your having discharge." He replied, "No." "Then let me examine her, for I dare say she has nothing amiss." I did so. I found nothing—no disease of any kind beyond what is commonly found—a slight degree of leucorrhœa. I have elsewhere recorded a case of severe gonorrhœa, contracted by a medical student who never had had intercourse but with one person, and that a young girl, living under her mother's roof, whom he seduced. On one occasion, by some accident, he had intercourse with her before her catamenia had ceased. But these cases are not necessarily confined to persons of the humbler station; a sprinkling of them exists throughout society.

A gentleman well and intimately known to me attained twenty-seven years of age without ever having contracted venereal disease. He moved in a circle which associated him with women of rank and station. He accomplished an interview with a young lady during the absence of her family, who *at the last* resisted him successfully. He showed me, within a few hours of the transaction, a large excoriated surface on the inner side of the prepuce and glans, the result of violence. On the day following he had intercourse with a married woman in the same rank of life, having all the external indications of perfect health. I asked him whether, as a man of the world, he had the smallest reason to think the latter lady could be the subject of disease. He thought it quite impossible. Now, in truth, it is a good way from impossible, but it was highly improbable. So far as he could make inquiry he did so, and the inquiry confirmed his opinion.

The result of the second act was increased inflammation of the already abraded surface, and excessive pain. Early on the following morning he called on me, and, among other questions, asked me whether I considered him to have the pox? and especially, whether he should have secondary eruptions? I answered unhesitatingly,—No. The wound, however, became phagadænic, and sloughed, and I applied nitric acid, and it sloughed again; and, in consultation with Mr. Welbank, strong nitric acid was resorted to. A large slough came away, and exposed a sore of formidable dimensions; and while this sore was in progress of healing, viz., in six weeks from the date of the poison, this gentleman was rewarded by an *intense phagadænic eruption from head to foot*. He was now subjected to repeated salivations by mercury, having placed himself under the charge of another surgeon, and was twelve months under treatment. Now, in reasoning on this and similar cases,—for they all carry the same evidence,—I would ask, Is it probable, or even possible, that these women have disease without being conscious of it? In the case quoted from Mr. Abernethy's work on "Diseases resembling syphilis," is it possible that this woman had sores, or even discharge, for three years without being conscious of it. Is it reasonable to imagine that three women, in the cases reported by Mr. Evans, an acute observer, truthful in his relation of facts, and ingenuous in his reasonings upon them, could have communicated disease to 100 men; or, in the case I have last related, is it more probable that disease existed in this lady unsuspected of herself, or of another who would have contracted it. It seems to me a just inference, that if a woman is unconscious of disease, having all the attributes of health, her husband being equally free, that the woman has not disease; and I believe such a woman, and in this condition, is competent to give venereal disease to a third person having intercourse with her, either through her own secretions possibly existing at the time in excess, or through the remains of catamenial discharge. At all events, that the secretions of the two persons combined can produce and develope a *tertium quid*, which may have all the attributes and properties of venereal poison—a poison more readily developed in the person of a man having occasional than having frequent intercourse with the woman in question. Of course I do not dispute the fact that disease really existing in either sex may be readily communicated from one person to another, though I doubt its being necessarily developed in the same form. Though gonorrhœa will generally produce gonorrhœa, the character of the sore is not by any means necessarily identical with that which produced it.

Now, in these opinions, I am happy to say I do not stand alone. I am persuaded that many think-

ing men, if they have not adopted them entirely, are prepared to extend their belief to the whole doctrine; and I do honestly believe that such convictions would become universal in the Profession, were it possible to divest our minds of the impressions of early education.

Grosvenor-street.

OBSERVATIONS ON STRICTURE OF THE URETHRA, AND ITS APPROPRIATE TREATMENT.

By BARNARD HOLT, F.R.C.S., and Assistant-Surgeon to the Westminster Hospital.

(Continued from page 567.)

Most writers upon stricture of the urethra attended with fistulous apertures have inculcated the necessity of retaining a catheter in the bladder, while others have thought it necessary to resort to a more severe plan of treatment by paring and approximating the edges, or, what is still more painful, cutting away all that cartilaginous deposit in which the openings are imbedded, and making, as it were, a new urethra. I have never seen a case, *however bad*, in which the latter method has been necessary, and cannot conceive any surgeon in the present day attempting an operation, the results of which must be attended with permanent inconvenience, and where the original obstruction, if situated much in front of the openings, has to be eventually overcome. There is always a natural disposition to close abnormal apertures as soon as all irritation has subsided; remove the cause, and, in nineteen cases out of twenty, the effects will cease; cure the stricture, and the fistula will heal without the necessity of retaining a catheter in the bladder. The *most* I have ever considered it necessary to do, has been to instruct the patient, after arriving at a certain size, to pass his instrument three or four times in twenty-four hours, and thus prevent any urine from coming in contact with the urethra. It may be occasionally necessary to touch the openings with the argentum nitratum; but it is only in the very worst forms of disease, and where three or four apertures have existed, that even this becomes necessary. The greatest difficulty in the treatment of this complication is in getting any instrument into the bladder; the urethra, from previous disease and a flow of urine being obtained without passing through the entire canal, becomes almost blocked up, and there is frequently the utmost difficulty in overcoming the obstruction. It may be, and occasionally is, necessary to make daily attempts for probably a week or a fortnight before a passage can be effected. The instrument employed should be of steel or silver, and of the smallest calibre; at first, probably, but little impression is made; but upon the second or third attempts the point may be got within the orifice; and whenever this difficulty is overcome, there is no question about its ultimately proceeding, only requiring that patience necessary to overcome any serious obstacle. Two most interesting cases came under my care; one in a man who had been the subject of stricture thirty-five years, during which period he had been subjected to various plans of treatment; but for the last ten years the urine had continually dribbled through three fistulous openings, and no instrument could be passed into the bladder. Upon examination, the urethra was found in a hard, cartilaginous condition, the openings being callous, and the integument puckered and of a dense structure; a small-sized silver catheter was introduced, but would not pass beyond three inches from the orifice,—steady pressure was maintained for a quarter of an hour without effect, and he was desired to present himself again in two days. After three ineffectual attempts the point of the catheter was got fairly within the orifice and retained for half an hour; upon the next visit further progress was made, and at the end of a fortnight it entered the bladder, and was allowed to remain two hours. He gradually and favourably progressed, the simple daily introduction of the catheter was persisted in, and at the expiration of three months No. 12 could be passed with facility; the fistulous openings entirely healed, and he was enabled to retain and make his water with the greatest facility. The other case was of a similar nature, and where there were three strictures and two fistulous communications; the same plan of treatment was adopted, and with the same results. These cases are mostly met with in persons of advanced age, where the urethra loses its sensibility, and becomes degenerated into a cartilaginous mass, yielding, after an entrance is once effected, with much greater rapidity than where the obstruction is not so severe, but the pain and irritability greater, but returning in a short space of time if not kept open by the occasional introduction of the catheter.

Cases will occasionally present themselves where, either from the interference of the patient, or want of attention on the part of the surgeon, false passages are made; in some the mucous lining is perforated, both in front and behind the stricture, and the instrument finds its way into the bladder, although it has not passed through the entire canal, a preparation of which I have; in others, it runs between the bladder and rectum, and occasionally into the rectum itself. I had lately a man in the hospital, the subject, I believe, of false passage of the first description, through which *he* was enabled to pass a catheter, but no other person could do so for him. Another case occurred in a gentleman who had been the subject of stricture, and where the surgeon under whose care he had placed himself passed the catheter as far as it would go, but without any water making its appearance; a quantity of fetid air escaped, the instrument having passed into the rectum. Innumerable cases of a similar character are to be found, and it is surprising how little inconvenience most patients suffer from such causes; occasionally, however, infiltration supervenes, and the life of the patient is placed in considerable jeopardy. Supposing a person to present himself upon whom a catheter can be passed nearly its whole length without any urine appearing, or that it proceeds but for a limited space, the handle having a disposition to be turned away from the centre of the body, and that the patient complains of pain and uneasiness in a situation foreign to the urethra, and that the history tells of many ineffectual attempts having been made to pass a catheter without success, here there is every probability a false passage has been made; it is true, that innumerable difficulties will be met with in the passage of instruments for very bad strictures; but taking the foregoing circumstances into consideration together with the time the disease has been progressing, and when the bladder was last emptied, a tolerably accurate diagnosis can be made. In the treatment of these complications it is useless where irritability exists, or where there is reason to suppose the abnormal aperture has been recently made, to attempt the introduction of any instrument. Time should be given, that the parts may thoroughly heal, and an instrument of larger calibre than that previously had recourse to should be introduced, when, if it pass into the bladder, the object is gained, but should not be repeated for at least a week; if, however, it should not proceed further than the face of the stricture, it is better it should be withdrawn, than futile attempts persisted in, by which still further mischief may be created. It is impossible, in these instances, to hastily decide upon the kind of instrument to be had recourse to. I may, however, mention, that, let it be of hard or soft materials, it should be a catheter, as, by the flow of urine, we are certain of its introduction into the bladder, and, if necessary, it can be allowed to remain. I certainly prefer the silver catheter, or one of elastic gum that has been kept on a stilett for a considerable period; and, supposing each to have a wooden handle, sufficient firmness is obtained to allow of progression being made in the right direction.

There are some instances where the patient experiences a hesitation at the commencement of micturition, which having been once overcome, the urine proceeds in a fair ordinary stream, but which is an occasional cause of retention. Here the verumontanum, and prostatic portion of the urethra, is mostly implicated; the catheter passes with facility until arriving at the neck of the bladder, when no further advance can be made, and it is only by partly withdrawing the catheter, putting the lining membrane on the stretch, and keeping the point gliding along its upper surface, that an entrance can be effected; if a gum elastic catheter be used, the withdrawal of the stilett will be occasionally sufficient, the elasticity of the material of which it is composed allowing it to pass over the obstructions. Two cases of this kind have lately come under my notice; in both, the instrument was supposed to have passed into the bladder, but no urine escaped, and it was imagined there could not be any water in the bladder; an examination, however, per anum and above the pubis, satisfied me there was a large collection, which was cautiously withdrawn, although considerable difficulty existed in getting a catheter into the bladder. I had an opportunity, some time afterwards, of examining the urethra of one of the parties, and found the commencement of the verumontanum thickened and formed into a projecting valve.

One of the most formidable affections the surgeon has to contend with, and where the difficulties are only appreciable by those who are constantly in the habit of meeting with them in all their varieties, is *retention of urine*. Its causes are so various, and its effects so serious, that it becomes a matter of extreme difficulty to accurately define the treatment applicable in each particular case. In fact, there are so many circumstances requiring consideration, that almost every case must be treated on its merits. General rules may, however, be propagated, and from those general rules, the surgeon must determine what course to pursue. The history of the patient as to age, habits, whether the subject of former urethral disease, present gonnorrhœa, abscesses, tumors, severe cold, enlarged prostate, &c., are circumstances of the utmost importance to be accurately determined previous to the introduction of any instrument. A man advanced in life shall have suffered inconvenience from enlarged prostate, circumstances occur which prevent his making water when the desire is urgent; the bladder, having made several ineffectual attempts to get rid of its contents, becomes fatigued; its muscular coat is paralysed from distension beyond its limits, and is now only acted upon by the ineffectual, but powerful contractions of the abdominal walls, which, however, are wholly insufficient to relieve the urgency of the case; here the history is plain: it would be useless to give opium, or have recourse to the warm bath; the retention is not caused by spasm of the neck of the bladder, or surrounding muscular structures of the urethra; and, if a prostate catheter of a moderate size be immediately had recourse to, the patient's sufferings are instantly at an end. On the other hand, a person suffering from acute gonorrhœa, having been guilty of great intemperance, finds, upon trying to empty his bladder, that he is unable to do so; he may never have been the subject of previous urethral obstruction, but the condition of the urine is rendered so excessively irritating by the stimuli previously taken, that the mucous membrane of the urethra, being in a state of inflammation, will not bear any excess of irritation without the surrounding muscular structures being alarmed, and immediately contracting so forcibly that no urine can be made; this is totally different to the previous case: here the immediate cause is the spasmodic contraction of the neck of the bladder and muscular structures of the urethra, which, by their action, prevent the expulsion of the smallest quantity of urine. I believe retention of urine depends, first, upon paralysis of the muscular coat of the bladder consequent on its over-distension from very bad stricture or prostatic disease; and, secondly, from spasmodic contraction of the sphincter of the bladder and surrounding structures of the urethra, the consequence of the more mild forms of stricture, intemperance, excessive sexual intercourse, masturbation, intense gonorrhœa, &c., and the treatment must, in a great measure, be suited to the case. If the history of the patient infers, that the attack has been somewhat gradual, that is to say, that the difficulty of micturition has progressively increased, until reten-

tion ensues, then it is evidently useless to have recourse to either opium or the warm bath; a small silver catheter, made in a manner similar to those before described, should be gently introduced, when, should the obstruction be of that character which will not permit a ready entrance into the bladder, firm pressure should be maintained for ten minutes or a quarter of an hour; and, at the expiration of that time, if still unsuccessful, one of the smallest gum elastic catheters, or a very small catgut bougie, should be had recourse to; which, if it will not pass through the obstruction, may be kept pressed against the stricture, and the patient be desired to strain violently, when the bougie should be withdrawn, and frequently a few drops of urine will pass; but, supposing no instrument can be got into the bladder, that the patient has not made water for many hours, that the bladder is greatly distended, and the patient suffering acutely, it will then become necessary to resort to one of the three operations for his relief, directions for the performane of which are to be found in almost every surgical work.

If, on the contrary, the case is one where great irritation and spasm is present, the treatment must be modified according to circumstances. I believe in *all cases* of retention of urine it is better to attempt, by the very gentlest means, the introduction of a moderately small silver, or gum elastic catheter; if, however, after the first or second trial, the obstruction is of that character as not to be overcome, recourse must be then had to the warm bath, opium, &c., which should be given in large and frequently-repeated doses, and under no circumstances should the introduction of the catheter be repeated until sufficient time has elapsed for the remedies employed to have their desired effect. In some cases the overflowings of the bladder will escape by drops for a very considerable time; as long as this continues, and the distress of the patient is not increased, anti-spasmodic remedies may be persisted in; but if no water can be made, and the agony of the patient is increased, it then becomes necessary to resort to one of the operations before mentioned. Should the urethra give way, and infiltration of urine ensue, free incisions must be made wherever it has escaped the patient's strength being supported by nourishment, stimuli, and ammonia; at the same time the constitutional disturbance may be much tranquillised by the free exhibition of opium.

[To be continued.]

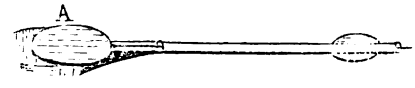
ON THE APPLICATION OF LEECHES TO THE OS AND CERVIX UTERI.

By WALTER CLEGG, Surgeon, Boston, Lincolnshire.

In certain displacements and diseased conditions of the womb considerable difficulty frequently occurs in effecting the proper application of leeches to the os and cervix. When the uterus is increased in weight and volume from enlargement or hypertrophy; when the cervix is much enlarged from chronic inflammation; when there is a relaxed state of the ligaments and a tendency to retroversion, the os and cervix will occasionally be found deeply imbedded and pressing heavily upon the rectum. The finger, on examination, first reaches the body or even the fundus; and the speculum first exposes these parts. Sometimes even with a four-bladed speculum there is difficulty in obtaining a perfect sight of the os, and in some cases which have come under my observation, I have no doubt the mechanical violence used to overcome this difficulty has much aggravated the condition of the patient.

These cases, however, are generally those in which scarification or the application of leeches forms an indispensable part of the treatment. To use the lancet with any of the ordinary specula, so as freely to scarify the diseased cervix is next to impossible, and leeches applied by means of the ordinary instrument will lay hold of the body of the uterus or of the mucous membrane of the vagina.

I have lately used a very simple instrument made for me by Mr. Wood, of York, which has answered admirably, and I therefore have much pleasure in describing its construction. An oval cup made of plated metal, very smooth externally, roughened internally, and about the size of a split walnut, so that it will easily pass through a speculum, contains the leeches. To this is attached a hollow stem, about nine inches long. The cup is covered by a lid (A), and to this lid a wire is attached which runs the whole length of the stem. The cup is passed through the speculum, and by reason of its extreme smoothness is rapidly slipped beneath the enlarged and prolapsed cervix so as to be closely applied to the os; then the wire is drawn, the lid slips back, and the leeches generally bite eagerly at the diseased surface. In one case, where the cervix dragged very heavily upon the rectum with considerable retroversion of the womb, I applied leeches *without* using the speculum, the cervix being too tender to allow of the least contact with that instrument. The leeches (four in number) laid hold warmly, and after filling themselves, which they did in half the usual time, found their way out of the vagina in the most orderly manner.



The lid is partly open, the wire at the handle (B) having been slightly withdrawn.

PROGRESS OF MEDICAL SCIENCE.

IRELAND.

SURGICAL SOCIETY OF IRELAND.

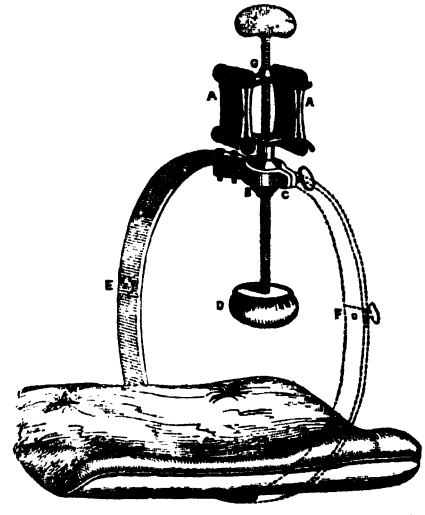
The President of the College in the chair.

NEW INSTRUMENT FOR THE TREATMENT OF ANEURISM.

By Dr. CARTE, F.R.C.S.I.

Mr. President,—I have much pleasure in bringing before your notice, and that of the Society, an instrument which I have had made for the treatment of aneurism by compression, and which has been recently used with success in two cases by Dr. Hutton of the Richmond Hospital. It differs from all others hitherto employed, in that the compressing medium is an *elastic* instead of an *unyielding* force. It may be adapted to all cases of aneurism occurring in the extremities where compression can be employed; and, from the trials already made, I have every expectation that it will meet with the general approbation of the Profession.

The shape of the framework of the instrument is immaterial so far as regards the adaptation of the compressing force; it may either be in the form of the ordinary clamp, (as represented in the accompanying sketch), or in that of the ring tourniquet (as indicated by the dotted line). The latter I consider to be the best, as it is less liable to slip when once placed upon the limb. The following is a brief description of the instrument:—To one side of the framework is attached a well-padded splint, and to the opposite side a ball and socket, or universal joint, which allows the compressing force to be applied in any direction required. Through the centre of the ball (but sliding freely in it) runs a screw about six or seven inches long, the lower end of which is terminated by a pad for compressing the artery, whilst its upper end is flattened into a handle for the purpose of turning the screw. Half an inch above the ball, but immovably attached to it, is a small iron stage; above this, again, is a corresponding *movable* one, having in its centre the worm of a female screw, (marked G in the sketch,) through which passes the long male screw bearing the pad. These two stages are united at their edges by two bands of vulcanized India-rubber, in such a way, that when the instrument is applied to a limb, the upper or movable stage (through the medium of the female screw in its centre, becomes a *point d'appui*, against which the elastic force of the vulcanized India-rubber acts; and, by advancing the male screw, as the upper stage is raised, a corresponding tension is thrown upon the elastic material. The exact amount of force required for controlling the circulation through the vessel can thus with the utmost nicety be applied, and at the same time the tension can be relieved by simply reversing the action of the screw. This principle may be modified in various ways: for instance, a rackwork, similar to that of the patent corkscrew, might be substituted for the male and female screw.



AA Vulcanized India-rubber straps held *in situ* by ivory pins in the upper and lower stage.

B Ball and socket-joint traversed freely by the long male screw terminating in the pad D for compressing the vessel.

C Pinching screw for fixing the ball in its socket.

D Pad for pressing upon the vessel.

E Hinge allowing the framework of the instrument to open for its more ready application, (if made in the form of the ring tourniquet.)

F Hasp to fasten the instrument, if made in the form of a ring.

G Upper or movable stage with female screw in its centre. This is the *point d'appui* against which the long screw in connexion with the pad works, and when the instrument is applied, by advancing this screw the elastic force of the vulcanized India-rubber is brought into operation.

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THE MEDICAL TIMES.

SATURDAY, JUNE 2, 1849.

A most important document on Quarantine has lately been issued by the General Board of Health. A first notice of it will be found in another column, and we shall, as speedily as possible, place a full abstract of it before our readers. The subjects of contagion and quarantine concern us individually and nationally. Quarantines were instituted to protect us against some of the most terrible diseases which can attack the human frame. To secure this end, we permit them to shackle communication, interrupt commerce, and impose the most tedious restrictions on the common intercourse of nations. It is of deep importance, then, to know that the principle of these laws is a true one; to be certain that quarantines are based on indisputable truth, and are not merely the antiquated expedients which have descended to us from an unenlightened age. We have a right

to claim some benefit from them, since they certainly put us to no little inconvenience.

The three diseases against which quarantines are established in this country, are Cholera, Oriental Plague, and Yellow Fever. Now, in respect of each of these diseases, the General Board declares, that no evidence can be brought forward to prove the utility of quarantines; nay more, it is asserted that quarantines are absolutely hurtful in more ways than one, but especially in drawing off the attention of the Government and the Professsion from other measures which are much more efficacious in arresting the spread of epidemic diseases.

These opinions will, no doubt, excite much discussion. Without in any way pledging ourselves to all the conclusions of the Board, we must consider that their case is a strong one, and that it will find favour with a great portion of the Profession. If it is correct also, there is no doubt that the Board will have conferred a great benefit on the commerce of this country. But we are unwilling, without a careful re-consideration of the whole question, to do more at present than direct the attention of our readers to this important subject.

One consideration, however, must detain us for a moment. Contagion and quarantine are portions of the great subject of public health. They are, then, properly discussed by the Board of Health, which has lately been constituted. But should these questions, or any other of the sanitary problems of the day, have been left to a Board composed of three laymen and one Physician? That they have treated the subject ably, is all the more creditable to them; but they ought never to have had the power of treating it. It should have been done for them, years ago, by those whose position is given to them, on the understanding, that they are to be the pioneers of medical knowledge, and the directors of medical opinion.

When we look over the lists of the College of Physicians, and pronounce the names of men eminent in every part of the Profession we ask, what fatal apathy is it which has prevented a body composed of such men from elucidating these all-important subjects? What pernicious lethargy is it that binds up the faculties of the corporate body, while its individual members, when acting apart from their College, are so full of knowledge and activity? What system is it that has encased this College in such straightened bonds, that it cannot avail itself of the fresh appliances, and accommodate itself to the marvellous progress, of the age. The very object of the College of Physicians is now apparently forgotten by its members; instead of being the leaders of Medical opinion, the College is thrust into the background by men who have the hardihood and ability to attempt the exposition of the great questions which imperative necessity demands shall be inquired into and made clear. And now we shall probably see the College of Physicians rousing itself up from its slumber, and, in its zeal to overthrow the Board of Health, which has assumed the office *it* should have discharged, entering at the eleventh hour on the discussion of quarantine and sanitary law. Well, even this will be of use, for we cannot suppose for one moment that the College of Physicians will be led away by opposition into controversy, and will forget that truth is sacred and dear even though the lips of enemies utter it. The Report of the College must follow that of the Board, if the College does not wish utterly to abdicate, and to confess that its chief office has been assumed by others. The great question of contagion will then, probably, assume a definite, and, as far as can be, a final form, and the use, or uselessness of quarantines, will be amply determined.

A daily contemporary lately devoted two leading Articles to the consideration of the Board's Report. It professed to give a popular view of the question of contagion, and of the connexion between Typhus and Plague. If anything could damage the Report in the eyes of the Profession, it would be those clever but incorrect Articles. They did not take up the real points of interest; they took up what was unnecessary to the argument, and added matter to it of a most questionable kind. If the General Board wish a question of this sort to be properly brought before the public, they may depend upon it that it can be done only through the medium of the Profession. They have wisely avoided any popular expositions in their own Report; and their friends should remember, that if the public wish to understand a Medical question, they must learn the precise Medical terms, without which all will be but confusion and error.

MEDICAL REFORM AND THE COLLEGES.

It is not easy to foresee the result of the negotiations on medical affairs carried on between the Colleges and the National Institute. Whilst we hold an independent position, and reserve our opinion upon the matter until we are informed of the actual terms of the arrangement that may possibly be concluded, we feel it to be desirable to survey the claims and relations of the competing bodies, and to throw out a few observations that may not be unserviceable at this crisis.

Many reports, some of which we know to be false, and others exaggerated, have been promulgated respecting the acts of the Lord Advocate, the College of Surgeons, and the National Institute, in relation to the scheme now in progress of arrangement. The chief difficulty seems to be the reluctance of the College of Surgeons to allow the right of the proposed College of General Practitioners to examine in Surgery. It is said, that, by a resolution of the Council, carried by a small majority, the admissions assented to and regularly signed by the delegates at the Conferences at the College of Physicians, have been disallowed; and that, in fact, two unimportant members of the Council have been instrumental in nullifying the better judgment of the President and Vice-Presidents, who were empowered to negotiate in the name of the whole body. This conduct is certainly highly unbecoming, and indicates a factious agitation of the subject within the Council itself. However, the question is, supposing that the statement is true to its full extent, and that the General Practitioner shall feel that it is politic to accept the arrangement, What would be the effect on the Profession, on the College of Surgeons, and the new College?

There can be no doubt, that, whatever change be made, the Profession cannot be in a worse position than at present. This is poor consolation, but it is derived from an experience of the innumerable evils that now grievously affect every class of medical Practitioners. Legislation of some kind is then absolutely necessary, and it would be a mere mockery of the Profession's just hopes, if the prolonged consideration which the matter has now received, shall be permitted to eventuate in a purportless and ridiculous failure. Neither the College of Physicians, nor the Apothecaries' Society, are in a position to carry out the powers with which they are entrusted, and the latter is daily sliding into insignificance; the College of Surgeons is the only body that prospers amidst the desolation that surrounds it. As we do not assume, that it is the present wish of the Profession to destroy the two Colleges, with a view to an entire remodeling of our Institutions, we conclude that they must be retained, and if retained, supported in respectability with sufficient means to maintain the dignity of the Profession. This the arrangement proposes to do.

The Apothecaries' Society has, however, outlived its day; it was a compromise at first, and, although it has laboured to justify its existence by its devotedness to the interests of the General Practitioners, it is a failure at last. The name must be wiped out of the medical vocabulary; its connexion with trade is a disgrace to a learned Profession, and its constitution would be offensive if it could be deemed desirable by the licentiates to be attached to it by a closer tie. Its admitted inferiority screens it from reprobation. It aspires to be no more than what it is, and its own rulers know that the time is come when it should be superseded by an institution of a more respectable and scientific character. The Apothecaries' Society ought, however, never to be destroyed without a guarantee that its powers for the suppression of illegal practice shall remain intact. The Act of the Society is the stronghold of the Profession against quackery; it is daily becoming more valuable; and all that is wanted is a sufficient amount of funds to carry out its provisions with vigour, to make it of the highest utility to the Profession. The powers of this Company ought to be conferred on a more competent body; but until this can be accomplished the Society must be preserved. It is, perhaps, unnecessary to say that the proposed arrangement contemplated this result.

We will suppose, then, that the new College is deprived of the right to examine in surgery. In such case the struggle of the members of the College of Surgeons with the Council would not cease. Emancipation in that College would be sought with greater earnestness. The very fact that the College of General Practitioners presided over a section of the science of medicine would cause all those gentlemen who particularly affected surgical practice to fix their sympathies upon the College of Surgeons; and, in the face of the rival College of General Practitioners, the Council may depend upon it, that they could not long defer an extensive modification of their Charter.

On the other hand, let us suppose that the National Institute reject the terms offered them by the College of Surgeons; what would be the result? That, most undoubtedly, a fierce and defiant agitation against the College of Surgeons would be carried on throughout the land. All parties would sink their minor differences to combine in this great struggle; the resentment of the old agitators would find a ready echo in the breasts of the more discreet and experienced reformers, and a battle would be waged such as the Profession has not yet seen. Of the issue we have no doubt. During the recent contest the General Practitioners have made vast progress in public opinion, and have succeeded in establishing a formidable position: such another warfare would make them the dictators of the terms upon which their opponents would be but too glad to obtain peace.

REFUSAL OF THE BELGIAN MEDICAL BOARD TO ADMIT A LICENTIATE OF THE LONDON COLLEGE OF PHYSICIANS TO EXAMINATION, FOR PERMISSION TO PRACTICE IN BRUSSELS.

A Degree is an honorary title, whether that Degree be in Divinity, Law, or Physic. Directly an Institution is empowered by the State to grant Degrees it becomes an University. A licence to practice Medicine is a certificate that the possessor of that licence is sufficiently acquainted with the particular subject to practice the same, without injury to those committed to his charge. The Licence and the Degree are totally distinct from each other. For the interest of Medicine, we trust they ever will be distinct. It is one of the few points regarding which, in the laws that regulate the Medical Profession in England, we have little to find fault. True, Oxford and Cambridge possess certain privileges out of London; practically, however, they are of little moment.

But there is one irregularity practised by certain Licentiates of the London College of Physicians, which, we think, should be placed in its true light; we refer to the unjustifiable assumption by such of them as have never graduated at our universities, of the title of Doctor. To this rank they have no more right than have the Licentiates of the Apothecaries Society, the members of the College of Surgeons, or the Licentiates even of the Pharmaceutical Society. Our attention has been directed to this point by a letter we received a few days since from our Brussels Correspondent, who writes thus:—"The *soi-disant* Dr. Milman Coley, member of the College of Physicians of London, has not been admitted to examination in consequence of his diploma not signifying that he has taken the degree of Doctor of Medicine. The title of M.D., *conferred by an University*, is necessary in order to constitute a claim for permission to be admitted for examination for a licence to practise in this *urbs intacta*." It is alleged, many others might try a venture before the Brussels Examining Board, if Mr. Coley were admitted on such a testimonial. It is necessary further to inform our readers, that, before an English Medical man is allowed to practice in Belgium, he must produce his University degree, and submit to examination.

Now, none can object to the London College of Physicians conferring its license to practice as a Physician on whomsoever it has proved, by examination, to be fitted for the office; but we cannot see the propriety of its allowing its licentiates to prefix to their names that to which they have not the slightest claim. The College of Physicians creates Physicians—*Medici*; Universities make Doctors—*Doctores*—whether of Divinity, Law, or Physic—D.D., D.C.L., M.D.

Our Correspondent has fallen into a mistake in supposing Mr. Milman Coley is a member of the College of Physicians—he is only a licentiate—the College acknowledges no members. The President, in the name of the College, grants permission to the holder of the license to practise Medicine—the College portals, from the moment the licentiate has paid his seventy pounds to its beadel, are as firmly closed against him as they are against the passer-by who gazes at its gloomy portico, and asks, What place is that? The College did for a time admit the "Permissi" to its library; but this Institution, which lays claim to be the head of the Medical Profession, soon found the cost of the fire and the librarian more than it could support.

Understanding that the College has abandoned the foolish idea,—the bait so dexterously thrown out to them, and which they so greedily swallowed, of preventing Graduates in Medicine—excepting only those of two Universities, who have no efficient means of teaching Physic—using the degree of M.D., unless they joined their Institution, or, to use more correct phraseology, payed their money and obeyed their bye-laws, and that without having the slightest voice in the making or sanctioning of the same, we are led to believe that their eyes may possibly be opened wide enough, by the conduct of the Brussels Board, in refusing one of their licentiates admission to examination because he is not a Doctor of Medicine, to see the absurdity of countenancing those licentiates who have no University degree, assuming the style and title of M.D., to which, as we have before said, they have not the shadow of a claim.

FALSIFICATION OF CHICORY.

Revenons à nos moutons. Chicory seems to be a very attractive subject at the present time. At breakfast it is talked about; at dinner it recurs to the mind; and at tea—which is generally coffee—it is a theme to dilate upon. Anstey himself has immortalised it, and by the laws of association,—and what a beautiful illustration it is,—he and it are for ever united and imperishable. It is no little matter to rise at once from nothing into importance and renown; and *certes* it is better to have a bad character than none.

We will not enter into the merits of the great chicory question; we say not to our readers, "Under which King, Bezonian?" we care not whether they drink their coffee with or without the root. The dispute is not unlike that between the Bigendians and Littleendians of Lilliput, and is, at best, a mere matter of taste. We only wish to inform those who really do prefer chicory with their coffee, and those who would encourage cheating rather than buy their coffee in bean and grind it for themselves, how it is falsified and they victimised. M. Chevallier has paid great attention to the subject, and from him we learn, for the first time, of the following "artful dodges" to which the lovers of chicory are exposed:—

1. It is mixed with pounded bricks, with ochre, earth, and clay.
2. With the husks of the coffee bean.
3. With toasted bread, and vermicelli.
4. With acorns.
5. With grass-seeds.
6. With different sorts of pulse, beans, and pease.
7. With the shells of the cacao.
8. With other vegetable husks or barks.
9. With beet-root and carrots.
10. With cream of tartar.

And, now, how is all this imposition to be corrected? One says, and says justly, let the public buy a coffee-mill, and grind the berry for themselves. Many do; and all may adopt the plan. If Parliament interfere, it should not be in the way of taxing the chicory, but in compelling the vendors of the two articles to sell them separately, so that the consumer may mix them to suit his own taste or pocket, of course exacting a heavy fine if the coffee be found to be adulterated. We fear that any other kind of interference would have a prejudicial effect on the consumption of so excellent a beverage as coffee. Men will have a stimulus of some kind; and, for the well-being of society, it is not only desirable, but imperatively necessary, that all such articles as cheer and exhilarate, without inebriating, should be placed on the humble board of the humble cottage, at the cheapest possible rate. To facilitate the accomplishment of this end should be the great business of the Legislature. The subject, however, both in and out of Parliament, has acquired an importance it does not deserve.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—May 22, 1849.

Geo. Macilwain, Esq., Vice-President, in the Chair.

A paper was read entitled

Table of 166 Cases of Secondary Syphilis observed at the Lock Hospital, during the years 1838-9 *with a Statistical Analysis and Observations.* By Henry Lee, F.R.C.S., Assistant-Surgeon to King's College and the Lock Hospitals.

In the analysis given of these cases it was shown, that out of the whole number, (which were taken consecutively as they presented themselves,) a very small proportion had been properly treated by mercury; and it was argued, that if proper mercurial treatment were not a preventive of secondary syphilis, cases where this medicine had been properly employed and had failed to cure the disease, would have presented themselves among the rest. "If," observes the Author, "in the present day, it should be found, that out of 100 patients presenting themselves with small-pox, a very small proportion only had ever been vaccinated, this negative evidence in favour of vaccination would carry with it as much weight as would attach itself to the histories of any number of vaccinated persons who subsequently remained free from small-pox." In like manner the Author endeavours to prove that the very small proportion in which cases of secondary syphilis occurred after proper mercurial treatment, was an undeniable evidence of the efficacy of that medicine. The cases in the table were arranged into those which were treated by mercury and those which were not, and each class was again subdivided into those

where the primary ulcer was accompanied by induration, and those in which this had not been observed. From a comparative view of these cases it appeared, that where mercury was given ineffectually, so as not to eradicate the disease, it favoured the formation of bubo; and that, moreover, the class of secondary symptoms which followed were of a more severe nature than where no mercury had been given. The papular and scaly eruptions were observed most frequently when the disease was allowed to run its course; but the pustular and tubercular were most frequently noted where ineffectual mercurial treatment had been had recourse to. The Author supposed that injudicious mercurial treatment had a tendency to convert the papular eruption into the pustular, and the scaly into the tubercular; and that if a sufficiently large number of cases were taken, the proportion in which this would happen would be alike in each class of cases, so that it might be stated that the papular eruption would bear the same proportion to the pustular as the scaly would to the tubercular.

Mr. B. Cooper: It occurred to me that the author seemed rather to blink the subject as to what kind of sore is to be attributed to syphilis, and also as to that kind for which he would recommend the administration of mercury. It is very true that mercury is mischievous sometimes under certain conditions of the system, and there is great difficulty in judging precisely what may or may not be treated with mercury. I believe, also, that it is not very easy to determine what is a syphilitic sore; for myself, I never understood the real difficulty until I read Recours' account of the different kinds of true syphilis. He maintains, that it is not the physical condition of the sore; that the excavated sore with a hardened base is a sore very rarely met with; and he says, that mercury, in such a sore, is not sufficient to cure it, because the constitution is not in a condition to receive it; and, though you may convert a syphilitic sore into a healthy ulcer, yet it is necessary to check the use of mercury in order to cure the patient. So that there are two considerations to be weighed before the administration of mercury: we must study the condition of the constitution to see whether it is admissible. I believe with Recours, that there is but one true test of syphilitic virus being secreted by a sore; and I did for two or three years carry it out — the *argumentum lucis* — to see whether a specific action could be produced by the virus on other parts; and I invariably found that mercury might be given, but given in all its varieties: calomel in some, bichloride in others, and red oxide in others, according to the peculiarity of the constitution; and therefore I should like to know from the Author of the paper, when mercury is to be administered, and how he is convinced that the virus is of a true syphilitic nature.

Mr. Lee: However much I may thank Mr. Cooper for the observations he has offered, I must still differ with him in one point, with regard to knowing whether a sore is venereal or not:—one mode is by the occurrence of secondary symptoms.

Mr. Cooper: Yes; but I should be sorry to expose my patient to such an experiment as that, while the blood must become contaminated. I hold that a patient should not be allowed to become the subject of secondary symptoms; I believe that persons whose blood becomes once poisoned, sow the seeds of disease in their constitutions, from which it may take them years to get clear. My object is to cure the primary disease as quickly as possible; and I doubt very much the correctness of the position which the Author has taken in his reply. I question whether there are not a train of symptoms which follow what would not be called syphilitic symptoms,—that there are cutaneous diseases much resembling it, but which are not of a true syphilitic nature. It appears to me, that the matter is as yet *sub judice*—that no one can point to this or that eruption as to true syphilis.

Mr. Acton: The author has observed that bubo follows chancre in a very small proportion of cases. Now, I should like to know from him whether he includes under the term bubo enlargement of the glands. Where you get indurated chancre, you almost always find enlargement of the glands, and I want to know the nature of that induration. In nine cases out of ten such enlargement takes place, which is a novel fact, but an important one. Again, the author has said that he would advise a course of mercury for four weeks. Would he treat all primary sores in that way? for I could not gather it from the paper.

Mr. Lee: What I mean by bubo is, a sufficiently prominent enlargement of the gland to be detected by the patient. The proportion in which it is stated in the paper is about the proportion in which it occurs in practice. With respect to treatment, it was my object, that if I wished to secure my patient from secondary symptoms, then mercury was the only remedy to be relied on.

Mr. Cooper: As to the administration of mercury for four weeks or six months, the rule is, never to employ local applications and at the same time to administer mercury. What demonstration can you have of the influence of medicine on the disease for which it is given? You must judge by the condition of the sore of the benefit resulting from the mercury. You will observe at once, if successful, that it will assume a state of granulation, and then you know that the disease is cured; and so soon as all hardness is gone then the mercury may be left off.

Mr. Acton: I think the Society will agree with me that an indurated sore, followed by enlargement of the groin, is not dangerous at all; and I think that the statistics have settled the point against the idea of indurated sores being generally followed by enlargement of the groin. Where induration of a sore occurs it is symptomatic of a general infection of the system, and is not a process set up by nature to limit the extension of the disease. As to whether mercury is beneficial or not, in a large number of cases I believe there is no occasion to give mercury. It has been laid down, that if a sore is indurated, it is necessary then to give it; but it would seem that there are two kinds of induration; one which may be simulated, and one which is specific, which has been described by Hunter. All will believe with him that that sore requires mercury; but there is a form of induration which simulates this, and which may be cured by hydriodate of potass. As to a four weeks' course of mercury effecting a cure, with all deference to the Author, I cannot agree with him, for it is only after three weeks' rubbing in that the induration will disappear; but I think mercury may be given to a much larger extent than that; I have known cases in which it has been two or three months before the induration goes away.

The President: I had hoped that the Paper would have given rise to more discussion; and, perhaps, I shall be expected to express an opinion on the subject. I shall, however, only deal with facts. With regard to the primary sore, all my attempts to establish any physical condition which should enable me to tell what is or what is not a syphilitic sore, have been without avail. As to the use of mercury, the first case I ever saw was one under the care of Sir Astley Cooper, one which I hardly knew anything to refer it to but syphilis, and I felt much relieved when the patient said to me, that Sir Astley had told him he had taken too much mercury already. I have found a number of cases in which there were symptoms not to be distinguished from secondary symptoms, in patients who had taken mercury for inflammatory affections. The evidence went to show, that mercury and syphilis might produce disordered states of the constitution, having physical characteristics not to be distinguished from each other. In my own practice, a gentleman called on me who had sores on his throat, which I had no doubt were syphilitic. He declared that he had never had syphilis. I then said that he had been taking mercury. He declared he never had. Then, said I, I do not understand your case. He had, however, mentioned to me, and which slipped my memory at the time, that he had taken large quantities of quack medicine. In the course of the following day I saw him again, and then discovered that he had been taking bichloride of mercury, and I said to him, Now I understand your case, and under my treatment you'll do well; and so he did.

A Fellow: I do not think it follows that there is enlargement of the glands where you have an indurated chancre. There seems to me to be some little confusion as to the use of the term bubo; it has been used to express a simple enlargement of one or more glands. I hold it, in many cases, to be the result of sympathy, and soon subsides; but because it has existed, I do not think that it is necessarily bubo. There are other instances in which it goes on to suppuration, and where the bubo heals readily, and that is not a case in which there is reason to suppose that the system is affected. Then there are others, where abscess is formed, with a thinnish skin, and a sanious discharge. I believe this to be the true bubo; and on this kind we have often a sore with indurated edges, and, ten chances to one, but after all the system will show evidences of its once existing. I think this distinction is founded on true principles. When there is indurated chancre of a definite form, mercury, I think, is to a certain degree useful; but if mercury is given extensively, so as to produce salivation, I believe it not only rather favours secondary syphilis, but will make it very difficult indeed to remedy.

Mr. Lee: It appears to me that the subject of the paper is rather of a different nature from that which has been discussed. I have treated the subject with reference to the prevention or cure of syphilis, and not to the treatment of the sore; and I still maintain that it occurs after indurated sores more frequently, having derived my opinions from a reference to nature. Mr. Cooper has referred to cases of debility, where, he says, mercury acts as a poison; but I think it is in the way the mercury is administered that the error lies. The following case is worthy of observation. A patient was admitted into Hospital. Mercury was given, but he could not bear it. He was then treated with sarsaparilla, and left; he got bad again, and was again treated with the same; he returned three times; the sarsaparilla had no effect; and at last he was treated with mercury and perfectly cured. In this case I think the sarsaparilla only supported the powers; and so it will be found that the hydriodate of potass relieves the symptoms but does not cure the disease.

Mr. Cooper: I said, that if you gave mercury without any local application, you could see all the changes—that particular states appear, the edges becoming level instead of everted, and so on; all which is a proof that the mercury is effecting the object. Then as to leaving it off, I should say this should not be as long as the induration remains. I agree with the Author, that at one time mercury was as destructive as it may now be beneficial; it used to be thought that that was not a proper state of ptyalism, if a pint pot was not full of saliva twice a day. So I believe that the hydriodate of potass or sarsaparilla will not cure, and that if there is one disease more than another which can be treated successfully, it is syphilis by mercury, desiring the patient to remember, that he is under the influence of a most important remedy.

Mr. Lee: I should like to ask the members of the Society whether they have observed the same proportion in the secondary symptoms of syphilis; (I kept notes of the cases a very long time before I found out that that proportion existed;) whether they ever noticed, that the different forms of eruption occur in proportion to each other.

Mr. Cooper: I think that is a matter of very little importance, without we can attach a fact as connected with the primary sore. It is impossible for any one to tell, from the primary sore, what the secondary symptoms may be. I feel disposed to think, that there is but one specific poison of syphilis, and that the changes depend wholly on the constitution, and not on any peculiarity in the original poison.

Mr. Lee: This point seems to me a very important one as to treatment. If I show that a certain proportion of papillary sores will be converted into pustular, and if the laws are regular which develope the one or the other, I think it, *à priori*, not improbable that, in the proportions given, it

should come out that the papillary are converted into pustular, and the scaly into tubercular.

Mr. Cooper: That is a view which I take; it is quite correct, but I was only looking to the treatment.

Mr. Acton: If Mr. Lee will look at a paper lately published in the *Medical Times*, of the cases occurring in the Army, he will find that the treatment had nothing to do with this, but that the climate had everything. In warmer climates there are very few secondary symptoms. In respect to the paper, we should bear in mind that the data were drawn from one year's practice, and we should, therefore, be careful how we base rules upon them.

The sitting was then adjourned to Tuesday, June 12.

REVIEWS.

General Board of Health: Report on Quarantine. Presented to both Houses of Parliament, by command of Her Majesty. London: 1849.

A document of great interest has just appeared, and will no doubt attract a considerable share of notice on the part both of the Profession and the laity. It is entitled a "*Report on Quarantine, by the General Board of Health. Presented to both Houses of Parliament by command of Her Majesty.*" The burden of its song is, as might have been anticipated, completely adverse to quarantines, which it professes to show are perfectly useless, and incompetent to fulfil the office for which they were originally instituted. "The true safeguards," it says, "against pestilential diseases, are not quarantine regulations, but sanitary measures;" that is to say, measures which tend to prevent or remove certain conditions, without which pestilential diseases appear to be incapable of existing.

The objections it makes to quarantines are threefold: first, that the theory on which they are founded overlooks the fact that, in all epidemics, a peculiar atmospheric constitution is a necessary condition of the extension of the epidemic; against such a constitution, however, quarantines make no provision. Secondly, that certain conditions peculiar either to a locality or to a person inhabiting it, have an extraordinary effect in aiding the development of a disease, in giving it a habitat, or in augmenting its intensity when it has become developed; the theory of quarantine altogether overlooks the influence of such conditions and concurrent assistants of the epidemic. Thirdly, that in most instances the disease against which the quarantine is to be established, has actually entered the place before the quarantine laws can come into operation.

The question of the contagion of diseases is separated from the question of quarantine.

"Quarantine is based," says the Report, "on the assumption, that epidemic diseases depend upon a specific contagion; but the question of contagion has no necessary connexion with that of quarantine. The real question is, whether quarantine can prevent the extension of epidemic diseases, whatever may be their nature. If it can, it is valuable beyond price; if it cannot, it is a barbarous incumbrance, interrupting commerce, obstructing national intercourse; periling life, and wasting, and worse than wasting, large sums of the public money. But if the power of protecting the country from the introduction and spread of disease, whether contagious or otherwise, be really possessed by it, this must be proved by other considerations than those which establish the contagiousness of disease; it is a mere matter of evidence and experience, and, consequently, the disputed point of contagion should be placed entirely out of view in this discussion, and the whole question should be argued on the broad ground, whether or not quarantine is a public security, or is capable of affording practically any useful result."

The chief ground, then, taken by the Report is this,—that, in the case of the three diseases against which we establish quarantines, viz., cholera, yellow fever, and Oriental plague, even if we admit that these diseases are contagious, it is necessary, in order that they should become epidemic, that other conditions, against which quarantines are utterly powerless, should be present,—such as a peculiar epidemic constitution,—or, as in the case of yellow fever, a particular temperature,—or, as in the case of Oriental plague, a particular degree of moisture; or, as in all three cases, peculiar local conditions. Now, when these conditions co-exist with, and augment the power of, the special virus, the disease becomes epidemic,—that is, spreads through the medium of a "corrupted atmosphere," which cannot be barred out by sentries, nor confined within the straitened limits of a lazaretto.

But the General Board also questions the contagiousness of some of these diseases; it brings forward evidence against the view that cholera spreads by contagion alone; it brings forward also evidence that Oriental plague is less contagious than has been supposed, and much valuable testimony is adduced to show that this disease cannot be carried by clothes, cotton bales, or other commercial articles which are shipped from Alexandria to England. It appears, indeed, that the quarantine regulations, in respect of purifying cotton bales, have been for many years completely neglected in many quarantine stations, and yet that no case of plague has occurred in consequence; and it is a remarkable fact, that, in spite of the increased intercourse with Egypt, no case of plague has been imported even into our quarantine establishments during the last 100 years. Having decided, that it is useless to maintain quarantine against Oriental plague, the Report continues:—

"If quarantine be given up with reference to Oriental plague, against what other disease is it reasonable to attempt to maintain it? Not, surely, against yellow fever,—for it is now generally admitted, that this peculiar form of fever is incapable of existing, excepting within a certain range of temperature, which range renders it in the highest degree improbable that it can ever prevail in Great Britain."

According also to the most strenuous advocates for the contagion of yellow fever, the virus is dissipated by a current of moderately cool air. Sir William Pym, the Superintendent of Quarantine, is thus quoted by the General Board:—

"In page 66 of a recently published work, Sir William Pym expressly says, 'that in an open airy situation persons may approach a patient in this disease, perhaps even to contact, with very little or no danger;' and again, when speaking of one of the Gibraltar epidemics, he says, 'upon the neutral ground there is a constant and strong breeze, or current of air, sufficient to destroy the contagion of any disease; and in this way the contagion not spreading, is to be accounted for this year (1810), although, in 1804, when the sick were crowded into temporary barracks or sheds, upon the same spot, all the hospital attendants were attacked by it.'"

Therefore, the General Board rather pertinently remark, that,—

"According to the practice of Sir William Pym, the true precaution against yellow fever is not the confinement of the sick in lazarets or in quarantine vessels, but their dispersion in open, airy situations."

Now, if quarantines are proved by evidence to be unable to keep out cholera and influenza,—and this seems to be admitted by almost every one,—if they are needless in the case of Oriental plague, and useless, or even hurtful, in the case of yellow fever, which, in this country at least, is to be combated by other means, then quarantines might be given up altogether; for, of course, we never dream of applying them to the common contagious diseases of this country, such as typhus, small-pox, measles, or scarlatina. These contagions are always among us, in the hearts of our large cities, in the midst of our densely crowded and laborious population; for these diseases, if legislation can do anything, it is not by means of quarantines.

We have given above, that which appears to us the most important, and probably the most correct, portion of the Report. The views advocated in these extracts are put forth with much boldness and no little skill. We deem it a most important point to have separated the question of contagion as much as possible from that of quarantine; these inquiries have been too often confounded together, and points which have to be determined on totally different grounds, have been constantly decided on evidence which was really inapplicable to them. It is one thing, whether the plague poison can be reproduced by the human body at all times, or during a particular epidemic constitution; it is another whether such a poison can be carried in a cotton bale. Independent evidence must prove each assertion. Again, it is one thing whether yellow fever is occasionally contagious in the countries in which it is most usually seen, and another whether it is capable of being contagious, or even of existing, under ordinary conditions in this climate. If it be true that the yellow fever poison dies at once in a moderately cool air, how absurd it seems to keep up on our shores an army of quarantine servants to ward off a disease which a more efficient antagonist than isolation almost invariably extinguishes.

Although we are disposed to agree with the General Board, that as far as regards Cholera, Oriental Plague, and Yellow Fever, some modifications of our quarantine laws is absolutely necessary, there are some other parts of the Report with which we do not so fully accord. These are, however, points not really essential to the main argument of the Report. Thus we find the contagiousness of typhus, though admitted, yet underrated. The modern meanings of the term contagion and infection are not, we think, fully apprehended. Contagion, in its widest and proper sense, means, that a disease is caught by proximity to, or contact with, a person affected with the malady. This implies an evolution of the specific poison from the body of the affected person, and, consequently, a generation of that poison by the body. But the General Board adopt one of the restricted definitions of contagion,—viz., that the poison is propagated only by actual contact. This definition, which originated in our own country, has been long known to be erroneous. No epidemic contagious poison is propagated only by mere contact; the virus radiates from the diseased body, diminishing in intensity the further it gets from it, until it is finally dispersed and rendered innocuous in the surrounding air; it is, to use the language of the General Board, both infectious and contagious,—for between these two terms there is no real distinction. Another point on which we decidedly differ, is, as to the agreement of English typhus and Oriental plague. We had thought such an opinion had become obsolete. The more we study these epidemic diseases, the more we find them to be absolutely distinct from each other; they may exhibit, indeed, what the Board terms "the common properties of pestilences;" but they are marked by symptoms so distinctive that no one can witness them without deciding that their causes must be equally distinct. Even now the researches into the Continued Fevers of this country, and of France and Germany, are determining the existence of various forms of fever,—of special and formal course,

that cannot be confounded with each other. Which of these fevers is it that the Board considers to be allied to plague? Not, surely, the typhoid fever of Paris; not, surely, the maculated typhus of London; not, surely, the relapsing fever of Edinburgh. No; Oriental plague has its own causes, and is marked by its own symptoms. To call it "typhus gravissimus," is, in our opinion, as much an error as to call cholera,—ague, or "an intense form of fever." There may be an alliance between these diseases, there is no identity; they may have common characters, but they have also special ones. For ourselves, believing that these various forms of fever were little understood in this country, we announced, some time since, to our readers, that we had made arrangements with Dr. Jenner for permission to publish a series of cases illustrating the continued fevers of Great Britain, collected by him at the London Fever Hospital, with the consent of Drs. A. Tweedie and Southwood Smith, Physicians to that Institution.

There are many other points of great interest in the Report to which we shall allude in a second notice. We will merely say now, that, in spite of differences of opinion, *this Report is a most valuable one*; it is calculated to do good, even by the discussion it is sure to elicit; its main conclusions also, are, we believe, correct ones, and will stand the test of inquiry and the antagonism of opposition.

A Practical Treatise on Morbus Coxarius, or Hip-joint Disease, with Cases and Illustrations. By W. C. Hugman, Surgeon to the Verrall Institution. 8vo. Pp. 81. London: Samuel Highley, 32, Fleet-street. 1849.

It will readily be admitted by most surgeons, that there are few diseases which are so difficult to treat satisfactorily as the affection under notice. In all great cities, and especially in this metropolis, scrofulous diseases of the hip joint carry off numerous victims; and those that are not hurried into a premature grave are too often, notwithstanding surgical aid, crippled for life; and of this latter fact, the daily observation of any one may convince him. It is by no means necessary to go into the wards of the hospitals, or within the walls of the parish workhouse, to know this. A walk for five minutes, in any of our crowded thoroughfares, is amply sufficient.

In very many of the instances, where recovery from the fatal effects of hip disease has ensued, so great an amount of distortion has taken place, that the limb of the unfortunate patient is either useless, or even an incumbrance to him. And it may well be asked, How is it that such distortion is allowed to take place, when it has been possible to overcome the disease and to bring about a cure? There are two answers to this question, both of which involve points of considerable importance in the consideration of any attempt to relieve this state of things. In the first place, it too often happens, that the early stages of this disease are overlooked by the patients themselves or their relatives; and when it is fully formed, there is often so little care exercised, that the patients are left almost to nature; or if medical advice is sought, there are no means or appliances, in their generally humble dwellings, which the surgeon can make use of, for the purpose of bringing about an effectual and satisfactory cure.

The second answer to this question is, that the limb gets into that position which is either most favourable to a spontaneous cure, and which is most easy to the patient. In the great number of instances of advanced hip disease, dislocation of the joint takes place; the limb becomes much shortened, and distorted to the utmost degree; the cure takes place, and the disfigurement and uselessness remain, unless some mechanical or other means have been adopted by the surgeon to prevent this.

The object of the Author of this work under notice is to recommend a mode of treatment which will not only obviate this deformity, but at the same time place the patient in such a condition that the diseased parts may have a fair chance of recovering themselves; and the principle upon which the Author bases his views is, that a perfect state of rest is essential to the cure of hip disease.

There is much difference of opinion respecting this most important point; and we perfectly agree with the Author, when he says: "I think there cannot be a doubt, that, in the earliest stages of the disease, whether it assumes the acute or chronic form, the most important consideration is, to enforce complete quietude of the affected limb, although a contrary opinion has been by some entertained." P. 23. We fully believe, that it is the most rational plan to pursue in the treatment of this disease; for why should not perfect rest be maintained, in disease of the hip-joint, as well as in any other joint. Surgeons recognise and follow out this practise in scrofulous disorders of the knee, elbow, and shoulder; the first and main object in the treatment consisting in keeping the joint perfectly quiet and immovable, by a suitable apparatus, so that nature may have a chance of overcoming the morbid actions. Why, then, should surgeons differ in their practice, when only another joint is affected in the same way? That they do so is well known; and their reasons for doing so are not unworthy of consideration, although, probably, they are not valid. Those who do not advocate rest, say that, as the disease is generally dependent upon, or accompanied with, a scrofulous state of the system, the health of the patient is liable to suffer from constant confinement. This is, doubtless, an important objection, and is worthy of much serious consideration; but those who use this argument should bear in mind, that, in the early and most tractable stage of hip disease, a great amount of injury may be sustained, by permitting the motion of the inflamed components of the joint, and that the mischief which ensues will not compensate for the temporary benefit which may accrue from the patient taking exercise.

In the early stages of hip disease, and in those cases of long-standing where anchylosis has not yet taken place, and where the parts have not become so carious as to forbid any hope of recovery, the plan recommended by the author of keeping the patient in the prone position, and, where necessary, employing extension, has its advantages, and is likely to be attended with great benefits. The position keeps the limb at perfect rest, and any topical remedies the surgeon wishes to use may be applied. Thus there will be a fair prospect of cure, and, by extension properly employed, permanent distortion, which but too often is the result of a spontaneous recovery, may be prevented.

We do not exactly understand whether the author intends to attempt the reduction of spontaneous dislocation of the thigh-bone, from hip disease, by this method. He, however, quotes at length some observations of Heine, who, in a treatise, has recommended the attempt to cure dislocation from disease by continued extension. Four cases are mentioned in which this event took place, or apparently took place. We must confess we are sceptical respecting the propriety of attempting to cure the disease in this manner; it should be borne in mind that this spontaneous dislocation is in many instances, as it were, an effort of nature to bring about a cure; that when the head of the femur is thrown out of the socket, the parts are in the most favourable condition to recover, the acetabulum becomes filled up with new bone, or entirely obliterated, and the head of the femur becomes anchylosed on the ilium. If, however, it was, whilst in a carious state, forcibly moved back into its socket, probably also in a similar condition, it is only likely that an impulse would be given to the occurrence of fresh disease, and the restorative efforts of nature would cease. Still, however, we must not overlook the results of experience; which have shown that this treatment may be successful.

We find, also, that the Author has referred to excision of the head of the thigh bone, which has been performed by Professor Ferguson and Mr. Henry Smith; and respecting which proceeding there has been of late so much discussion between Mr. Syme and the latter gentleman. The several successful cases which have now occurred, sufficiently demonstrate that, in those instances where there is so much disease of the head of the femur, and little hope of a natural recovery, the removal of the head of the thigh bone is not only justifiable, but even necessary. This proceeding should nevertheless be limited to those cases where active disease has ceased; and we believe that neither Mr. Ferguson nor Mr. Smith have proposed that it should be put it force where acute actions are going on.

The Author has inserted the particulars of seven cases treated in the manner he has recommended. They are all of them more or less satisfactory instances of cure, or great relief from very serious disease. We perceive, that he does not neglect the constitutional treatment, which is so necessary in hip disease; he advocates the use of iodine and cod-liver oil.

This little work is modestly written, and we think that the Author is entitled to credit for bringing before the Profession a method of treatment which doubtless will be attended with great benefit in certain forms of hip disease, which admit of recovery, and we consider that it is worthy of the attention both of public and private practitioners.

The Sea-side Book; being an Introduction to the Natural History of the British Coasts. By W. H. Harvey, M.D., M.R.I.A., Keeper of the Herbarium of the University of Dublin, and Professor of Botany to the Royal Dublin Society. London: John Van Voorst, Paternoster-row. Foolscap 8vo. Pp. 248.

Failing a cheerful and a faithful friend, we are right glad, whether strolling in the fields or along the meads, reclining by the sea-side or mounting the hill-top, to feel that we can, at "our own sweet will," converse, as it were in secret, with an intelligent and pleasing companion, from whom we may draw both instruction and delight. This little book supplies the want; and although addressing itself more immediately to the young, is of that class which may afford pleasure to all—to the listless, the invalid—the restless or the placid—whoever may be placed by the side of the "great deep," whether from circumstances of health or enjoyment. Its author, imbued with a love of nature, in the treatment of his subject reminds us of a well known individual, whose ardour in agricultural and horticultural pursuits was proverbial, and who was accustomed to say, that he never knew any one who spent only a few days in his society that did not become enamoured with his favourite occupations. Just so in this case: whilst perusing these pages, from the interest with which the shells, the sands, sea weeds, and all the various objects attracting attention, are invested, we experience strongly the desire to recur to our sea-side recreations, and practically to carry out the author's observations. The following extract will illustrate the spirit in which they are written:—

"The portion of the created universe with which the naturalist occupies himself is indeed small, if we compare our world with the stellar system, and estimate its value with the line and plummet; but the more we become conversant with its heights and depths, the more shall we find that size and weight ought to have no place in our estimation of the great or the little in nature; for they appear to have no place in the mind of the Author of nature. * * * In nature everything displays the same evidence of greatness of design, sufficient, when duly appreciated, to fill the largest intellect to overflowing, and to make it sensible that, so far from having a capacity 'equal to the majesty' of what it contemplates, its utmost stretchings are insufficient to comprehend the fulness of a single natural law."

Dr. Harvey justly recommends his readers not to indulge in fanciful theories, but carefully to observe and treasure up facts, pointing to the work of that most pleasing of all Naturalists, Gilbert White, in his "History of Selbourne," to show what may be done, and how much may be enjoyed, in such pursuits. The work is adorned with seventy wood

engravings, characteristic of its subjects, executed in the usual style of excellence which marks the productions of its publisher, to whom, for his beautiful series of Works on Natural History, the public owes a testimonial of its gratitude.

CONVENTION OF POOR-LAW MEDICAL OFFICERS.

A Deputation from the Committee, consisting of Dr. Hodgkin, Chairman; Dr. Barnett, Mr. Vallouse, of Stratford, Mr. Ebsworth, of Bulwell, Mr. Ross, Mr. Mitchell, Mr. Porter, Mr. P. Martin, of Reigate, Mr. White, and Mr. Lord, the Honorary Secretary, was received, on Thursday, 24th, by the President of the Poor-law Board, at Somerset-house. Dr. Hodgkin being absent on the entrance of the Deputation, the business was entered upon by Mr. Vallance, who begged that the case might be judged of, not by "his feeble advocacy, but by its inherent strength and justice;" adding, that though he had personally little or nothing to complain of, (his own Board having acted with something like liberality and fairness,) he was induced to join the Deputation from a thorough conviction and long knowledge of the just claims of the Medical Officers. After dwelling on their very insufficient mis-called remuneration, which varies from 2½d. to 14s. 4d. per case, and showing that the cost of drugs alone, as stated by Dr. Bigsby and Mr. Farre, is 2s. 1½d. in Dispensaries, and 3s. 7d. per case in Hospitals, he asked, could it ever be pretended that the Medical man was paid by 2s. 6d., the country average, for attendance and medicines? He would not insult the judgment of Mr. Baines by arguing the point. It was conceded by the resolution of the House of Commons, of 1838, recommending a considerable increase, also by the feeling of the House in 1844. Lord Ashley strongly and truly expressed the opinion, that the Medical Officers could not properly perform their duties, unless they received an income suitable to the magnitude of those duties; that they ought to be enabled to occupy the position that belonged to them as educated men, entrusted with great, indeed fearful, responsibilities.

Mr. Vallance next urged the importance of making the appointments permanent, "*quam diu se bene gesserit*," and proved the fallacy and injustice of treating the Union Surgeon as the only officer subject to a precarious tenure of, or capricious dismissal from, office. He concluded a lucid statement by somewhat adroitly, though respectfully, reminding the President, that, in ancient times, a Potentate began his reign by an exertion of mercy or of justice; that nothing would better become his high position, or be more graceful than his yielding in mercy to the sick poor fair and impartial justice to the claims of the Medical Officers; all that the Committee seek, may be comprised in payment proportioned to duties—permanence of appointment during good conduct, and responsibility to professional authority.

The President replied that nothing could be better than the manner in which Mr. Vallance had stated the case, and that he was very much obliged for the information the Deputation had placed before him. He was perfectly aware of the hardships under which the Union Surgeons laboured, and very desirous to have them relieved. He had been himself a professional man, and had much sympathy with gentlemen so situated, and wished to see them requited on a scale befitting their station. His power, however, had been much over-rated; he was not absolute. He had been informed that Mr. Buller, in considering the question, found difficulties increased upon him as he progressed. An extension of the power of the Commission, to enable it to carry out such measures as the Committee sought, could only come through Parliament. That in Parliament many of the Members were *ex officio* Guardians, watching every proposed change with attention; while from local knowledge in their own districts they were able to speak to facts, and took an interest in the proceedings of the Boards of Guardians.

Mr. Vallance reminded the President, that in the Report of Lord Ashley's Committee, he would find it stated, he thought by Mr. Lewis, that the Poor-law Commissioners had now the power to declare all Medical appointments permanent.

Mr. Lord said, that he knew the President dwelt very much upon a power for giving redress, which was in the hands of the Guardians. A Member of Parliament, who had been imbued with these views, remarked to him, that it appeared to him that this power, unchecked by the Commons, ought in all cases to be an adequate remedy if the guardians act fairly and reasonably. The Deputation were particularly desirous to impress upon the mind of Mr. Baines the fact, that the Poor-law medical staff, from long and painful experience, had lost all reliance upon these bodies acting in that way. The *ex officio* Guardians, the clergy, and more intelligent members of the Local Boards were equally, with the Poor-law Commissioners, disposed to act with considerable liberality towards the medical officers, but who were from time to time defeated by the farmers and tradesmen, who too often carry out their merely commercial views, and combine to keep down the salaries on the single, the short-sighted principle of keeping down the rates. To so great an extent is this often carried, that the very orders of the Commissioners are frequently opposed or set at naught. In illustration of these points he read extracts from public documents and letters received by the Committee from persons of the highest respectability.

The Committee, therefore, feeling strongly the importance of awakening attention in the House of Commons to the false system on which Poor-law medical relief is based, prepared forms of Petition to be returned from numerous parts of the kingdom, many of which have already been presented, and more had been received for that purpose. The clergy and magistrates had, in many instances, taken part with them, as the following extract of a letter which he had received from Mr. Cowley, of Winslow, testifies:—"I have," states that gentleman, "drawn out a *general Petition*, and obtained the signatures of nearly all the magistrates and most of the clergy resident in the Union, and no doubt shall have the name of every one; they all express much sympathy with medical officers of Unions, and surprise that a similar Petition is not adopted in every Union."

The President here observed, that such efforts, carrying with them the manifest co-operation of other classes than the medical officers would be likely to have considerable weight with the Legislature.

Mr. Lord rejoiced that the Committee had done much, and would yet do more to draw public attention to the subject, and to cause the people at large to know how utterly inadequate was the pay for the public advantage conferred through the services of the 3,000 gentlemen who composed the staff.

The powerful writer in "the *Times*," under the signature of "S. G. O." had lent his aid in furtherance of the claims of the sick poor, and those of the Union surgeons.

Through these various modes of exciting interest and diffusing information, the Committee hope to exert an influence in the House of Commons, which at least might strengthen the President, so as to enable him to carry into operation such measures of redress as he believed to be right.

Mr. Baines inquired if the Committee were unanimous in approving the proposed plan of Medical Relief appended to the Memorial of Sir George Grey, observing, that it was a matter of great pleasure to notice how well the medical men generally performed the arduous duties of their engagements, and how very few complaints against them reached that office. Respecting the salaries a great additional difficulty arose from the readiness with which medical gentlemen accepted the appointments. Mr. Vallance having explained the vigilance of self-protection which induced men of character and capability to take office under the Poor-law, the President added, that he was quite aware of the motives, irrespective of the pay, which induced many gentlemen to fill these offices, and that, though such were not fair arguments against their complaints, they did give a pretext with some for not interfering with the present system.

Mr. Peter Martin said, that though, unfortunately, it was only a section of the entire body of the Profession who were thus exposed to the hardships complained of, were the Profession generally direct sufferers there would be more chance of co-operation to resist or prevent an injurious competition.

Mr. Ebsworth, of Bulwell, reminded the President of the immense and wide inequality between the payments made to Union medical officers, the difference being observed even amongst the members of the Deputation themselves.

The Poor-law Commissioners sanction the salary of 100*l.* for duties performed in one Union Workhouse of less size, with fewer inmates, and attached to a far less number of parishes, whilst in his own case he received only 46*l.*! How did this inequality arise? On what principle of justice could it be upheld? Did medical officers know beforehand the duties they would have to perform for the salaries advertised, none would have the hardihood to accept office on the terms.

This Deputation was of opinion that Mr. Baines, as President, had the power at least to alter the anomaly of the present medical regulations. It was not equitable that the pauper of one district should be provided with a worse paid medical officer to attend them in their sickness, nor could it be supposed that the diseases of one county required a more expensive class of medicines than another.

If Mr. Baines would look into the circumstances of each Union, and learn the nature and extent of the duties of each individual medical officer, and found thereon a scale of remuneration somewhat approximating to the recommendation of the Poor-law Board itself, the hardships we complain of would soon cease.

We complain of inadequate salaries and burdensome duties—where other relief is refused, Medical assistance is wanted, in case of a man's family being sick from destitution—the head of it having struck for wages, Medical orders are granted *ad libitum*, although the law, in such instance, disqualifies for receiving general relief. The difficulty of obtaining orders for extras is always proportionate to the laxity with which sick ones are distributed. All and every complaint made by us might easily be done by the President saying, "By such and such standard shall the remuneration of the medical officer be guaged. I will tolerate no appointment in which an inadequate payment must fail to secure good attention to the poor, and good medicaments in their diseases."

The President remarked, that the question of finance was one grand difficulty. Throughout the country the demands upon the Poor-rates had been lately increasing, and he feared that any fresh one made just now would be met from all quarters with opposition. He had no reason to think, that any mode of administering medical relief, except as now, through the Boards of Guardians, would be acceptable to the country in general. The plan suggested, of placing the entire cost of medical relief on the Consolidated Fund, was one which the Chancellor of the Exchequer might deal with. In legislating on these matters, no Minister or Officer of the Crown could begin to write, as it were, on a *tabula rasa*, but with such means and systems as were established, and much entwined with the feelings and habits of the country. Mr. Vallance informed the President, that at the interview at the Home Office last year, Sir George Grey admitted, that the money question was secondary to that of procuring efficient medical aid for the poor, at the same time referring the Committee to the President of the Poor-law Board, the late Mr. Charles Buller.

Mr. Ross, although holding no appointment under the Poor-law Commission, but acting as *amicus curiæ*, wished to interpose a few remarks. The Deputation had believed that the Poor-law Board exercised a power almost autocratical in the administration of the laws for the relief of the poor, but it now appeared otherwise; and they were given to understand that it was the Board of Guardians who exerted this arbitrary power, and who were best able to redress the grievances under which the Union Surgeons laboured. This was, in fact, the point of complaint. It was because the Boards of Guardians had the power that those evils under which the Medical Officers were smarting prevailed, and it was to alter this system that the Poor-law Medical Convention was established. The entire scope of the resolutions agreed to by the Committee, and cited in their Memorial to Sir George Grey, went to this effect:—These resolutions sought for payment of salaries out of the Consolidated Fund, in order to obviate the grinding parsimony of local Boards; and they desired the establishment of a distinct Medical Staff, with the view of removing the Medical Officer from the jurisdiction of Boards frequently composed of persons who were utterly incompetent, by habits of thought and feeling, education and pursuits, to form a correct judgment on the conduct of their Medical Officers. Many cases might be cited to prove the injustice of Boards of Guardians towards their Medical Officers, and of the apparent powerlessness of the Poor-law Board to redress the wrongs the Medical Officers are thus obliged to suffer. They are, indeed, sacrificed between two rival jurisdictions. The Huddersfield case is an evidence of this deplorable state of things. Among other subjects of complaint, Mr. Tatham, the Medical Officer, applied for remuneration for attendance on a fever hospital established in Huddersfield during the prevalence of fever in that neighbourhood. He had been appointed to the medical duties by a portion of the Board of Guardians, who had acquainted the Board, at one of their meetings, of the arrangement that had been made, which the Board acquiesced in, but *neglected to enter it on their minutes*. The Board refused payment for these extra services. Mr. Tatham

applied for redress to the Commissioners, who recommended the Guardians to grant the required remuneration, on the ground that it was *inequitable* to expect Mr. Tatham to perform the duties of surgeon to the Fever Hospital under his contract. The Guardians obstinately refused to act on this recommendation, as also upon other arrangements advised by the Commissioners, and the result was, that the Commissioners themselves suggested to Mr. Tatham the advisability of *bringing an action at law* against the Board of Guardians. This was done, and at the trial the Board of Guardians pleaded their own neglect of duty in not entering the appointment of Mr. Tatham on their Minutes, as an answer to his claim: Judge Alderson, in indignation, said, that the behaviour of the Guardians was a disgrace to the township, and if he were an inhabitant, he would commence a subscription forthwith to compensate Mr. Tatham for the losses he had sustained. In this case, either from prudential motives or legal difficulties, the Central Board could take no stronger step in a cause which it knew to be just, than advise a trial at law.

With respect to payment for medical service from the Consolidated Fund, that was the recommendation in the resolution of the Committee, which, if it could be carried out, would, he believed, be the simplest and best plan for adoption. It had not been agreed to without careful deliberation. Other plans had, however, been adverted to, and he, therefore, might be at liberty to suggest, that, supposing the Government should deem it impracticable at the present time to alter the existing system in such a radical manner as this resolution proposed, but still resolved that the payments should be made from the local funds, the remuneration for medical service, in such case, might be afforded by a uniform rate, per cent., being struck, by order of the Commissioners, upon the gross amount of rates raised in each Union for general relief, exclusive of the establishment and incidental charges. The gross amount of rates are a standard of the poverty of a district, and the number of claimants; the number of claimants, of the liability of the Medical Officer. Subordinate arrangements might be made to equalise perfectly the remuneration in a ratio to labour, for the several Medical Officers of each Union. He believed the Poor-law Board had full power to enforce such an order. Mr. Ross, however, stated this to be a private view of the matter, and pressed the resolution of the Committee.

In answer to a question by Mr. Baines, relative to the power of appointing the Medical Officer, on the assumption of payment of salaries out of the Consolidated Fund,

Mr. Ross stated, that it was contemplated to grant this power to the local authorities, by which the objection of giving undue patronage to a Central Board would be avoided, at the same time that the Boards, having the right of electing, in their judgment, the best man as Medical Officer, should have no power of unfairly reducing his salary. He, himself, was daily becoming more convinced that the present system was based on a false principle, and that medical relief should be entirely separated from general relief, and treated as a distinct subject for legislation. Medical relief now constitutes a kind of right for general relief, and Boards of Guardians and Relieving Officers often refuse the one to avoid the liability of the other, thus inflicting a cruel injury on the poor, and throwing the odium of their own misdeeds on the Medical Officer. Poverty is created by society itself; and is not generally so urgent as to prohibit the exercise of a discretionary power in the grant of relief; bodily suffering is a visitation from God, or an accident of nature,—sudden, inevitable, imperative. The same machinery cannot be applied to circumstances so widely different in their nature, and he believed that the Poor-laws would never work satisfactorily until the separation was made.

After some other conversation, in which Dr. Hodgkin and others took part,

Mr. Baines stated, at the conclusion of the interview, that he was obliged for the opportunity which had been afforded him of gaining information, and hearing statements, some of which were new to him,—He again assured the Deputation that he was quite prepared to view the position of the Medical Officers as one calling for relief, and this, rather as a matter of justice than mercy, (alluding to Mr. Vallance's concluding remarks,) he should feel it a duty to afford according to his power.

Mr. Mitchell, before the Deputation retired, put into the hands of the President a Paper which stated, that in November last, when the cholera was prevalent, together with other epidemic diseases, in the parish of Lambeth, a conjoint application of seven of the district medical officers of the parish had been made to the Board of Guardians, requesting in the emergency, additional assistance or means to procure it, to enable them more satisfactorily to perform their onerous duties; that upon the refusal of the Board to comply with this prayer, a Memorial supporting its object was presented to the Board signed by nearly all the respectable men of the parish—most of the *clergy, many of the respectable inhabitants*, and even some of the *magistrates*,—which, although productive of no immediate benefit to the medical officers, clearly shows that growing sympathy with the greatly oppressed and suffering Poor-law medical Staff, is being felt by the Medical Profession generally, and among the respectable orders of society, through whose combined influence it may be hoped that, eventually, important and salutary changes may be effected in the existing law.

The Deputation then withdrew, having experienced, on the part of the President, the most courteous reception.

MEDICAL MEN AND ASSURANCE OFFICES.

[To the Editor of the Medical Times.]

SIR,—I received a request to-day, from Mr. Marsh, Secretary of the National Provident Institution, London, to fill up an enclosed form for their guidance, as to granting a policy, or otherwise, to a gentleman with whom I am acquainted. For the gentleman's sake, I gave them my opinion on every question proposed. On returning it, I wrote the following note to the Secretary:—

"Ivy-house, Worcester, May 26, 1849.

"To the Directors and Physicians of the National Provident Joint-stock Company.

"Gentlemen,—I conclude by your note that you require my services on the subject of your request *gratuitously*.

"I feel ashamed of your penury and want of the sense of justice; and the more so, as I conclude that your conduct is sanctioned by the two respectable physicians I find holding office under your jurisdiction. I am known to them both, and, as I never do anything underhand, I wish them to know my opinion. They have both held prominent positions as *friends to their Profession*, and now, by sanctioning the *ruse* you practise on it, they are prostituting its respectability.

"You are well aware, that you could not insult any other Profession with impunity, as you have done ours, by requesting valuable and responsible information gratuitously.

"I am your obedient servant,

"E. A. TURLEY.

Directed to "Mr. Marsh, 48, Gracechurch-street."

I leave any comment to yourself and your numerous readers.

I remain, sir, yours obediently,

E. A. TURLEY, M.D.

THE NEW BILL AND THE PETITIONING CRUSADE.

[To the Editor of the Medical Times.]

SIR,—The attention of almost every Professional man is directed more or less to the proposed Medical Bill which the Lord Advocate intends introducing into Parliament this session. My more particular attention has been directed in consequence of having received the copy of a Petition which I am to sign if I approve. It comes from an Association in North Wales. I have a few thoughts on the subject of medical reform, which, perhaps, you may be kind enough to publish. I shall endeavour to be as brief as possible; and, in the first place, I may remark, that it is my opinion *we shall have no Bill passed this session*; what may happen in the next I shall not venture to predict.

Since receiving the copy above referred to, I have looked over all the Petitions given in your Journal. From the several towns and Associations named at their head, I have made the following abstract. The Manchester Petition takes the lead, and the others are drawn out or led by the nose.

Manchester opposes the attempt at reform according to the proposed Bill, because there is therein suggested a new establishment—a college of General Practitioners for England only, and because it is proposed to admit Doctors, Bachelors of Medicine, and Members of the English College of Surgeons, and certify them as General Practitioners; and because it will ratify the arrangements introduced into the College of Surgeons by the Charter of 1843. This Petition is signed by 142; not so many as half of the Surgeons in that town, and perhaps some have signed because others have done so.

London National Institute of Medicine, Surgery, &c., approves of the proposed Bill.

Gloucestershire Association thinks the corporate Institutions too numerous, and would have the Colleges of Physicians and Surgeons re-organized. Signed by two, on behalf of no one knows how many. This Petition generally agrees with the Manchester memorial.

Cheltenham agrees with what the Manchester Surgeons have said, and proposes that there be a severance between the trade of pharmacy and the functions of the medical adviser. This bears forty-one signatures.

Halifax desires the College of Surgeons re-organized; but generally approves of the projected Bill. There are twenty-two signatures appended.

I come now to a copy which has been forwarded to me.

Associated Physicians, Surgeons, &c., North Wales.—They think the proposed Bill will be of no good, and that members will be dissociated from their own Colleges; that the new College will have no medical or surgical title; want a uniform standard of medical education, and a proper examination. Agree with the Manchester memorial, because it states that the Fellows of the College of Surgeons would have a right, in case the Bill passed, to practice all branches of the Profession; and the same with the members and associates of the College of Physicians,—one they say has not been examined in medicine, and the other in surgery. It is stated, that this Petition already bears 160 signatures.

A man, after reading and hearing all the propositions for regulating the Profession, must have great tact and judgment, or he is sure to fail; and I must confess, after looking over these few Petitions, I am almost so much confounded as to feel incapacitated for writing; but I have determined to go through, hit or miss.

Now, I have not seen the Prospectus issued by the National Institute in reference to the new Bill; but what information I possess I gather from sundry parts of your Journal, and especially the first Charter, which is to be granted to the General Practitioners, as published in the *Medical Times*, May 13th, 1848. Judging from what I have gathered from these sources, I have come to the conclusion that the advantages of the new Bill will be numerous. Confining myself to the Charter, as you have published it, I make out the following abstract:—General Practitioners will have a College of their own—*a home*; each member of that family will have a privilege of voting for whom he likes, of those within 24 miles of the London Post-office, to occupy a place among the officers who for a stated period are to have the control of the College. To avoid the want of agreement and unity, the new Bill will legalize all members of the Profession, whether Doctor, Surgeon, or what not, and also all those who may, after the lapse of a few years, obtain a diploma from any College in the United Kingdom, providing the examination he shall have passed be as high as that conducted in the new College, shall be admitted a member of it under certain restrictions easy to comply with. The College will have a connexion with the State, a favour which no College at present enjoys. There will be an examination in midwifery, as well as other branches of medical study.

These appear to me to be numerous advantages, and when placed by the side of the objections named in the Petitions, the objections fall greatly in the shade, and ought to have no weight with any one desiring to have the Profession placed in its proper position among the numerous callings of men. I do not see why medical distinctions ought to be made missiles against medical reform. These are the only weapons of the objectors, and objectors of the General Practitioner fraternity, who, if possible, would raise themselves above individuals of a higher rank—namely, physicians.

The great objects of medical reform are the suppression of quackery, and raising the Profession in public and private esteem.

I conceive that both these objects will be accomplished by allowing the new Bill to become law. The sooner the first object is attained the better—the other will follow as a consequence of the measure. General Practitioners cannot lose one jot of their present privileges, but they will obtain new powers and new privileges by the new Bill.

Much is said of the constitution of present colleges. It is to me a matter of little moment. If the ruling bodies of such colleges inflate themselves with pride because of their peculiar privileges, they do not fill me with awe, but rather disgust and shame, that I should have a relationship to men who are so very foolish. Much is said of the incapacity of a physician to treat a surgical case, and of a surgeon to treat a medical case. Is this true? If so, I

beg most respectfully to say, that such persons are not fit to practise in any branch of the Profession. If it is not true; and every medical man may answer the question himself—if it is not true—what harm—what degradation—what insult is it to admit any one possessing either diploma, either medical or surgical, in the new college as a member? This fight about distinctions is disgraceful, and for men pretending to be enlightened and educated to denounce others equal to themselves in every respect, does not speak much of their honesty. The battle is not only disgraceful, but foolish, and must and will end in nothing. Let every opponent ask himself the question—what will the Profession gain by this battle—what shall I? The conscience will furnish a reply sufficiently stinging. I could prove, if necessary, that every man possessing a medical, surgical, or apothecaries' diploma alone, is quite able to all the exigencies of his professional calling, if he has only been attentive to his studies, during and subsequent to his pupilage; and I have cases also to show, where men who have been legalised in every sense of the word, have been no more fit to practise than a common quack. I need not mention names; but those who know their own incapacity will feel the truth of this remark; and yet some of these are the very men to make so much noise. While I agree with a great part of what is contained in several of the petitions, I cannot help stating, that the aim at proficiency appears to me to be useless. Such a reorganisation as some of the petitions refer to, will never be accomplished—for the obstacles in the way are so many. The attempt to make the College of Physicians a home for all sects of the Profession will never be agreed to, nor will the College of Surgeons be so remodelled as to admit Physicians and Apothecaries. The establishment of a new College, therefore, appears to me to be the best and most satisfactory method, especially since the Apothecaries' Company does not object to resign its powers in favour of such a College.

As is stated in one petition, that a new College of General Practitioners will prove "a great public and professional calamity," I may state that I do not see through the meaning of the expression. I think, in common with many others, that such an institution will be rather a good than a calamity, inasmuch as it will raise the position of those connected with it. Nor can I understand the meaning of that part of the Memorial which says, "in order that they may become tenant-occupiers of a College possessing neither medical nor surgical title." Such a College, if created, must surely have both titles if they are given to it, or at least if it is known that Practitioners in medicine and surgery are connected with it. Such a College, if created, must and will be the *home of a great body*, and a body not one jot inferior to any other exclusively medical or exclusively surgical, let opponents say what they will.

These are some of the views I entertain on this subject, and I trust they will be of some service, though I am doubtful, knowing that when once a man entertains an opinion, he will stick to it through thick and thin. Not being so stubborn myself, however, I will gladly yield if any one will be kind enough to show me that I am in error. In conclusion I propose that all who are in favour of the new Bill should at once send up their names, with a title appended, to your office—if you will be at the trouble to receive them—to put to a Petition that the Bill be made into law as early as possible.

I am, Sir, yours, &c.,

A Reformer of Abuses.

BELLADONNA AND NUX VOMICA.

[To the Editor of the Medical Times.]

Sir,—I must again trouble you with a few remarks, leaving it to your candour and judgment to decide whether they be worthy of a place in your valuable columns, and adapted to interest your intelligent readers. Presuming that the statements respecting the use of "Belladonna in Neuralgia," and "Nux Vomica in Intestinal Obstructions," pp. 586 587, are intended to draw attention to these medicines as novelties in the present application, I venture again to assure you that these remedies are of long standing among the followers of Hahnemann, who himself described their pathogenetic properties, and prescribed their administration. Mr. Postgate, your correspondent, states that he has "prescribed for several years in neuralgia, where the attacks returned at regular intervals, extract of belladonna with great advantage. My plan is," he continues, "to *induce* as soon as possible, its physiological effects on the system, manifested by pupils slightly dilated, sensation of dryness of the throat, and difficulty of swallowing," &c. This is very much like what the Homœopaths denominate "medicinal aggravation"—often a "good sign," in their treatment; and they may feel obliged to Mr. Postgate for attesting their solemn dicta respecting the pathogenetic properties of belladonna, for Jahr and others have long ago recorded the same symptoms, with many more still more important, namely: "Pupils immovable and generally dilated, but sometimes, also, contracted; spasms and convulsive movements of the eyes; eyelids wide open, &c."—*Jahr, Homœopathic Manual, Part I.—Belladonna*—p. 80. So much for the "eye-symptoms." Jahr continues:—"Great dryness and burning in the throat and on the tongue—inflammation and swelling of the throat, of the velum palati, of the uvula, and of the tonsils—suppuration of the tonsils—painful and difficult deglutition—complete inability to swallow even the least liquid, &c.—*Ibid.* The pathogenetic properties of this medicine fill nearly nine closely printed pages, enumerating its effects on the skin, sleep, fever, moral symptoms, head, eyes, ears, nose, face, teeth, mouth, throat, appetite, stomach, abdominal region, fæces, urine, genital organs, catamenia, larynx, chest, trunk, arms and legs—as is usual with regard to the pathogenetic properties of all the medicines in the homœopathic Materia Medica.

It must be evident that we would do well thus minutely to study the effects of our medicines, lest we confound *their* results with the symptoms of disease, as is very often the case.

The homœopaths class belladonna with aconite, cantharides, chamomile (the same which we pour by cupfuls into our children's throats), Peruvian bark, mercury, lead, hyoscyamus, valerian, and other medicines which exhibit similar "pathogenetic properties."

Amongst the very extensive list of diseases in which the homœopaths use belladonna, I find "nervous prosopalgia;" probably the same as Mr. Postgate's "neuralgia." It is also used in odontalgia of pregnant women, difficult dentition of children, *salivation from the abuse of mercury*, glossitis, *stuttering*, phlegmonous anguina, dyspepsia, vomiting, and other gastric affections, *dysentery*, hæmorrhoids, dysmenorrhœa, and metrorrhagia, *adhesion of the placenta*, puerperal peritonitis; in fact, in all diseases arising from engorgement of the glands, phlegmonous inflammations, or the *deficiency* of the circulation in the capillaries. Hence its efficacy, as stated, in diseases of the skin, erysipelas in the face, scirrhous and cancerous affections, scrofulous and mercurial ulcers, chilblains, and the stings of insects. See "Jahr" *ut antea*. I know by experience that it is of immense benefit in certain cases of *chronic constipation*, especially in cachetic habits.

Belladonna is one of the immediate homœopathic medicines in cerebral congestion, with vertigo, and *sanguineous* apoplexy.

Belladonna is in high repute with the homœopaths, and so is *nux vomica*, and precisely for the diseases in which you allude to its efficacy, namely, "*obstinate constipation*," principally caused by a *sedentary life* or by *the abuse of coffee*."—"Jahr," *antea*, p. 411. And yet it also cures mucous and sanguineous diarrhœa, as I can testify by a very recent and violent case, which was immediately relieved by this medicine. Blind and bleeding hæmorrhoids have also been cured by the proper administration of nux vomica, whose homœopathic pathogenetic properties are certainly worthy of attentive study, although they fill twelve closely printed pages.

Meanwhile, however, in drawing attention to these powerful medicines, it is highly important that the greatest caution be used in their administration. If we cannot adopt the homœopathic infinitesimals, we must dilute immensely lest we kill in seeking to cure, or, at least, fail to relieve, and yet inflict damage on the patient. Coffee and wine may prove antidotes in many cases of "medicinal aggravation" in the use of belladonna and nux vomica: but the allopathic practitioner must study the "indications" and the "pathogenetic properties" of his medicines, if he does not wish to grope in the dark where all should be light—the light of knowledge to guide him in the alleviation of suffering humanity. I cannot more appositely conclude these remarks than with the words of Dr. Wilson:—

"Every Physician, with large opportunities for observing the treatment of disease, may find repeated illustrations of this great practical truth in the perplexing variety of effects that follow the administration of the same medicine in cases apparently the same. How often, in the *published narrative of selected cases*, are we required to share in the surprise expressed, with unconscious simplicity by the author, at the untoward appearance of a pleurisy, an apoplexy, or an inflammation of the bowels, of which, although apparently unconnected with the previous symptoms, we find a ready explanation in the annexed list of prescriptions. Failing to arrest the actions of disease, medicine, too frequently, disturbs the succession on which their safe development depends. If unduly retained in the system, by interruption of the proper excretory functions, it becomes, in truth, a poison; of which the effects are determined in the lungs, or in the brain, to the serous or to the mucous membranes, by inflammation of their structure, or by fevers general throughout the system, according to the habits and temperaments of the patient, or other circumstances peculiar to the case."—*On Spasm Languor, &c.*, p. 61, *et seq.*

Surely such considerations should induce us minutely to investigate the peculiar powers or "pathogenetic properties" of our medicines, as well as the symptoms which determine a correct diagnosis. Boldness in his various prescriptions may characterize our young Practitioner; but it is painful to think of the calamitous results which will be required to sober down his superabundant energies. In this respect, at least, the followers of Hahnemann are safe.

If we cannot admit all their doctrine, let us nevertheless wisely consider their practice. If we believe that homœopathy cannot *cure* disease with its "small doses," experience ought to have long ago convinced us that we may *kill* by overdosing.

S—z.

THE RESIGNATION AT THE SOUTH LONDON DISPENSARY.

[To the Editor of the Medical Times.]

Sir,—I have read with great satisfaction your sensible and very able article on the above subject, and I hope it has made a due impression on the Profession. It is very true that many of the greatest ornaments of our Profession, in all ages, began the world in an humble way, some as assistants to Apothecaries, and others with open shops. Amongst them were some of the most esteemed Physicians and Surgeons to the Sovereigns of this and of other countries; and I could mention several of them by name who arrived at their high positions by the most honourable means, and without the envy, but, on the contrary, with the admiration of their *confreres* and of the public. It is not, however, necessary to do so, for every well-informed man in the Profession is aware that such things have been, and are constantly occurring; and that in the other Professions, as well as in our own, men of merit often make their way from a low degree to the highest eminence.

I am not, however, Sir, an advocate for appointing medical men keeping open shops—requiring a great deal of their time and personal attention—to medical officers in public institutions, because I am satisfied that gentlemen so engaged cannot spare time to do justice both to Hospital or Dispensary patients, and to the private practice of their shops; and it is but natural to suppose that the poor patients would be, under the circumstances, more or less exposed to neglect.

I am too strongly opposed to appointing general practitioners of any grade, whether keeping the shop open in the front of the house, or in a *snuggery* to the rear, to such officers, because the same objections apply equally to them all. It is utterly impossible, that a general practitioner, with his hands full of business, or engaged in making a practice, and driving about from house to house, at the rate of ten or twelve miles an hour, can apply sufficient time to the case of the poor at Hospitals or Dispensaries; and, indeed, wherever gentlemen of this class hold such offices, neglect of the poor patients is a probable consequence.

It is from a conviction of this nature, as I suppose, that a law exists in every Hospital and in most of the Dispensaries in the metropolis rendering general practitioners ineligible for the offices of physicians and surgeon; and I hope, that in any law that may be enacted by Parliament for regulating the medical profession, a clause will be inserted that will have the same effect in reference to every Hospital and public medical Institution in the United Kingdom. This is a subject upon which my opinions were, long ago, formed upon personal experience and observation; for, whilst yet a student, I was fortunate enough to get appointed apothecary to a large Dispensary; and, subsequently, I held the office of surgeon to a large parochial Infirmary for many years, so that I have had ample opportunities of becoming acquainted with the nature and extent of the duties of the medical officers to such Institutions; and I repeat, that they are totally in-

compatible with the business that devolves upon a medical man engaged in general practice.

The conduct of the Surgeons to the South London Dispensary in the matter that now agitates that Institution, reminds me of a bye-law enacted by the College of Physicians, some centuries ago, when the world was but just emerging from the darkness of the middle ages. The law was precisely in the spirit in which those gentlemen have acted, and ran, as nearly as I can recollect, in these words :—"No man laying his beginning in a shop, as an Apothecary, or in practice, as a Chirurgian, or any such artificer, shall ever be admitted a Fellow of our body."

The College of Physicians,—unquestionably the most learned Corporation, and now the most liberal in the Profession,—has departed from those absurd bye-laws and foolish distinctions, and there are now amongst the Fellows many men, the highest ornaments to the College, who began the world as apothecaries. The South London Surgeons would, however, in their small way, revive those petty distinctions to keep men as well, or, perhaps, better, educated than any of themselves, and in every respect as worthy and as respectable from coming between the wind and their gentility, because, forsooth, they keep open shops! The thing, really, is too bad, and too ridiculous,—a storm in a wine-glass.

I cannot see the professional or the social distinction that these gentlemen who keep their *shops*, which, for *the gentility of the thing*, they call *surgeries*, in obscure holes in the rear of their houses, want to set up between themselves and the Practitioners, who keep open shops, and sell their medicines over the counter.

They all come in the estimation of the Profession, and of the public too, under the same category. They all *compound and vend medicines*, and, consequently, they are all Apothecaries, and merge, in the act of trade, the dignity of the Surgeon, if Surgeons they happen to be by diploma.

But the business of the Apothecary is a most reputable and useful business, partaking a good deal of the nature of a Profession, and no man need be ashamed of it, who follows it honestly.

Amongst us, however, those who live and live well by it, appear to be too proud for it, and use the title of Surgeon (which they buy at Lincoln's-inn-fields, as I did myself, in a deluded hour, nearly thirty years ago) in preference to that of Apothecary. Though it is under the monopoly that the Apothecaries Act gives them, they practice medicine, and get their living. Take away from them the fruits of the Apothecary part of the practice, and leave them only what they get by surgery, and their poverty will soon cure them of their pride. The South London *Surgeons* would be, in that way, soon brought to their senses, and to a conviction of the fact, that they are, after all, and notwithstanding the title of Surgeon, only Apothecaries, and not a whit better in the eyes of the gentry of this country, than their brother of the open shop.

Let me now, Sir, in conclusion, express a hope, that the Governors of the South London Dispensary will not elect to the office of Surgeon him of the open shop, and that they will fill up the vacancies, occasioned by the recent resignations, by electing Physicians and Surgeons *totally unconnected with "compounding and vending medicines,"* by which course only they will succeed in securing to the objects of their charity and bounty that patient and deliberate attention without which disease cannot be properly investigated and treated.

M.D., Edin.

London, 26th May, 1849.

[To the Editor of the Medical Times.]

SIR,—As a Governor of the South London Dispensary, I am desirous of correcting a misconception into which you have involuntarily fallen. At a General Meeting of the Governors, held on the 17th of April, which I attended, it was distinctly enunciated on the part of our late Medical Staff that it was not a simple question of selling drugs; but, as it is an almost universal rule for the retailers of drugs to act also as agents or vendors of quack medicines, (which you boldly and frankly aver to be derogatory to the honour and dignity of the Profession,) the objection was made general, on account of the almost complete universality of the practice of uniting the retail sale of drugs with that of quack medicines; as such it was brought forward; as a question of Professional principle, and not as a matter regarding the private worth or respectability of any individual.

I have the honour to be, Sir,

Yours most obediently,

May 25th, 1849. VINDEX.

P.S. You are at liberty to make whatever use you may deem right and proper of this communication. It has been written simply with a view of removing an impression which, from your editorial remarks, you appear to entertain, that this has been a question relating rather to the social positions than to the Professional views entertained by the adverse parties.

GOSSIP OF THE WEEK.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, 24th May, 1849.—Sampson Kingsford Burch, Canterbury; Robert Jackson, Scotland; Joseph Brigstock Sheppard, Witney, Oxon; Henry Thomas Parke, Horncastle, Lincolnshire.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the diploma were admitted members of the college at the meeting of the Court of Examiners, on the 25th instant :—Messrs. George Edwin Williams, Dover; Seaton Wade, Royal Navy; William Barney Tate, Valparaiso, South America; Robert Donaldson, Ballybay, county of Monaghan; James Bernard Ruck, Prestbury, near Cheltenham; James Denton Hulme, Leicester; Henry Tapley, Dover; Claudius Galen Wheelhouse, Leeds; Charles Joseph Bullock, Congleton, Cheshire; and Thomas Johnson, Weymouth, Dorset.

GUY'S HOSPITAL.—Mr. J. Birkett, the Demonstrator of Anatomy at this Institution, has just been appointed Assistant-Surgeon to the Hospital; and has also been awarded the Jacksonian Prize, by the Council of the Royal College of Surgeons.

KENT OPHTHALMIC HOSPITAL.—Mr. J. H. Puleston, of the Charing-cross Hospital, has just been elected House Surgeon of this Institution.

UNIVERSITY OF LONDON.—A Deputation from the Senate of the University of London, consisting of the Chancellor, the Earl of Burlington, the Vice-Chancellor, Mr. J. G. Shaw Lefevre, Dr. Billing, Dr. Hodgkin, Mr. Kiernan, Mr. Ridout, and Mr. Warburton, had an interview with Sir George Grey yesterday at the Home Office.

THE WAR MEDAL.—Surgeon William Oastler, R.N., Stockton, has had the honour of receiving a medal awarded by Her Majesty for his services in an action fought in the Archipelago with a Turkish flotilla, July 5, 1808, Mr. Oastler being then on board H.M.S. Seahorse.

THE NATIONAL VACCINE ESTABLISHMENT.—Dr. Paris had an interview with Sir George Grey, on Saturday, at the Home Office, and presented the Annual Report from the National Vaccine Establishment.

NORTH DISPENSARY, LIVERPOOL.—Dr. Manley was elected Honorary Surgeon to this Institution on Thursday week.

PROGRESS OF THE CHOLERA.—The latest accounts from St. Petersburgh give the returns of cholera for the present year up to the 6th of May. These returns are looked to with some anxiety, as appearing to indicate a coincidence between the present and former visitation of the epidemic, as showing its tendency to recommence with severity after the first attack was thought to have ceased. According to these official announcements, the recent fatality of the disease is as great as it was before the period of its decline. From the beginning of the present year up to the 5th of May, a period of 18 weeks, there have been 2,384 cases, and 1,207 deaths; but during the last month there has been a very marked increase. The numbers for the 5 weeks ending the fifth of May, are 1,280 cases, and 580 deaths, or about equal to the numbers for the preceding 13 weeks. Many persons of respectable condition, and of high rank in society, have been carried off by this last attack. The total numbers in St. Petersburgh, from the commencement of the epidemic, are reported to be 21,812 cases, and 12,198 deaths; but there is reason to believe, that the actual amount of the attacks has been much greater. In France, the visitation appears to have been very severe in particular places; nearly one-half of the persons attacked have died. In the French towns, the procedure recommended by the General Board of Health here has been very generally followed. At Tours, the notifications of the London Board, and their recommendations as to the treatment of the premonitary symptoms, and as to diet, have been translated and distributed for the information of the inhabitants generally. In Christiana the views of the Board were adopted by the medical authorities, and recommended to be enforced by the Government. Cases of cholera have lately appeared in England—at Liverpool, Gloucester, Oldham, and Keynsham, near Bath. Though the attacks have been severe, the numbers appear hitherto to have been small, and the attacks of persons in the higher ranks have not been unfrequent recently even in England.

RETURN OF THE CHOLERA.—We regret to state, that the cholera has again made its appearance in the neighbourhood of Edinburgh, a woman having died from this fatal epidemic on Thursday, in the parish of Cramond, where a boy is also suffering from its effects.

CHOLERA.—REFUSAL TO VIEW THE BODY.—At an inquest held in the Paddington Workhouse, Harrow-road, on James Taylor, aged 24, the jury were with difficulty induced to view the body, it having been stated, that the deceased died of cholera. Dr. Mackenzie, Physician to the workhouse, said, that it was a decided case of Asiatic cholera, in its worst form. The deceased, it appeared, was in a state of starvation. The Coroner, Mr. Wakley, jun., declared it was the third inquest on persons who had died of cholera he had attended that day. [We should like to know how these sapient jurymen arrived at the conclusion, that cholera is so very contagious. In the case before them, starvation had induced the disease; and the Master of the workhouse, who had been in India, assured them, that he had seen thousands attacked, and yet he had never found it contagious.—ED.]

THE CHOLERA IN PARIS.—From the return of the military and civil hospitals, it appears that the cholera, after having remained stationary for forty-eight hours, has, within the last two days, shown a marked decrease, the average number of the admissions into the civil hospitals having fallen to 68. The only means by which the progress and intensity of the disease in private practice can be judged of, is by the report of the deaths. The number, per day, has decreased in the last five days; after being, on the 1st and 2nd of the month, 40 per day, it increased to 124 on the 12th. Since then it has fallen off; on the 18th, the number was 75; 19th, 93; 20th, 84; 21st, 63; and 22nd, 66.

THE CHOLERA IN MEXICO. — The cholera is constantly advancing in Mexico. Many of the towns along the rivers are almost depopulated by its ravages.

DOMINA BLACKWELL IN LONDON.—We understand that this lady, whom we stated had received the Degree of M.D. from the Geneva University, is at present in London.

ROYAL MATERNITY CHARITY.—On Tuesday last the Anniversary Dinner of this Institution took place at the London Tavern, Lord Robert Grosvenor in the chair. This Charity, it was stated, had now existed a century, and had administered relief to more than 400,000 married women. The Chairman adverted to the benefits this Institution conferred on the poor, by its allowing a large number of midwives being instructed there, "whose services, under ordinary circumstances, were more acceptable and beneficial to the poorer classes than those of Surgeons." [His Lordship has certainly been misled by some one. Poor women, even *under ordinary circumstances*, do not prefer midwives because their services are *more beneficial* than the surgeons, but rather because the midwife's fee is much lower than the accoucheur's. We should like for His Lordship to have stated in what respect midwives' services are more beneficial than those of the members of the Medical Profession.—ED. *Med. Times.*]

EXPENSE OF POOR-LAW MEDICAL RELIEF.—The rate in the pound which the charge for educating the poor, together with that of medical relief to the poor, bears to the annual value of real property assessed to the Property and Income-tax in 1843

(viz., 85,002,735*l.*) is 28-100ths of a penny in the pound, or one-farthing 3-25ths of a farthing in the pound.

Quackery.—The Belgian Courts have lately condemned to one year's imprisonment, and a fine of twenty francs, Francis Van Rymenant, of Antwerp, for illegally prescribing and compounding medicines. By the way, it seems that quackery is very rife in ingenious expedients. In one of the Brussels papers we find the following, among a host of advertisements, for lost watches, pins, &c. &c. "On Saturday last there was stolen a name plate, from the door of M. Lippschutz, dentist, from London, residing at No. —, ——— street. Whoever will return it shall receive five francs reward."

Progress of Medicine in Turkey.—Our readers will be gratified to learn, that a Medical Journal has actually been started in the Ottoman Empire,—an important sign of the times and the advancement of Medical Science. It is called, *La Gazette Médicale de Constantinople*, and is published in the French and Turkish languages. The Editor is Haïr-Ullah-Effendi, who signs himself, "*Docteur en Médicine et Directeur des Etudes de l'Ecole Imperiale de Galata-Serai.*" We hope to obtain the new Journal, and occasionally to analyse its contents.

Diseases of the Punjaub.—The diseases common to the country are the same as those observed throughout British India, fevers, liver complaints, and dysentery being the most frequent. The readiness with which change of temperature may be obtained presents, however, a valuable means of mitigation, and the climate of Cashmere, as regards healthfulness, is asserted, not without some show of proof, to be the finest in the world.

Diseases of California.—The diseases most common in California are fever, leprosy, and dysentery. The yellow fever is unknown; but intermittents are very common, the natural result of the ground being under water during four months of the year, the quantity of rain that falls, the great heat of the climate, and the intense fogs. Emetics and large doses of quinine are the usual modes of treatment. Leprosy is a very common disease in all the warm regions of America. Dysentery is the most fatal disease of the country, and caused, it is said, by the general use of fruits. Generally speaking, the climate is good; and, with temperate habits and prudence, any serious malady may be avoided.

Hospitals in China.—The Americans have founded hospitals at Canton, Shangai, Ning-po, and Hong-kong. At that of Canton, 8,247 cases have been treated from July, 1845, to December, 1847.

The Graveyard in Russell-court.—In consequence of representations made to the Bishop of London by the inhabitants of St. Martin's, respecting the crowded state of the Russell-court graveyard, and the horrible effluvium issuing from it, a proclamation has been issued by the Bishop, directing the churchwardens of the parish to prevent any more graves being dug or bodies being buried within that yard until further orders.

Meteorology.—Among the most important investigations of our own time we must assign a prominent place to those connected with meteorology. We may reasonably expect, within a comparatively short period, to ascertain the laws by which atmospheric phenomena, hitherto regarded as the emblem of inconstancy, are regulated. Observations of the most accurate kind are now made at all the magnetic and astronomical observatories in every part of the world; and the reduction and full examination of these have been made by Professor Dove. In a series of Memoirs presented to the Academy of Sciences at Berlin, this investigator has most industriously determined the progression of atmospheric temperature during an interval of 115 years—from 1729 to 1843. It is impossible for us to give any idea of the amount of labour, of the most severe description, which is bestowed on this examination,—of the great variety of interesting facts embraced in these Memoirs. It must suffice to state, that the gradual passage of the *isothermal lines* of January and July into one another exhibits over the century the utmost regularity.

Middlesex Hospital.—The annual dinner of this valuable Institution took place on Thursday last; His Grace the Duke of Northumberland in the chair; no less than 140 guests attending, when the gratifying intelligence was announced, that the contemplated alterations and improvements had been fully and completely carried into effect.

New Use of Hydrophytes.—A French naval Surgeon, Dr. Gonleven, observing the avidity with which cows eat certain sea-weeds, as *Laminaria leptopoda*, *digitata* and *palmata*, contrived to make from them a good and nutritious soup,—a very acceptable addition to the table of the poor cottager in the absence of potatoes. In Scotland, these species of Algæ are commonly eaten, and "Dulse and Tangle" is among the street-cries of Edinburgh. In the Himalayas, a species of *Laminaria* is called *goitre-leaf*, because chewed by the inhabitants where goitre prevails.

MORTALITY TABLE.

For the Week ending Saturday, May 26, 1849.

Causes of Death.	Total.	Average of Five Springs.
All Causes	897	963
Specified Causes	893	959
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	233	198
Sporadic Diseases:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	47	48
Tubercular Diseases	155	200
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	122	123
Diseases of the Heart and Blood-vessels	20	34
Diseases of the Lungs, and of the other Organs of Respiration	139	131
Diseases of the Stomach, Liver, and other Organs of Digestion	51	62
Diseases of the Kidneys, &c.	12	11
Childbirth, Diseases of the Uterus, &c.	6	8
Rheumatism, Diseases of the Bones, Joints, &c.	5	8
Diseases of the Skin, Cellular Tissue, &c.	2	1
Malformations	1	3
Premature Birth and Debility	18	21
Atrophy	19	17
Age	27	50
Sudden	9	11
Violence, Privation, Cold, and Intemperance	27	33
Causes not Specified	4	4

TO CORRESPONDENTS.

"P. P., a Non-Medical Subscriber, at Brighton," is informed, that so long as he continues to attend so well to the condition of his body, locally as well as generally, he may bid defiance to the elements, the seasons and their vicissitudes, and also to the greater part of the ills that flesh is heir to. He must, however, guard against one thing—against taking too much care of himself. This is a rock on which many split; and the anxiety he manifests is not a healthy symptom. It is never wise, in this climate, to make sudden changes in dress. Before this is done, be sure that the swallow finds himself at home with us; and then our Correspondent may relieve himself of his inexpressibles, provided he loses a portion of them daily.

A Correspondent, who signs himself "Paul Pry," informs us that, passing through Basinghall-street lately, he had the curiosity to turn in and hear Dr. Southey deliver a Gresham Lecture on the Practice of Physic. Our Correspondent is anxious to know who these Lectures are intended to benefit, as the members of the Profession either appear to know little about them, or take but little interest in them. He thinks these Lectures might be made useful, if the time appointed for their delivery were changed, and the subjects well chosen.

"A Legal Practitioner."—1. The Charter of the London College of Physicians does not interfere with the privileges of the "Two Universities." 2. A candidate for a License *ad Practicandum in Medicinâ* from Cambridge is required to pass an examination to the satisfaction of the Regius Professor of Physic, the Professor of Anatomy, the Downing Professor of Medicine, and a Doctor of Physic, to be nominated by the Vice-Chancellor, and approved by the Senate at the first congregation after the 10th of October in each year. The fee for the license is £11 6s.

"Scotus" informs us that, at a recent trial, in which he had to give medical evidence, he was astonished to hear the counsel for the prisoner maintain, that the hands and feet, uncovered, were not weapons. Our Correspondent wishes to know, if there is good authority for this opinion. We believe that it has been held by most of the judges, that the teeth, hands, and feet, uncovered, are not weapons. Artificial arms and legs, however, are considered weapons; and Dr. Taylor mentions a case in which an effort was made by counsel to save a prisoner, who had committed an assault with a wooden arm, by an attempt to prove that it had become, by long use, a part of the body, and ought not to be considered a weapon in law. The objection was overruled.

"Cantuar."—There is no legal claim.

"Amicus."—Injection of a solution of nitrate of silver has been found useful in dysentery.

"Erinensis."—To visit, prescribe, and dispense legally, the Apothecaries Certificate is necessary.

"Mr. Westell."—Ergotine has been employed with advantage in hæmorrhages not uterine. M. Bonjean of Cambray, records a case in which the flow of blood from a wound in the hand was checked in two minutes, when compression had been used in vain.

"Galen."—An Edinburgh degree does not confer the right of practising as a physician within seven miles of London. The College of Physicians will admit to examination.

"A Medical Apprentice."—The indentures will be received at the Hall.

"A Practising Surgeon."—The druggist is open to a prosecution.

"A Pupil of St. Thomas's."—Less than two grains of Arsenic have been known to destroy the life of an adult. Reinsch's process is a good one for detecting the poison in the tissues.

"G. F. M."—A candidate for an Assistant-Surgeoncy in the army is required to fill up a blank form of Certificate, which may be obtained at the office, by written application to the Director-General.

"Accoucheur."—Dr. Simpson, of Edinburgh, whom we consider a good authority, states, that, in his opinion, in anencephalous monsters, the malformation arises from intra-uterine disease.

"L. J. Berry."—(1) The matriculation examination at the London University takes place once a-year, and commences on the first Tuesday in July. (2) The candidate must be sixteen years of age. (3) The fee is two pounds, which is not returned if the candidate fail to pass; he is, however, admissible to a subsequent examination without paying any additional fee.

"Senex."—A Medical Reform Bill has not been introduced this session into the House of Commons.

"A Physician."—The appointment is in the gift of the Corporation of the City of London.

"Alpha" being forty years of age, and a legal medical practitioner, will be admitted to examination at the College of Physicians.

"A regular Subscriber, Manchester."—Gutta Percha is imported from Borneo. The botanical history of the trees which yield it is unknown.

"James."—The quantity of animal matter in the bones varies in different classes of animals. In the mammalia it is generally about thirty-three per cent.

"An Old Medical Practitioner" asks, "What is jervine?" It is an alcaloid which accompanies veratrine in veratrum album. It is prepared by a process similar to that for veratrine, from which it is separated by the facility with which it chrystallizes from its alcholic solution. When pure it is white, easily fusible, totally decomposed at 400°, slightly soluble in water, but copiously in alcohol. Crystalized jervin contains 4 Aq.

"Nemo."—The College of Surgeons does not require an apprenticeship indenture, but proof that a candidate for the diploma has been engaged at least four years in the acquisition of Professional knowledge.

"E. G., M.B."—(1) Symptoms of perforation often come on suddenly after eating a large meal. (2) Death generally follows the lesion in a few hours, but cases have been known in which persons have survived for months.

"A Poor Man."—We do not prescribe through our columns. Consult some properly qualified medical practitioner.

"One about to Emigrate."—An English Surgeon may practise his Profession in the United States without subjecting himself to a prosecution.

"N., Gosport."—We cannot answer the question.

"Inquirer."—A young man not having attained the age of 21 at the time of passing the Apothecaries' Act, in 1815, is not a legally qualified practitioner, though in actual practice prior to that period.

A Correspondent has forwarded to us copies of four letters which have been published in the *Liverpool Mercury*, in reference to Mr. Goldsmith, against whom a coroner's verdict has been returned, of having caused the death of a man by administering a large dose of Morphia, when he was suffering from *delirium tremens*. Mr. Alfred Higginson states, that, if the sleep following the dose taken by the patient had not been interfered with, the result might have been otherwise than it was. Dr. Simpson gives it as his opinion that the sheet-anchor in the treatment of *delirium tremens* is opium, and that half a grain of acetate of morphia, or even thrice that quantity, is too large a dose in bad cases. Professor Lizars says that he gives opiates in this disease alternately with small doses of stimulants, and that a grain-and-a-half of acetate of morphia, administered as a dose to a powerful man, is not too much. The practice of giving narcotics in *delirium tremens* is sanctioned by use and by great names, and there is no doubt that much benefit often results from this plan of treatment. When opium is given, the dose of course must be regulated by the state of the patient.

"Mr. Postgate, Kilham, Yorks," is thanked for his communication.

"A Young Subscriber."—The large towns of British North America are well supplied with Medical men, and open shopkeeping does not prevail to the extent it does in London. We do not know of any books published on the subjects referred to.

"Chirurgus" shall be answered next week.

ORIGINAL LECTURES.

HUNTERIAN LECTURES

ON THE

GENERATION AND DEVELOPMENT OF THE INVERTEBRATED ANIMALS.

By RICHARD OWEN, F.R.S.,

Hunterian Professor and Curator of the Museum of Royal College of Surgeons, Corresponding Member of the Institute of France, &c.

[Reported expressly for the "Medical Times," and revised by the Lecturer.]

LECTURE VII.

GENERATION OF ENTOZOA.—General characters of this groupe of parasitic animals, and of its primary divisions, Sterelmintha and Cœlelmintha, with those of their orders.—The Nature of the problematical Acephalocyst discussed,—and that of the genus Gregarina.—Generation of the ordinary or admitted Entozoa: tabular conspectus of those of the Human Subject.—Re-production of the Cœnurus cerebralis.

MR. PRESIDENT AND GENTLEMEN,—We come now to the survey of the generative organs and functions in another primary division of the Animal Kingdom, to which Cuvier has given the name of ARTICULATA, from the jointed structure of the body, or of the limbs, or of both. In commencing the study of the generation of the Articulata in the same ascending order in which we pursued it in the *Radiata*, we have to retrace our steps and go very low down in the scale of animal life. But, perhaps, before entering on the proper subject of this Lecture, it may not be unacceptable briefly to recapitulate the leading facts which a survey of the generative phenomena in the radiated animals presented. Beginning with the Infusoria, and taking the Polygastric Monads as the typical members of the group, the only determined mode of generation for the *Polygastria* generally was by spontaneous fission; gemmation was exceptional and limited to the Vorticelline family. The propagation of the Polygastria by ova or impregnated germ-cells rested on analogical grounds chiefly.

Spontaneous fission would seem to result from the properties of the clear nucleus, or the so-called "testis,"—a self-repellent power as regards its own matter, and an attractive power in respect to surrounding matter. The division of the nucleus and self-repulsion of its moieties were followed by a re-arrangement of the other parts of the monad, by which the whole body became divided into two, the two preliminary clear centres acting as two distinct centres of assimilative force, and exciting, perhaps governing, the development of the parts required for the full completion of each individual resulting from the spontaneous fission. The physical characters of that nucleus resemble those of the matter of the spermatozoa in higher animals. The interspaces between the nucleus and other organs of the Monad were occupied by smaller cells, which have been called "germ-cells," and by Ehrenberg, "ova;" and the last action of the rupturing Monad was to give exit, and apparently to disperse the fecundating principle of the nucleus amongst these germ-cells.

In the lowest forms of the Polypi, *e. g.*, the *Hydra*, was manifested a mode of propagation, not by division into two, but by pushing out a bud, which became a perfect hydra. But it is well determined in this polype that there is a formation of true ova, and also of sperm-sacs, so that here we have two kinds of propagation, one parthenogenetic, the other by impregnation. If gemmation is incomplete, or only carried to a certain point, you have a compound instead of a simple animal, as, *e. g.* in most of the marine Hydrozoa. The hydra, according to M. Laurent, quits the ovum in the miniature form of the parent; but this is not so in regard to the other polypi. The ova in these do not give issue to a young miniature polype, but to a larva of a very different form. Often like a microscopic Planaria, ciliated and vermiform, whence such larva has been called *planula*; or, instead of a planula coming forth from the ovum, a little creature of locomotive powers is developed, not to be distinguished from the smaller medusoid species of acalephæ. Here, indeed, there still remains a gap in the series of observations: viz., the destiny of the such medusoid larvæ, and how the ova are developed from it into polypi. But what renders it almost certain from analogy that such larvæ are oviparous, and produce polypi, is, the complete series of observations made on the mode of propagation in the larger acalephæ, to which the small acalephoids from the compound polypes are so similar. The male and the female elements are severally developed in distinct individuals in the medusæ; and in certain species, the ovum is received, after impregnation, into a marsupial sac; in which development takes place. And here it is essential to recollect, that the ova of the Medusa are devoid of the chorion, and consist, as in the Hydra, of the germ-yolk only. That germ-yolk being impregnated, is converted into a germ-mass, by the series of reiterated divisions, which I have so often had occasion to describe; and, through the mysterious influence and operation of a plastic force upon the germ-mass, there results the production of the ciliated animalcule, called the planula.

In the Echinoderms, the general course of the reproductive phenomena were very analogous to those of the Polypi and Acalephæ. The germ-mass, formed as in the Acalephæ, is transmuted into a ciliated larva, which is either changed into a pedunculated and adherent polypoid animal, as in *Comatula*, or assumes rather the character of a small ciliograde Acalephe, sketching out and temporarily manifesting the form of the class which is inferior to the Echinoderma in the Radiated Series. The subsequent progress into the ophiura, or the echinus, was detailed in the foregoing lecture. This progress cannot be strictly called one of mere metamorphosis. What is of most importance to notice, in the larval Pluteus, is the large mass of nucleated cells, or of the unchanged germ-mass, which has been termed the stomach. Now, it is this germ-mass which gives rise to the parts of the nascent ophiura or echinus. These were not formed by a change of the parts of the Pluteus into the parts of the echinus, but by a development of these by a kind of gemmation from within the pluteus, which ultimately perishes and is cast off; so that it is rather a process of metagenesis, than of metamorphosis; and the essential condition of that process was the un-used up germ-mass, and is to be recognised by duly comprehending the processes going on in the ovum after the act of impregnation, which result in the diffusion through the germ-mass of the spermatic force.

We come now to the consideration of the generative economy in the lowest forms in the great Articulate series. We may regard the Entozoa as representing persistent embryonic forms of the typical Articulata. They were left among the *Radiata* by Cuvier.

There are few common and positive organic characters which can be attributed to this very extensive and singular group of parasitic animals comprehended under the class-designation of *Entozoa*. They have generally a soft, mucous, and colourless integument, which, in a few species, is armed with spines. That the integument should be uniformly white or whitish might, *à priori*, have been expected of creatures which are developed and exist in the dark recesses of other animal bodies. The mature ova are almost the only parts which naturally acquire a distinct colour; and the sub-transparent body sometimes derives other tints from the accidental colour of the food. Excluded also by the nature of their abode from the immediate influence of the atmosphere, no distinct respiratory organ could be expected to be developed in the *Entozoa*; and this negative character is common to the Entozoa with most of the other *Radiata* of Cuvier. In animals surrounded by and having every part of their absorbent surface in contact with the secreted and vitalised juices of higher animals, one might likewise have anticipated little complexity and less variety of organisation. Yet the workmanship of the Divine Artificer is sufficiently complicated and marvellous in these outcasts, as they may be termed, of the animal kingdom, to exhaust the utmost skill and patience of the anatomist in unravelling their structure, and the greatest acumen and judgment in the physiologist in determining the functions and analogies of the structures so discovered. What also is very remarkable, the gradations of organisation that are traceable in these internal parasites reach extremes as remote, and connect them by links as diversified as in any of the groups of the true Zoophyta, although the members of these play their parts in the open and diversified field of nature.

Beginning with the lowest link of the Entozoal chain we have to commence with a condition of organisation more simple than is presented by the lowest Infusory or Polype. We end with a grade of organisation, which, whether it is to be referred to the radiated or articulated types, zoologists and anatomists are not yet unanimous.

Amongst the vermiform animals with colourless integument, colourless circulating juices, and without respiratory organs, two leading differences of the digestive system have been recognised: in the one it is a tube with two apertures contained in a distinct abdominal cavity; in the other it is excavated or imbedded in the common parenchyme of the body, and has no anal outlet. The first condition characterises the "Cœlelmintha," or *Vers Intestinaux Cavitaires* of Cuvier; the second the "Sterelmintha," or the *Vers Intestinaux Parenchymateux* of the same naturalist.

The cavity worms of Cuvier include the cylindrical species, or round worms, which form the order *Nematoidea* of Rudolphi.

This great entozoologist, who devoted the leisure of a long life to the successful study of the present uninviting class, divided the parenchymatous Entozoa into four other orders.

The *Acanthocephala*, in which the head has a retractile proboscis armed with recurved spines, the body round and elongated, and the sexes in distinct individuals.

The *Trematoda*, in which the head is unarmed, and has a suctorious foramen, the body rounded or flattened, and generally one or more suctorious cavities for adhesion, and in which the organs of both sexes are in the same individual.

The *Cestoidea*, in which the body is elongated, flattened, and generally articulated. The head, variously organised, is provided with suctorious cavities and a central mouth, sometimes armed with a coronet of hooks, sometimes with four unarmed or uncinated tentacles. Both kinds of generative organs are combined and multiplied in the same individual.

Lastly, the order *Cystica*, in which the body is rounded or flattened, and terminates posteriorly in a cyst, which is sometimes common to many individuals. The head is provided with suctorious cavities; and the mouth, with a circle of hooklets, or with four unarmed or uncinated tentacles. No distinct generative organs have been clearly detected in the cystic Entozoa.

The generative system of the Entozoa is so distinct in each of these orders that I shall describe it successively in a few typical species, selecting mo e especially for demonstration those which infest the human body; and which chiefly concern the medical practitioner.

In this category the common pathological product, called "Acephalocyst" by Laennec, is by many received, and ought not, perhaps, in this place to be omitted. The acephalocyst consists of a sub-globular or oval vesicle filled with fluid. Sometimes suspended freely in the fluid of a cyst of the surrounding condensed cellular tissue; sometimes attached to such a cyst; developing smaller acephalocysts, which are discharged from the outer or the inner surface of the parent cyst. These acephalocysts vary from the size of a pea to that of a child's head. In the larger ones the wall of the cyst has a distinctly laminated texture. They are of a pearly whiteness, without fibrous structure, elastic, spurting out their fluid when punctured. Their tissue is composed chiefly of a substance closely analogous to albumen, but differing by its solubility in hydro-chloric acid; and also of another peculiar substance analogous to mucus. The fluid of the acephalocysts contains, according to Lobstein, a small quantity of albumen with some salts, including muriate of soda, and a large proportion of gelatin.

The tunic of the acephalocyst is usually studded with more or less numerous and minute globules of a clear substance, analogous to the "hyaline nucleus," whose remarkable properties in reproductive cells, has been so frequently illustrated in previous Lectures, and from which the young acephalocysts are developed. No contractile property, save that of ordinary elasticity, has been observed in the coats of the acephalocyst; no other organization than that which I have just described; no other function than that of assimilation of the surrounding fluid by the general surface, and the development of new cells from the nuclei of hyaline. We see with how little reason such a body can be compared with the *Volvox globator*, as has been done by Professors Nitzsch and Leuckart. The discovery of the composite character of that low organised infusory and the elucidation of the anatomy of each constituent monad prove the acephalocyst to stand on a still lower step in the series of organic structures. A better comparison is that which approximates the acephalocyst to the *Protococci* of the vegetable kingdom; these lowest forms of cryptogamic plants, consisting of a simple transparent cyst, and developing embryo cysts from their external surface. The knowledge that we now possess of the primitive embryonic forms of all animals and of all animal tissues, places us in the position to take a true view of the nature of the acephalocyst. It seems to me to be most truly designated as a "gigantic monstrous organic cell," not as a species of animal, even of the simplest kind.

Yet these productions have not escaped the ingenuity and discriminative powers of the classifier. Of the numerous species, nominal or real, which are to be found in the works of naturalists and pathologists, the two following are most familiarly known:—1st, the *Acephalocystis Endogena* of Kuhn, likewise called *Socialis, vel prolifera*, by Cruveilhier: the "Pill-box Hydatid" of Hunter. It is the kind most commonly developed in the human subject, and in which the fissiparous process takes place usually from the internal surface of the parent cyst, the progeny being sometimes successively included: and, 2ndly, the *Acephalocystis Exogena* of Kuhn, *Eremita, vel Sterilis*, of Cruveilhier, which developes its progeny generally from the external surface, and is found in the ox and other domestic animals.

Mr. H. Goodsir has described three species of the genus *Acephalocystis*; the specific characters being derived from the structure of the germinal membrane, (the membrane from which the young originate,) also from the mode of growth and structure of the young Hydatids.

In *Acephalocystis simplex* the membranes appear to be more or less inseparable, transparent, and the young vesicles are very few in number.

In *A. Monroi* the germinal membrane, is divided by means of a fibrous tissue, into numerous compartments, each of which is occupied by a delicate transparent vesicle filled with cellular substance, of which the cells or divisions are very large. Each of these vesicles contains one or more small dark bodies—the young Hydatids.

In *A. armatus* the young arise from the germinal membrane of the parent as very distinct small separate vesicles, which at first are quite transparent, but soon become opaque from the addition of young within them.

A small transparent vesicle jutting out from the surface of the germinal membrane is the first vestige of a young Hydatid, which speedily becomes opaque in consequence of young cells growing within it. This very soon separates, and then becomes what Mr. Goodsir terms a secondary Hydatid. The young cells which were seen growing within it before its separation now also increase in size, and soon become parent cells, but do not separate from the germinal membrane of their parent until she escapes from the primitive Hydatid. Thus there are four generations, the primitive Hydatid still containing the three generations to which she had given birth.

If the primitive Hydatid is buried so deeply in the tissues of the infested being as to prevent the escape of the secondary Hydatids, with their two inclosed series of young, decomposition ensues, upon which they speedily disappear.

And now some may naturally be tempted to ask, having heard this description of a free and independent being, whose tissues are chemically proved to be of an animal nature, imbibing nourishment without vascular connexion with the cavity containing it, and reproducing its kind, How is an animal to be defined, if this be not one? The answer that the acephalocyst has no mouth may, perhaps, not be regarded as satisfactory, and, indeed, ought not, as I shall presently show with reference to the *Gregarinæ*. But, definitions apart, our business is to discover to what organic thing the acephalocyst is most similar.

The primitive forms of all tissues are free cells, which grow by imbibition, and which develope their like from their nucleus of hyaline. All the animal tissues result from transformations of these cells. It is to such cells that the acephalocyst bears the closest analogies in physical, chemical, and vital properties. When the Infusorial Monads are compared to such cells, and man's frame is said, by a figure of speech, to be made up of such monads, the analogy is overstrained, because no mere organic cell has its mouth, its stomach, its pulsatile sac, &c. So also it appears to me that the analogy has been equally overstrained, which makes the acephalocyst a kind of monad, or analogous species of animal. We may, with some truth, say that the human body is primarily composed or built up of acephalocysts; microscopical, indeed, and which, under natural and healthy conditions, are metamorphosed into cartilage, bone, nerve, muscular fibre, &c. When, instead of such change, the organic cells grow to dimensions which make them recognisable to the naked eye, such development of acephalocysts, as they are then called, is commonly connected in the human subject with an enfeeblement of the controlling plastic force, which, at some of the weaker points of the frame, seems unable to direct the metamorphosis of the primitive cells along the right road to the tissues they were destined to form, but permits them to retain, as it were, their embryo condition, and to grow by the imbibition of the surrounding fluid, and thus become the means of injuriously affecting or destroying the tissues which they should have supported and repaired. I regard the different *Acephalocysts*, therefore, as merely so many forms or species of morbid or dropsical cells.

The conclusion to which the known phenomena of the parasitic Gregarinæ lead is a different one; and to this much-mooted question I next pass.

In 1826, M. Léon Dufour described and figured some minute Entozoa, of very simple form and structure, which he discovered in the alimentary canal of several species of Coleoptera.

Subsequently, in 1828, detecting them in great abundance in the chylific stomach of the Earwig in the month of August, the same distinguished entomologist communicated a particular description of them to the "Annales des Sciences," 1828, (Vol. xiii., p. 366), proposing the name Gregarina for the genus; and he gives three figures of the species, under the name of *Gregarina ovalis*. It is half a line in length.

One individual is characterised as having a spherical anterior segment. In a second this appears to have been lost, and is said to be replaced by a sort of skull-cap (*Calotte*). The third, besides the constriction defining the anterior sphere, shows another constriction equally bisecting the trunk. Of this latter specimen Dufour remarks:—"Deux individus fixés bout à bout ou tête à queue, peut-être accouples." Making the same mistake or misrepresentation of the phenomena which Leeuwenhoek did, when he first witnessed the process of spontaneous fission in the infusorial Monads.

M. Dufour could detect nothing in the interior of these parasites except "des corpuscules arrondies." They were observed to vomit these "corpuscles" by the anterior end (probably after the fission); and thus we have most probably a second generative phenomenon, as in the Monads.

Siebold, in 1837, not succeeding in observing any signs of voluntary movement in the *Gregarina*, rejected them at first from the kingdom of completely-formed animals, and supposed them to be eggs of insects.

Returning to the investigation, he soon, however, renounced his first opinion, and retained the genus, as unique and exceptional in its nature amongst the Entozoa.

He observed, in some, a feeble contraction of the body, producing a vermiform figure. They consist of a very firm, smooth, completely-closed skin, which is highly elastic, and includes a milk-white, minutely granular mass, imbedded in which there is a clear cell, including smaller cells. Usually only two individuals were seen to be attached to one another. "Auch sah ich gewöhnlich nur *zwei* individuen aneinander kleben."

Dufour had conjectured, that the genus *Gregarina* might belong to the *Trematoda*. Siebold, with better judgment, refers the genus to the order *Cystica*. He describes several species; and figures some in the state of spontaneous transverse fission; but misinterprets this as two complete individuals sticking together. Each separating moiety shows the central multinucleate cell. Schleiden has viewed these Gregarinæ as essentially a single organic cell, and would refer them to the lowest group of plants. And here, indeed, we have a good instance of the essential unity of the organic division of matter. It is only the power of self-contraction of tissue, and its solubility in acetic acid, which turn the scale in favour of the animality of the Gregarinæ; they have no mouth and no stomach, which have commonly been deemed the most constant organic characteristics of an animal.

1846, Henle and others have questioned the title of the *Gregarina* to be regarded as an organic species or individual at all, or as any thing more than a monstrous cell: thus applying to it my idea propounded in 1843 of the true nature of the acephalocyst.

1848, Kolliker has recently published an elaborate memoir on the genus, in which good and sufficient grounds are given for concluding that the gregarina not merely resembles, but actually is an animated cell; it stands on the lowest step of the animal series, parallel with that of the single-celled species of the vegetable kingdom. The Gregarina consists, as Schleiden and others have well shown, of a cell-membrane, of the fluid and granular contents of the cell, and of the nucleus with (occasional) nucleoli. The nucleus is the hardest part, resisting pressure longest, like that of the Polygastrian. It divides, and its division is followed by spontaneous fission. Sometimes the establishment of the two centres of assimilative force separates the cell-contents into two groups, without the concomitant division of the cell-wall; but an inner partition-wall is developed.

Another mode of propagation is then set up; the granules of the divided cell-contents, as if impregnated, develope cells, divide and subdivide, and are ultimately resolved into embryos having the form of *Navicellæ*; but without the siliceous shell. Kölliker is of opinion, from the frequent co-existence of these pseudo-navicellar capsules with the ordinary *Gregarinæ* and the identity of structure of the capsules, prior to the developement of the pseudo-navicellæ, that this is one mode of propagation of the Gregarinæ, but the progress of the Navicella to the Gregarina has not been seen.

The firm nucleus of the Gregarina answers to that of the Polygastrian; the cell-membrane to the ciliated integument, and the granular contents to the more-specialised cells which surround the nucleus of the Monad. The Gregarina is a parasitic Monad, and the most simple of the animal kingdom. It differs from the single-celled plant by the contractility of its tissue, and the solubility of its cell-wall by acetic acid.

Passing now to the less dubious or problematical forms of Entozoa, I may remark, that the numerical extent of this class may be conceived from the fact, that hitherto there has hardly been a species of animal dissected, in which there has not been found at least one species of Entozoon peculiar to it, and generally more. The human body itself has been

found to be the seat of no less than fifteen well-determined species, enumerated in this tabular conspectus:—

Species.	*Situs.*
1. *Echinococcus hominis.*	Liver, urinary bladder.
2. *Cysticercus cellulosæ.*	Intermuscular cellular tissue; eye; brain.
3. *Tænia solium.*	Small intestines.
4. *Bothriocephalus latus.*	
5. *Distoma hepaticum.*	Biliary ducts.
6. ——— *lanceolatum.*	
7. *Filaria medinensis.*	Subcutaneous cellular tissue.
8. ——— *oculi.*	Eye.
9. ——— *bronchialis.*	Bronchial tubes.
10. *Trichocephalus dispar.*	Cœcum.
11. *Strongylus gigas.*	Kidney.
12. *Ascaris Lumbricoides.*	Small intestines.
13. *Oxyurus vermicularis.*	Rectum.
14. *Trichina spiralis.*	Striated muscular fibre.
15. *Spiroptera hominis*	Urinary bladder.
(?) *Dactylius aculeatus.*	Urine.

Independently of the doubtful products called Acephalocysts.

With regard to the *Trichina Spiralis*, this may be the young or larva of some before-known Nematoid species; and the organization of the *Dactylius* as described, and very accurately, by Mr. Curling, is so similar to that of the Annelidous Naids, and so superior to the Nematoidea, as to leave a suspicion on my mind that the specimens might have been introduced accidentally into the utensil in which they were found, and that they had not been developed in the kidneys or the urinary bladder.

Resuming the consideration of the generative economy of the Entozoa, I proceed to the species admitted by Rudolphi into his order *Cystica*, and commence with that very remarkable genus *Cœnurus*, of which no representative has hitherto been found in the human subject.

The most common seat of the best known species of this parasite is the substance of the brain of the sheep, whence it has been designated *Cœnurus Cerebralis*. A nearly allied species of *Cœnurus* is, however, occasionally found in the subcutaneous and intermuscular cellular tissue of the tame rabbit. This entozoon consists of a globular cyst, like that of that of the acephalocyst; but from the walls of this cyst there project numerous well organised contractile vermiculi, with a head provided with suctorial acetabula and a coronet of hooks. These vermiculi can protrude themselves from the outer surface of their base of attachment or retract themselves wholly within their common cyst, whence the name of the genus, the cyst being figuratively regarded as the tail or common termination of the numerous tœniiform vermiculi.

Our present knowledge of the generation of the *Cœnurus* is limited to one of the alternating modes, viz., the gemmation of the armed and suctorious vermiculi, the phenomena of which process have been carefully traced by Mr. H. Goodsir, who has communicated an able memoir on this subject to the Royal Society of Edinburgh. The common or parent cyst is composed of two layers of substance, —the external one fibrous, or striated, in different directions; the internal of a delicate pulpy texture, locally thickened, and studded with minute clear cells. The gemmation of the vermiculi is not a process of continuous growth from the tunics of the parent cyst, but commences from an independent cell, situated between the layers, like the commencement of the bud from the hydra. Mr. Goodsir has figured the progressive multiplication of cells from the primary one, closely analogous to the mode of establishment of the germ-mass from the primary-impregnated germ-cell in ova, until the cellular basis of the vermicule is established, it pushes out before it the external fibrous layer of the mother-sac; and the organization of the head is completed by the metamorphosis of the pre-developed cells. At this point, however, the generation by gemmation is arrested; the young individual is not cast off like the young hydra, its base continues in organic connexion with the parent stock, and thus a compound animal, or aggregate of vermiculi results, analogous to the compound polypes, or, as regards the general form of the community, to the volvox globator.

The question which remains to be solved is, how the parent hydatid originates; two modes may be conjectured: either it is the result of the development of an organic granule, nucleus, or cell, of the animal infested, according to the hypothesis of fortuitous or spontaneous generation; or it is developed from an impregnated germ-cell detached from a pre-existing *Cœnurus*, and potentially endowed with the special mode and direction of the plastic force which issues in the repetition of the same organic form as the animal from which it proceeded. Analogy points to the latter as most accordant with actual physiological experience, agreeably with which we should have in the *Cœnurus* an additional instance of the alternation of generation from a free germ, with generation from a still included one, or of oviparous reproduction, with parthenogenesis by the mode of incomplete gemmation.

LECTURES ON MATERIA MEDICA,

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS.

By GOLDING BIRD, M.D., F.R.S.,
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[Reported expressly for this Journal.]

LECTURE III.

THE MATERIA MEDICA OF THE 17TH CENTURY.

MR. PRESIDENT AND GENTLEMEN,—I propose, on the present occasion, occupying your time by the consideration of some very curious and unique specimens, to which great interest attaches, in consequence of their being the landmarks of theories of past times, and of the peculiar relations they possess to certain modern pathological views. In consequence of the general belief, in those days, that all diseases were caused by morbid states of the blood, they looked for some medicine to oppose this influence,—believing the blood to be the life of the flesh, they looked for something wherewith to vitalize this force in the blood, and hence their search after specific remedies. As a consequence of this theory, we have now in our Museum a large quantity of remedies, under the title of Bezoars, derived from the Persian *pazahar*, signifying "antidotes to poison," a name applied to almost every substance which possessed an influence over diseased conditions of the blood. In their search after these bezoars, the first was made among living animals, in consequence of the idea that we should one day or other be capable of conveying the vital influence to a patient when diseased. The practice was common, three centuries ago, of endeavouring to elevate the powers by enveloping the patient in some animal recently killed, and thus, in typhoid disease, they would kill an ox or a cow, and place the patient in the yet warm blood of the animal. We read, that in the case of Cæsar Borgia, the natural son of Pope Alexander, he nearly fell a victim to the poison he had prepared for another, in order to get the crown of Parma. He invited two cardinals of the family to sup with him, and had mixed poison—it was suspected to be arsenic—with the wine. By some mischance, however, the unadulterated wine was given to the guests, and Cæsar Borgia partook of the poison. The alarm was immediately given; a mule was killed, the reeking integuments were wrapped round him, and he recovered. Several other instances of this kind are also related. Bezoars were searched after in the bodies of animals, because if a crystallized body could be found, our predecessors presumed that this would possess all the virtues of the living animal. Among the older physicians, four kinds are especially noticed.

1. Natural. These are very curious. They are crystallized bodies, or concretions found in the bodies of animals; there are some in our own Museum, which at one time would have been regarded as equal to the ransom of a prince.

2. Oriental.

3. Occidental.

4. Spurious or factitious.

The Oriental were the most valued, found in certain of the antelopes, and in the goat, generally deposited in the fourth stomach. It is supposed that they really are biliary concretions. The occidental are larger, and are generally found in the stomach of the lama, and in other ruminant animals of South America. Some of these bezoars were valued so much that they were exchanged for precious stones, more particularly those found in the stomach of the ape and monkey. With respect to the chemical composition of them, it was long supposed that they were biliary concretions. Owing to the researches that have been made in this country, their composition has been very clearly made out; and a peculiar analogy is found, namely, that they bear a relation to the elements in the urine in states of disease. Take one of these oriental bezoars, and put it in the flame of a candle; one part will melt, containing lithic acid, which may be tested by its being soluble in boiling alcohol, and deposited in concretions; boil the concretion in alcohol, and being washed it may be obtained very pure, and it then melts at the point of boiling water. When melted, it is a resinous mass, but if kept in cold spirits, it breaks up into beautiful crystals. This lithic acid contains 42 of carbon, 37 of hydrogen, 7 oxygen, and no nitrogen. If you subtract this from the composition of the original matter of the bile, you get the composition of cystine: thus—

	C.	H.	N.	O.	S.
Bilin	48 +	43 +	1 +	11 +	1
If you subtract the composition of lithic	42 +	37 +	0 +	7	
The result is ..	6 +	6 +	1 +	4 +	1

which is exactly the composition of cystine, minus 1 of sulphur,—a curious relation, if we recollect the value of lithic acid in these bezoars in the treatment of cases in which the characteristic is severe and protracted dyspepsia. There is another substance in the occidental bezoars which might have been least expected. If an infusion of gall-nuts be exposed, we get a deposit of ellagic acid, which bears a relation to gallic acid. Now, the Oriental bezoars are made up of ellagic acid; it is obtained from them by passing carbonic acid gas through them, which sets it free in crystals. The source of this is curious; but the fact of animals, such as the lamas, grazing on the barks of trees, explains it. It may, however, be a secretion of blood, in which case it only exists in small quantities. Thus to get at the relation of ellagic acid:—

	C.	H.	O.
Tannic .	18 +	6 +	9
+ 10 O.			10
	18 +	6 +	19

If we subtract the elements, four of carbonic acid, and four of water, thus—

	C.	H.	O.
	18 +	6 +	19
	4 +	4 +	12
we get . .	14 +	2 +	7

which is the exact composition of ellagic acid. This is the oxide absorbed, and the ellagic acid precipitated, and would account for the fact of the appearance of ellagic acid in the urine of the species. In alluding to the extreme importance of ellagic acid in cases of hæmorrhage, and which has been admitted in more modern practice, we might be anxious to know what became of it. It comes away in a modified form; gallic acid escapes from the urine as ellagic acid, and is conveyed to the bleeding tissue. If the urine of a patient be taken, of a deep red hue, and heated with caustic potash, it becomes black.

In consideration of the high value attached to some of the bezoars, it was very common for them to be adulterated—some good—some bad imitations,—for instance, the *gos* antipoison, the prescription for which in the first Pharmacopœia was —hyacinth, jasper, sapphire, and topaz. The preparation was—Hyacinth, topaz, sapphire, rubies, aa. ʒ i.; pearls, ʒ ss.; white and red coral, ʒ ij.; musc and ambergris, ʒ ij.; gold, 40 leaves;—made into balls. Some specimens were merely gilded over; and hence we find in the Pharmaco-

poeia rules given for detecting the false ones, by the gilding. These precious stones were employed from a very odd delusion. It was supposed that they were the residences of various tutelar powers; and our Scotch neighbours placed them in little hollow stones; but the more ancient writers gave them a locality only in precious stones, which, according to them, could only be the residence of good agents. [The lecturer here exhibited several specimens from the Museum, among which were three occidental bezoars consisting of diphosphate of lime; German bezoars found in parts of the Austrian Alps, light as cork, which, on being cut open, present, their true character, consisting of accumulations of hair; two sets of biliary calculi—inspissated bile and common calculi, the first acting powerfully on the bile in torpid conditions of the liver; another, consisting of nothing more than the concretions found on the rose-tree.] There is another form of natural bezoars derived from the vegetable kingdom, and which are many of them comprised now in a series of drugs used for the same purposes. [Specimens: a species of root of the serpentaria Virginia; the roots of various valerians, and of angelica.] These were combined with animal products, for the purpose of curing the bites of vipers,—and were made up of the spine of the viper and of valerian—half a drachm to a dose. Then, there are a curious set of bezoars from the animal kingdom. Of these, there is the true animal bezoar. I have a strong suspicion that this is really the true James's powder; at least, there is some reason to believe that these powders are nothing more than the *bezoardicum minerale* of the older writers. This bezoar, if mixed with phosphate of lime, would very much resemble James's powders. It was given in antimoniacal acid, which is very influential indeed as an anti-diaphoretic. The spurious bezoars were employed in combination with crab's claws; for above 300 years they were regarded as important in treatment of disease; and we have evidence of one having been given as the ransom of a general during the Holy Wars. Among other curious specimens are what were called *terræ sigillatæ*, consisting of aluminous earth, dug up at certain times, sealed, and brought into commerce as sealed earths. Some in the Museum are from the island of Lemnos, and bear the impression of the Ottoman seal. Two forms of them are white, and are utterly valueless, consisting of silicate of alumina; the red contained a quantity of iron, which might impart to them a medicinal virtue; but, in general, their value was commensurate with the difficulty of obtaining them. Some are from Silesia—white and red—and from Lisbon. These were all preparations allied to the bezoars, these earths being employed for neutralizing the effects of poison in the stomach. It was said, that if you drop a little water on these earths they will absorb it, and therefore they will absorb the poison; in fact, in the absence of chemistry, no distinction was made between a piece of lime and a common bole of earth. Many bodies were confounded with these common sealed earths, and hence we have, in this part of the collection, crab-stones, consisting of accumulations of carbonate of lime, and possessing no value above common carbonate of lime, only that they were found in lobsters or crabs; and so many useless substances were thus employed; as for instance belemnites—the fossil remains of an animal allied in structure to the nautilus, and which, if divided in the centre, is seen to consist of a cone of concentric layers; and so I might allude to oyster, mussel, and snail shells. But there is a curious instance of pearls being employed in this way, which are of no medicinal virtue whatever, but came into use in consequence of their supposed high value, and this gave rise to the employment of the pseudo-pearls found in various molluscs.

It is worthy of notice, how very much the supposed properties of these bodies were owing to false analogy. If they had only led to the use of carbonate of lime in medicine they well deserve our attention; but the real source of their introduction into medicine was their supposed value in the treatment of calculi. According to the doctrine of signatures, the same concretion which was found in another animal would be used for the eradication of it in a patient, and carbonate of lime would, perhaps, be no bad medicine; in consequence of the difficulty of administering these, they were burnt, powdered, and mixed with water, giving to it the property of lime water. On this was based Miss Stevens's preparation in 1739, for the treatment of calculi, who received a grant of 5,000*l.* from the House of Commons. The first physician to Guy's Hospital has left on record a number of cases thus treated by Miss Stevens's remedy. This remedy was composed of snail and egg shells heated, powdered, and made into pills with soap, taken with lime water in enormous quantities, where there was pain in the loins on voiding urine. After a time the patient began to get thin—the pains in the loins were better, and the calculi came away. But how was this effected? The urine became offensive, and the matter came away; and then the patient sinks, and is sent into the country to get well. The patient had lived on lime-water; all the secretions of the body became excessively alkaline, and the patient passed a quantity of thick mucus; this is the secret of the remedy. At this time of day even, this is very much in vogue, especially among the porters of Newgate Market, who attend at a certain inn in the neighbourhood, where the ostler administers this very remedy.

In my next I shall offer some illustrations of the practice of medicine among the Chinese.

ORIGINAL CONTRIBUTIONS.

CASES OF STRICTURE OF THE URETHRA, TREATED BY PERINÆAL INCISION.

By JOSEPH THOMPSON, Esq., Consulting Surgeon to the Nottingham Union Hospital, and to the General Dispensary.

(Read before the Medico-Chirurgical Society, Nottingham.)

[Continued from page 584.]

John Oakland, aged 47, was admitted a patient at the Union Hospital, with impassable stricture at the membranous portion of the urethra. Before the operation he was very thin and feeble, his tongue dry, and there was a large abscess in perineo on the right side, which had existed three weeks before I saw him. It was opened, and purulent matter, mixed with urine, escaped. After this his state very much improved. The urine continued to flow freely through the wound; the tongue became moist, and his appetite increased; the inflammation and thickening on the perinæum subsided greatly, but as the stricture could not be passed, the operation was performed on 2nd October, 1837, in the manner already described. The stricture was divided upon a small director, which it was practicable to introduce in his case, and an elastic catheter was passed into his bladder, to be left there instead of a silver one. As some difficulty was experienced in the introduction, the stiletto was removed and the instrument drawn through the wound as far as possible, and then passed in a straight form into the bladder. On the day after the operation, being in pain, on account of the urine becoming obstructed in its course through the catheter, he took it out, and there was some difficulty in replacing it. It remained in the bladder five days, and afterwards one of silver was used occasionally. The wound closed perfectly, but not so rapidly as in the foregoing cases, and he was discharged cured, with directions to apply at intervals to have a catheter introduced. I have seen him to-day, and he says, that, although he has not had any assistance in that way for eighteen months, yet the urine comes freely and he is quite well.

The application of caustic in the cases just narrated would have been totally inadmissible, and there is so much difficulty in applying the cutting catheter in such a manner that its lancet, when thrust forth, shall penetrate the centre of the stricture only, without injuring the walls of the urethra, that I consider its use would neither have been so safe, nor so likely to be followed by prosperous results as the operation resorted to. If, for instance, during the use of the instrument, the handle were too much depressed, or not sufficiently so, or if it inclined to either side, then, although the commencement of the stricture might possibly be somewhat incised, the walls of the urethra would likewise be cut through at that part towards which the extremity of the catheter was made to point. After this, if any attempt were made to pass the instrument, its point would start through the wound; a false passage would be established,—a thing in itself sufficiently disastrous, independently of the mischief which, sooner or later, might ensue. Further, these difficulties would be increased in all those cases where abscess had formed between the erector penis and the bulb, and where much thickening and induration remain, displacing the bulb, or where one or more strictures exist in the urethra anterior to the membranous part, because the difficulty of placing the instrument upon the stricture with the degree of precision necessary to insure a division of it, without injury to the urethra, would be greater. Notwithstanding these objections, I will not deny the possibility of its being used with success in *some favourable cases*, viz., where the instrument can be readily placed upon the stricture, and where the urethra can be felt distended with urine immediately behind, giving us the information that the stricture is of very small extent; still cutting down upon the stricture, and dividing it, will, in most cases, be less likely to be attended with disappointment. The foregoing are the three first out of seven cases of stricture treated by incision in perineo; and although the bulb has been divided to a greater or less extent in all, I have never seen any hæmorrhage of importance occur, except in one instance; and in that case it was easily controlled by a portion of lint inserted between the lips of the wound down to the catheter, a spouge placed over it, and bound firmly by a T bandage. In addition to the cases just mentioned, I have laid open the bulbous portion of the urethra twice for the removal of calculi; in one instance four fragments had become immoveably fixed there after the operation of lithotripsy; in the other, several calculi (not fragments) had passed from the bladder into the bulb, where they had been arrested for a great length of time, in consequence of stricture anterior to this part. In neither of these cases was there any bleeding; indeed, I attribute the absence of hæmorrhage in all these cases to the *central situation* of the incision, away from the point at which the artery enters the bulb, and after it has terminated in the tissue of the latter. As it regards the seat of stricture, I do not wish to make many remarks. I may, however, observe, that M. Amussat declares they are never met with beyond the bulb; Sir C. Bell, that they are never found beyond the posterior part of the bulb. According to Mr. Hunter, "the bulbous portion of the urethra is much the most subject to stricture." He says again, stricture is sometimes situated on this side of the bulb, *but very seldom beyond it*. Mr. Stafford says,—"I am inclined, however, to agree with Mr. Macilwain, that the affection most commonly occurs behind it (the bulb), and this I am led to infer, both from experience, and also from comparing together the specimens preserved in our museums." Again, Sir Everard Home was of opinion that strictures occur *most frequently just behind the bulb*. Mr. Guthrie, whilst speaking of the anatomy of the membranous part of the urethra, remarks, "It passes through the triangular ligament in this state, to meet the bulbous portion of the urethra, and it is rarely, except when it meets with this, or is surrounded by the corpus spongiosum, that strictures are found in diseases, unless they are of long standing, have given rise to much external mischief, and have been propagated by repeated attacks of inflammation in a contiguous structure." "Many surgeons," says Mr. Bransby Cooper, "state that the membranous part of the urethra is often the seat of stricture, but such is not the case; and you, as anatomists, gentlemen, will readily see why it should not be so, owing to the small quantity of cellular tissue which surrounds it, and the absence of corpus spongiosum." In making a few observations on the opinions above quoted, I will confine myself to the question, Whether stricture ever forms at the membranous portion of the urethra. If it is frequently seated

immediately behind the bulb as is asserted by some authors, it must be at the membranous part, and I confess that I am of this opinion, and can only account for the assertions of others to the contrary, on the supposition that they have either not met with stricture at this part, or, if they have, have arrived at an erroneous opinion as to the seat of it; having trusted to the information afforded by the introduction of a bougie or catheter along the canal down to a *supposed strictured part*, without verifying beyond all doubt the *exact situation* of the stricture, by the finger introduced into the rectum, and thus have come to the conclusion that stricture is never seated there. It is surely a point capable of being ascertained beyond all reasonable doubt; viz., if an instrument be passed along the urethra to what may be supposed to be the posterior part of the bulb, and if the finger be now introduced into the rectum, placed upon the apex of the prostate, and then upon the point of the instrument, if the space intervening be about an inch, five-eighths of an inch, or less, and the instrument cannot be made to pass any further, the obstruction may be said to be at or within the membranous portion. Mr. Guthrie, who is a very great authority, says, the pars membranosa is rarely the seat of stricture, except where it meets with the triangular ligament, &c., so that even he admits that it is occasionally the seat of the disease behind the triangular ligament, and more frequently where it "meets with it." Before I make any further comments, I beg to direct your attention to the excellent description of this part, given by Mr. Guthrie, in his work "On the Anatomy and Diseases of the Urinary and Sexual Organs," as well as to the quotation given below from M. Velpeau's "Traité d'Anatomie Chirurgicale ou Anatomie des Regions."

Superiorly the membranous portion is about an inch long, and situated beneath the arch of the pubis, from which it is separated by a space of about six lines, which is filled by cellular tissues and by the little muscular fasciculus coming from the posterior part of the symphisis upon the urethra, in front of the prostate known as *Wilson's* muscle. This space is traversed, moreover, by the dorsal veins of the penis, which pass thus into the pelvis to terminate in the hypogastric vein; we find there, also, the corresponding arteries at the place where they leave the ischio-pubic branch, to place themselves upon the dorsum of the penis. Sometimes these two arterial vessels unite so as to form only a single dorsal branch. But, frequently, this abnormal junction does not change in the least the disposition of the pubic arteries; but at other times it occurs that the dorsal arteries of the penis take their origin from one of the branches of the hypogastric, as we have shown on two subjects; and in this case, if the vessel is examined from before, backwards we remark that only externally it bifurcates in entering the pelvis in front of the neck of the bladder, and that the two branches of the bifurcation proceed to terminate in the vesical or ischiatic arteries. We see, therefore, that this disposition would lead almost necessarily to hæmorrhage if the operation of cutting for the stone was practised by the method of *Foubert*, and more certainly still by the proceeding of *Thomson* and *Dupuytren*, that is to say, if the urethra and neck of the bladder were divided upon their upper wall, the same accident would also happen after the operation for the stone with the gorget modified by Scarpa.

Inferiorly, the membranous portion of the urethra appears shorter, because the point of the prostate and the bulb appear to pass one before the other; whence results a sort of groove, which must always be penetrated when sub-pubic lithotomy is practised in the median line. This groove, bounded behind by the front of the rectum, anteriorly by the bulb, on the sides by the recto-vesical aponeurosis and the anterior part of the rectal layer of the ischio-rectal aponeurosis, below by the deepest portion of the perinæal ligament, or of the deep layer of the perinæal aponeurosis, properly so called. This groove, we say, is filled by a dense and fibrous cellular tissue, by some arteries and veins, and between the aponeurosis and the skin by the crossing of the transverse muscles of the perinæum, the arteries of the bulb, and the sub-cutaneous layer. More immediately the membranous portion of the urethra is enveloped by a prolongation of the fibrous sheath of the prostate,—a prolongation which gives to it more force and resistance than we should be inclined to suppose at first. More immediately still we find a true fleshy covering, sometimes strong and very distinct, sometimes, on the other hand, transformed into a yellowish tissue. The composition of this muscular membrane is sufficiently remarkable to merit our attention. Thus, the most external fibres are vertical, and depend evidently on the expansion of *Wilson's* muscle; and, as this muscle takes its fixed point behind the pubis, it results, that its contractions may draw the urethra more or less upwards, but without compressing it in a very marked manner. The deeper fibres are parallel with the canal; they appear to be a continuation of those which surround the prostate, that is to say, they appear to come from the neck of the bladder, and in such a manner that, being crossed by other annular fibres, when their contraction takes place, the urethra can be strongly narrowed so as to repel the bougie or catheter, which we endeavour to introduce into the bladder. In this way is explained the spasmodic contraction remarked by all surgeons, and which makes catheterism, at one moment impossible, become sometimes very easy the moment afterwards.

Internally, this part of the urethra is not so wide as that which the prostate gland encloses, so that it dilates in continuation with the latter, and where it gains the bulbous portion; whence it follows that foreign bodies expelled by the urethra are most frequently arrested at this part, and it is commonly between the spongy and membranous portions that false passages are met with after forced catheterism. In widening itself anteriorly and posteriorly, the membranous portion of the urethra appears to weaken itself somewhat, since the most external layers are scattered to cover the prostate or the bulb; consequently, in the middle portion, it offers most resistance; so that the sound escapes from the urethra only in entering the membranous portion, or very soon after having cleared it, and this the more likely, as the kind of anterior rim is again strengthened by the arcuæal ligament, which it penetrates on arving the pelvis, and, as in this point, the penis elevates strongly the urethra. But it is proper to remark, that if the instrument makes a false passage in this point, it may continue to glide beneath the aponeurosis, as far as the region of the anus, and in this way the accidental track will be less dangerous than in the case where the catheter is conducted around the prostate, or neck of the bladder. Keeping in mind that the inferior surface only presents these peculiarities, and in following exactly the superior, the end of the catheter runs no risk of deviating.

Lastly, that the membranous portion of the urethra retains the chief of the structural characters which belong to the bladder; viz., that the fleshy covering is found there still, and that the ancients, guided by their philosophic ideas in anatomy, had truly remarked, that the urinary bladder and its canal were only the continuation of one another in organization as in continuity, and that the name of fleshy, or muscular, which they gave to this portion of the urethra, a name which M. Amussat has lately proposed again, was, perhaps, more appropriate than that of membranous, which we make use of at present.

After taking a careful review of the anatomical constituents of this part of the urethra, its mucous membrane, the sheath derived from the prostate, its connexion with *Wilson's* muscles, the triangular ligament and the sub-pubic cellular tissue, as well as that which connects the various parts together; when we consider that its attachment to the triangular ligament renders it more or less fixed and liable to be influenced by any unusual motion of the urethra before or behind that point; that it is frequently the seat of spasm, and not seldom disturbed by the contraction of the muscles of *Wilson*, and the anterior fibres of the levator ani; that it is the narrowest part of the urethra, the orifice excepted; and more especially when we bear in mind the true causes and pathology of stricture, it does not appear, although the contrary has been asserted, that there is anything in the structure of this part of the urinary canal to warrant the opinion, that it cannot become the seat of stricture, but rather the contrary. Neither does it seem, when the position of vessels is considered, to be so much a matter of indifference as Mr. Guthrie supposes, whether the stricture be divided *upwards*, downwards, or laterally in these cases. Other questions remain to be discussed, such as the length of time the catheter ought to remain in the bladder; the variable condition of the urine; some circumstances to be attended to in the treatment of extravasation of urine, &c.; but having taken up so much of your valuable space, I must bring this communication to a close, and will, with your permission, return to the subject on some future occasion.

Nottingham, May 2, 1849.

CHOLERA IN IRELAND.

By Dr. KIDD, Limerick.

The *primary* source of cholera, dissertate how we will, seems wrapt up in no little of uncertainty and doubt. It must be granted, at the same time, as I hinted before, that nature seldom, perhaps never, travels out of her old and well-tried sources of power, and that, in bringing to pass even the most unlooked-for events, she has recourse to her ancient armoury of facts. Columbus, writing from the New World, immediately after its discovery, says,—"El mundo es poco."—the world, after all, is small. The saying of Alexander is as ancient as our schoolboy days; that of Solomon has degenerated almost into a solecism. Under all and each, perhaps, is shadowed the sameness and fixity of purpose of everything appertaining to nature. We are surrounded, it is true, by the wonders of science. In the great epochs of the geologist, we have miracles on every hand,—epochs, to which the age of Appenines and Andes is, as it were, but a moment; and yet, in these far distant periods, traces of the same laws now existent are everywhere visible. I am inclined to think, that something not very different remains to be shown in the phenomena of disease,—that in the one now under our consideration. We are too eager for something novel and unexpected, and that, after all, in some one of the many imponderable agents with which we are already familiar, we shall best look for its primary cause. Recent physical research, too, has brought us nearer and nearer to some grand generalisation, which shall reduce these many potencies under some one far-seeing law; and we are then left to explain the scattered materials of our knowledge. Much after the method of the puzzled disciples of Des Cartes on the discovery of the grand generalisation of Newton.

That some great physical cause is busily at work in cholera it would be ridiculous to deny, from the almost unvarying regularity of the march of this disease. From some half-understood phenomena of terrestrial magnetism that have been observed, and the curious way in which the disease travels along the banks of rivers, seeking evidently the lowest levels, and disappearing, as a general rule, wherever it makes its appearance, quite as suddenly as it came.

The human mind is so constituted as to have a passion for the mysterious; and because we cannot clear up the often vexed question under consideration, we are said to know nothing in reality of the disease, its fearful mortality giving a colour to the assertion; but no one will deny that we know nothing of phthisis on account of its incurability beyond a certain stage, or that every one who has studied the subject, is not quite satisfied of its origin in certain physical relations, which one perhaps cannot always trace in individual cases. We cannot, it is true, tell to a demonstration what the physical cause is that produces cholera; some new

and simple apparatus, some set of observations, may possibly let us into the mystery. We are on the verge of the thing, and we should not relax our efforts. To say we know nothing of cholera, is to confess our ignorance of the simplest phenomena of disease. We cannot tell its primary cause. We may study it, however, in its secondary results; and these, I think, lead us irresistibly to some one central disturbing influence of the general splanchnic nervous system, beginning somewhere about the duodenum, and its nerves from the solar plexus, spreading through the entire sympathetic, even as far as the cortical arrangement of the kidneys, investing or stopping the functions of these essential parts of the system, and reflected again in the "excito-motor" method of Marshall Hall, as evinced by cramps and other irregular movements of the spinal system.

These are the phenomena, in point of fact, that an attentive study of the disease presents to an inquiring mind, forming, as they do, a key to its multifarious symptoms and modes of treatment. To tell a patient the cramps were no part of the disease, would seem something like scientific trifling; and why the serum of the blood should drain away, as it does, by the entire mucous tract seems, perhaps, not less perplexing. To one, however, conversant with the machinery of the system, there is, I conceive, no puzzle in these matters.

The ganglionic system, too, I think, is easier affected by physical agents. Through all its analogues in the lower animals up to its condition in man, we find it, I think, less and less under the control of the cerebro-spinal system, or what we recognise as peculiarly the system of "animal life." While tracing it, again, down through the other kingdoms of the organic world, it brings us, at last, to mere physical existence itself, influenced by none other than physical agents. A thousand events of ordinary every-day practice teach the same lesson—the contagion of fever. The perfect kaleidoscope of symptoms in some diseases from vicissitudes of climate, season, weather, &c., reflected, it is true, but too often on the finer part of his organization, making the mind oftener than we are aware a mere accident of the elements. The ganglionic system, however, as in cholera, is the centre of all the disturbance, and more under the dominion of physical agents.

In a former communication I spoke a few words of treatment, the entire success of which nearly depended on getting the cases in time. The rate of mortality, it is curious, has been nearly exactly the same under even somewhat different modes of treatment, pointing to some great and all-pervading mortiferous agent, rather than the result of remedial interference at all. Outside the hospitals the number of deaths has been computed considerably over *three thousand*, which, with about five hundred within the walls of these establishments, treads closely on four thousand. The hospitals here mentioned, I may say, are placed at different ends of the city; the Medical Staff had no communication of any particular kind; the return is one of the last taken at random, and yet I find the rate of mortality *precisely the same*, within a fraction of 54 per cent. at each.

	Cases.	Deaths.
City Infirmary . .	471	254
St. John's Hospital .	297	160

These were the only hospitals open during the epidemic, a system of treatment of the milder cases, at their own homes, having been found more in accordance with the feelings of the patients themselves, was very generally resorted to, with what result, however, the lamentable mortality already mentioned fully indicates. FOUR THOUSAND human beings swept away out of a population of something about 60,000, in little more than a month, is one of those things, indeed, that reminds me of some frightful siege or battle; for myself, I saw nothing half so terrific among the hospitals and barricades of Paris last June, having watched some 1,400 cases at both periods.

ON CHOLERA.

By Dr. REID CLANNY.

Eighteen years have elapsed since it was my painful duty to report to Government the outbreak of cholera in England, and that Report formed the leading article in each of the London newspapers of the day. I little expected to witness the return of the pestilence amongst us, though I held in remembrance the observation of the late Sir Henry Halford—that the cholera would return, as has been experienced in respect to small-pox, &c.

At this moment I am reminded of the words of Ovid,—

"Dum vires annique sinunt tolerate laborem."

From experiments and observations made during the first and second visitations of *the* cholera in this town, I have come to the conclusion, that its origin and persistence in each individual case may be attributed to the abnormal state of endosmose and exosmose in the lungs. In the year 1834, my experiments on human blood satisfied, I believe, most of my professional brethren, that atmospherical air was received continuously through the air-cells and pulmonary veins into the blood, by endosmose and that portion of the oxygen which was not used in the formation of carbonic acid in the blood-vessels, was by exosmose conveyed again into the atmosphere with the halitus of the air-cells of the lungs. The nitrogen also was, in the process of circulation, to a certain degree, diminished in quantity. These observations will, *in limine*, suffice. We are aware, that when the effects of nature are too intricate, experiments are the only *media* which remain for us in our investigations. Whether the magnetic state of the atmosphere be the exciting cause of this abnormal state of the air-cells of the lungs, I am unable to say; but I am strongly inclined to be favourable to that opinion, from the report in the *Medical Times* for the 7th of last month. I regret that I was so much engaged during the last visitation of the cholera, that, on this point, I made no experiments.

We are aware, that, though different descriptions of gasses pass through membranous *media*, a remarkable difference is observable in the relative rapidity of transmission. This fact has been accurately investigated by the experiments of Drs. Faust and Mitchell. They transmitted gasses through membranes which were more dense than those of the lungs. (*Vide American Journal of Medical Science*, No. 13. *Vide etiam* Milne Edwards's valuable experiments.) We are aware, and the general impression is, that we cannot trace any nervous filaments to the fibres of cellular tissues, though such threads may be seen passing between them to the neighbouring organs. The insensibility in its healthy state seems also to indicate the absence of nerves; but as pain is experienced during inflammation, we must admit the existence of some communication with the sensorium commune. Respiration is effected by the contact of the atmospherical air with blood, the smallest particles of which, in its passage through the innumerable capillaries which ramify on the air cells of the lungs, are, by means of the immense surface, (which all these cells offer,) exposed to the action of the atmospherical air. The chemical process which ensues between the air and the blood is carried on through the delicate membranous parietes of the cells, and in accordance with the laws of endosmose and exosmose.

The respiration is everything, and may be considered as the *primum mobile* of the whole animal system. When atmospherical air is received into the air-cells of the lungs, a portion of it comes into union with the free carbon of the blood, in the blood-vessels, forming carbonic acid in equal volume with the oxygen gas; from this process the arterial blood owes its property of being the sole stimulus of living structures; venal blood which has not undergone this change has a poisonous action on the organs of the body, particularly on the nervous system, overcoming their irritability; hence, should the air-cells of the lungs be so acted upon by the magnetism or electricity of the atmosphere, the functions of the body are, in some instances, in a few minutes, suspended. Hence the symptoms of cholera of rapid type. Hence the sudden deaths from cholera upon its first invasion of a town or even district. In one man, says an eye-witness, (p. 50, Madras Reports,) the prostration of strength was so great, that he could hardly move a limb, though he had been, but fifteen minutes before, in perfect health, and actively employed in his business of a gardener. "As an instance," says another, "a Lascar, in the service of an officer, was seized in the act of packing up rice, previous to going out to cut grass close to his master's tent; and, being unable to call for assistance, he took up small stones and pitched them towards him, (the eye-witness,) in order to attract his notice; This man died in an hour." Should the air-cells of the lungs refuse to receive the atmospherical air, especially the oxygen thereof, we would expect, *à priori*, to find that individuals so placed would experience, in the first instance, great debility, hindered respiration, and ultimately extinction of that most important function, and death. During this progress, should the individual survive the first impulse, universal debility takes place—vomiting, purging, and their concomitants,—vomiting to excess, even of blood,—purging to excess, even of blood, as we have all witnessed, more or less,—cramps, from excessive debility of the stomach and bowels,—thirst, cold, clammy skin, suffused, half-closed eyes, and weakened intellect, are forerunners of death.

As only a certain portion of oxygen, from the state of the atmosphere, finds its way into the blood, hence a gradual precipitation.

HOSPITAL REPORTS.

THE PRACTICE OF THE BELFAST GENERAL HOSPITAL.

[Continued from Page 512.]

MEDICAL REPORT.

II.—RHEUMATISM.

1. John Patten, aged 17; shoemaker; moderately stout; ill 6 months; discharged relieved.
   Case.—Stiff and pained neck; pain in left side; along edge of trapezius on motion; commenced originally as a small hard tumor, of which no trace exists; in hospital 38 days.
   Treatment.—Ung. hyd.; actual cautery; ung. tart. emet, and iod. potass. internally.
2. James Kennedy, aged 37; shoemaker; ill 9 weeks; discharged well.
   Case.—Subacute; limited to lumbar regions; loins, and right thigh; in hospital 12 days.
   Treatment.—Vapour bath; acupuncture; cantharides liniment; and iod. potass. internally.
3. Fred. Magee, aged 20; butcher; stout build; ill 5 days; discharged well.
   Case.—Acute; commenced with rigor; first attack—in legs, arms, and breast; wrist and ankle swollen; pains very severe; fever; improvement on third day; diarrhœa (mercurial); pains quite well on tenth day; in hospital 24 days.
   Treatment.—V.S.; Calom. and opium; nitre posset and anodynes.
4. Thomas M'Bride, aged 26; labourer; slight conformation; dark complexion; ill 5 weeks; discharged at his own request; relieved.
   Case.—Subacute; limited to lumbar region and loins; general health unaffected; in hospital 24 days.
   Treatment.—Cantharides liniment; warm baths; sinapisms; blisters; belladonna ointment; *acupuncture;* Dover's powder, aperients, and iod. potass. internally.
5. William Sloan, aged 24; shuttlemaker; ill 1 month; discharged well.
   Case.—Syphilitic; four years ago had lumbago; four months ago contracted syphilis, in shoulders, loins, and knees; pulse quiet; lichen appeared on back and shoulders on ninth day from admission, and after muscular pain of right side; in hospital 23 days.
   Treatment.—Pil. plummerii; iod. potass.; Dover's occasionally; warm and sulphur baths; vesic. lat.
6. John Burns, aged 20; sailor; ill 3 months; discharged well.
   Case.—Syphilitic; 4 months ago contracted

syphilis; was mercurialised; 2 months ago had a second attack treated without hyd.; 8 days complaining of throat; nocturnal pains in shoulders, elbows, and knee, and loins; fauces merely reddened; in hospital 7 days.

Treatment.—Pil. Plum. and iod. potassii.

7. Catherine M'Chisky, aged 35; ill 12 years; discharged relieved.

Case.—Chronic acute muscular peritonitis, originally acute rheumatism; elbow, wrists, and ankle-joints became stiffened in 3 years; swelling and pain of left shoulder, especially left pectoral muscle and axillary glands, 6 years. These glands suppurated; severe abdominal and lumbar pains during the last 12 months; pains elsewhere transient; p. 66; soon, without apparent cause, vomiting and epigastric tenderness, with a rising pulse, ensued, which became developed into confined inflammation of the abdominal parietes. This state was entirely removed, and she was discharged quite relieved, after 55 days in Hospital.

Treatment.—At first, stramonium, and the warm bath, and antacid purgatives; then effervescent and anodyne draughts, and blistering the epigastrium; and, when the inflammatory state supervened, free blood-letting generally and locally, and calom. and opium to salivation. During the mercurialism, the body and arms became covered with erythematous patches of great vividity.

8. Catherine Blair, aged 55; ill 3 weeks; discharged, much relieved, by desire.

Case.—Subacute; limited to left loin and knee; originated from cold and damp; some recent bronchitis; in Hospital 2 weeks.

Treatment.—Turpentine stupes; anodyne pectoral, and sulphur electuary aperient.

9. James O'Hara, aged 63, bricklayer; ill 6 months, but had chronic rheumatism some years ago; discharged well.

Case.—Local; limited to left shoulder joint and accompanied with weakness of limb; while convalescing after diarrhœa, was attacked; arm reduced, and its motion limited, on account of the *pain* attendant; in Hospital 4 weeks.

Treatment.—The *Chelsea* electuary, turpentine, *acupuncture*, and the perpetual blister.

Remarks.—(No. 1.)—It is doubtful whether the condition here may not have arisen from chronic cellular inflammation, though the objective symptoms, at present, rather indicate the view taken.

(No. 3.)—This case is an admirable illustration of the effect of the calomel treatment in acute rheumatism; complete relief accruing after 5 days' treatment.

(Nos. 5 and 6.)—Show clearly the good results of iodine in secondary syphilis; the Plummer's pill, though given with it, did not affect the system.

(No. 9.)—This case is interesting, in a diagnostic point of view, as attenuation with weakness, and symptoms of paralysis, were present.

[To be continued.] (a)

SURGICAL REPORT.

II.—Diseases of Joints.

1. Rachael Carr, aged 30; acute inflammation of knee; cured.
2. Lewis Johnston, aged 30; idem; cured.
3. Hugh Boyle, aged 16; idem; cured.
4. Ellen Tinsdale, aged 18; chronic inflammation of knee; result, anchylosis.
5. Lucy Walton, aged 22; acute inflammation of hip; died.
6. Robert M'Cormac, aged 23; white swelling of knee; amputation.
7. Charles Higgins, aged 35; acute inflammation of knee; cured.
8. William Leech, aged 32; disease of elbow; amputated; died.
9. James Campbell, aged 21; acute inflammation of hip; cured.
10. Rachael Donughy, aged 20; acute inflammation of knee; cured.
11. Margaret Larken, aged 12; inflammation of knee; cured.
12. Eliza Bluck, aged 20; chronic inflammation of knee; cured.
13. Ann Cooper, aged 26; chronic inflammation of knee; relieved.
14. William Mullan, aged 14: caries of elbow bones.
15. William Donnelly, aged 13; caries of knee bones.
16. Margaret Burns, aged 19; acute inflammation of knee; cured.
17. Margaret Kane, aged 16; acute inflammation of knee; cured.

Remarks, (1.)—Treated by mercurials and counter irritation.

(No. 3.)—Admitted suffering from caries of end of femur; discharged with joint anchylosed.

(No. 4.)—Suffering from ulceration of cartilages on admission; had a fall (eight years ago), after which inflammation set in, which was neglected, and ended in thickening of synovial membrane, with effusion; has had three attacks of acute inflammation since, which yielded to treatment; since she came into the hospital has been confined to bed with starch bandage along whole length of limb; discharged; joint anchylosed.

(No. 5.)—Scrofulous habit; while under treatment of hip affection, symptoms of iliac abscess supervened, which resulted in formation of thin unhealthy pus; abscess opened spontaneously at anterior spinous process of ilium; suffered from hectic two months and died; *post-mortem* showed cystic abscess, caries of crest of ilium, and lungs tuberculous.

(No. 6.)—Scrofulous; suffered for two years; at last submitted to amputation; circular; stump did not heal till after residence in the country; is now enjoying good health.

(No. 7.)—From fall off a horse; knee became painful, red, and swelled on third day; was confined to house since he received the injury; partial separation of the ligamentum patellæ.

(No. 8.)—Admitted suffering from caries; operated on; caries of ends of bones, which extended along the humerus to junction of upper and middle third, where an abscess had formed; never recovered, although removed to country.

(No. 11.)—Although admitted as a case of inflammation of knee, the case was one of periostitis of the lower end of femur; when discharged bone much thickened, but could make proper use of limb without pain.

(No. 16.)—About two years prior to admission received fracture of femur; the fracture was supposed to extend into joint; ever since, the knee is "very weak," and occasionally, during sudden atmospheric changes, a slight inflammatory affection of the joint confines her to bed for two or three days at a time; under an attack of the kind she was admitted.

Washington Murphy, L.R.C.S.I.

May 8th, 1849.

(To be Continued.) (a)

(a) The next series will consist of collapsed, or marked cases, of Asiatic cholera.

PROGRESS OF MEDICAL SCIENCE.

GERMANY.

[Berlin Correspondence.]

The working men of this city are at present endeavouring to form a General Association, based, to a certain extent, upon Communist principles, viz., community of labour, production, and consumption. This Association embraces already 6,000 members, belonging respectively to an infinite variety of trades. Rules and regulations are just now being framed for the sanitary department of the Association. The Board of Directors have already engaged a number of physicians, under the following conditions:—Each of the physicians of the Society has a certain definite number of members' families to attend, in the capacity of family physician. In important cases, he is bound to consult with one or several of his colleagues. The whole of the physicians of the Society assemble once a-week, for the purpose of communicating to each other their respective observations and experience. Their medical college shares with the General Board of Directors, the inspection of the dwellings and provisions. It is intended, also, to establish pharmacies and hospitals for the exclusive use of the Society. It is expected that a monthly contribution of about 6d. per member will suffice to cover the expenses of the sanitary department.

Last week, we had a trial for quackery here, which, upon the whole, is rather a rare occurrence in Berlin. During the invasion of the cholera in the autumn of last year, the corners of our streets were covered with large placards, advertising a certain powder, which was stated to be an infallible specific against the cholera. The poor were offered this powder for the trifling sum of about one halfpenny; the rich had to pay 3d. for it. The sale of this precious powder was most rapid; in a few days 22,000 packets were sold. At this period, the *post-mortem* examinations in the Cholera Hospitals revealed the presence of metallic masses, in the stomachs of many subjects; and in some cases inflammation, in others, laceration and perforation of the mucous membrane. Upon investigation, it turned out, that all the individuals whose stomachs presented these singular *post-mortem* appearances, had partaken of the wonderful powder. Upon the report of the Sanitary Board to that effect, the police put at once a stop to the further sale of the grand specific. At the same time, a criminal information was laid against the vendor. Upon chemical analysis, it was found that the powder consisted of a mixture of iron and brass-filings, sand, and acetic acid. The quack confessed, that he had procured the filings by the cwt. from the workshops of locksmiths and brassfounders; but he avowed, at the same time, that his powders had done wonders in Poland, in 1830, and that he had sold them at Berlin from pure motives of philanthropy. The price of the powders having been trifling only, and since it could not be proved that any individual had died simply and solely from the effects of the powders, the quack got off with the lenient punishment of incarceration for three weeks.

You are aware that all houses of ill-fame were suppressed at Berlin a few years ago, under the decree "that it was not becoming a Christian Government to sanction immorality." Since then, secret prostitution, and its inevitable concomitant, syphilis, have been greatly on the increase; and, at the present moment, they have reached an unprecedented height. This may be imputed, in a great measure, to the state of siege under which we have been groaning for the last six months, and which has thrown into our city thousands of idle soldiers, *whom it is absolutely indispensable to keep in good humour*. Now, if there were still brothels in Berlin, as formerly, a partial check, at least, would have been opposed to the spread of lues, by the medical inspection of the prostitutes, to which the latter were formerly compelled to submit themselves every three days.

We hear from Austria that a radical reform of the quarantine system is on the point of being introduced there. The Austrian Government will still continue to adhere to the principle of contagions; and this they may, indeed, justify upon the ground, that even those European States, of which the Medical faculties have pronounced for non-contagion, persevere, notwithstanding, in their preventive and protective measures. But it is intended to sweep away many of the useless regulations which have for ages impeded the free communication between Austria and Turkey. Thus, for instance, it is very likely that quarantine on the frontier of the Danubian principalities will be altogether done away with, since these principalities have been, for some time past, separated from the rest of the Turkish dominions by quarantines of their own. Even in the other provinces of Turkey, sanitary cordons separate those parts in which the plague has been found to develope itself spontaneously, from those in which it has, up to this time, appeared as an importation only. Of course, the intended modifications of the Austrian quarantine-system will depend, in a great measure, upon the nature, condition, and regulations, of the Turkish cordons. The Austrian Government has accordingly appointed a Commission of three Physicians, to inquire into the state of the sanitary measures and institutions of the Turkish provinces, (Egypt included;) and the report of this Commission will serve as the basis for the intended re-organisation of

(a) The next series will be on *Tumors*.

the system. The purpose in view would be considerably facilitated, if it were possible to induce the Divan to permit the co-operation of the European Powers in the internal sanitary arrangements and regulations of Turkey.

QUININE AND ARSENIC AS PRESERVATIVES AGAINST CHOLERA.

Dr. Hass, in a long memoir on this subject, endeavours to prove—(1), that miasmata act primarily on the nervous system, and secondarily on the blood; (2), that quinine and arsenic are preservatives against intermittent fever; (3), that there is the greatest similarity between cholera and intermittent fever,—both being of miasmatic origin; having their seat, according to his views, in the spinal cord, their symptoms being only manifested in those parts which are supplied by nerves from the spinal cord; in both diseases there being heat and cold; in both the mental faculties remaining clear, &c.; and (4), that as quinine, and more especially arsenic, seem to have the power of rendering the spinal cord proof against the poison of intermittent fever, it may be concluded, that the same agents exert a similar power (in part, if not totally) against the poison of cholera.

FRANCE.

[Paris Correspondence.]

You have requested me to keep your readers *au courant* with the medical news of the French metropolis—to furnish you, in a word, with a weekly *resumé* of all that passes in this great centre of the sciences relative to medicine and the professors of our art.

I shall endeavour to do so, although at the outset I must observe, that I find in medicine, as in everything else, a sad falling off from the brilliant aspect which it presented when I first visited Paris some twenty years ago. This, you may say, is the old story. As we advance in years we become less content with the present; and we all remember the Roman poet's description of age:—

"Difficilis, querulus, laudator temporis acti."

Still, as I have not yet quite arrived at the Horatian period, I may regret the past without injustice to the present.

And since the time alluded to, how many illustrious men have disappeared from the scene of their labours! Boyer and Larrey; Dupuytren and Lisfranc; Broussais, Alibert, Delpech, Desgenettes, Guersant, Sanson, Blandin, and a host of others. Then, crowds of English and American students encumbered the dissecting-rooms of Clamar, while the eloquence of a Dupuytren, the impassioned causticity of a Lisfranc, or the profound observation of a Lanis filled the Hôtel Dieu and La Pitie with a multitudinous and a delighted audience. Now-a-days forty or fifty students make a respectable class. From the advanced ages of Marjolin and Roux, Velpeau may be considered at the head of French surgery, while medicine is still sustained by the name, if not by the labours, of André, Chomel, and Louis.

France, however, is not the only country in which the gradual or untimely disappearance of illustrious men leaves vacancies which their successors are unable to fill up. Whether we look at home or abroad, towards the bar as well as to medicine, to the arts and the sciences, to the great men of war, and the still greater men of peace, we are compelled to confess, that "we are advancing backwards."

These few observations will prepare you for the little which I shall have to say touching great men or grand progress. Medical literature has been completely killed by the Revolution; and even the cholera itself has been unable to give it a stimulus.

The only thing resembling a "book," which has appeared for a long time, is a treatise by Dr. Prosper Lucas, "On the Influence of Parentage;" but it contains nothing worthy of even passing notice. Politics, in fact, absorb everything else; and, accordingly, we have no less than nineteen medical men in the new Legislative Assembly. This practical acknowledgment of the claims of medical men to public confidence is rendered more striking by the fact, that the "Journalists," with all their influence, were not able to obtain more than ten nominations. Dumas, the celebrated chemist, is returned for the "North." *En revanche*, as they say here. Gerdy and Trousseau, who sat in the late Assembly, are sent to the right-about, (they were both miserable politicians,) and little Malgaigne, member of the last Chamber of Deputies, did not obtain more than a few hundred votes, though put forward by the moderate Republicans.

The cholera, of course, forms the chief topic of medical interest here; and I regret to say, that it still continues to exercise considerable ravage, although the rate of mortality has slightly fallen within the last few days. The confusion occasioned by internal affairs prevented the authorities from taking the most ordinary precautions, while various circumstances were combined to give full play to the disease. We have lost about 200 individuals per day since the commencement of the epidemic; and it still prevails in many of the crowded quarters, passing from one to another, with unabated virulence. In one street alone, and within the last few days, I have known seventeen deaths to have taken place before 12 o'clock, a.m.

As I have alluded to the absence of hygienic precaution, it may be well to absolve, from any degree of blame, our "Director of Public Health," Dr. Berrier Fontaine, who for many years enjoyed an excellent practice amongst the French residents in London, and resided in Foley-place. The duties of "director" are chiefly confined to cleansing and lighting the city, while that of providing for the public health is vested in an irresponsible and unpaid board of citizens, who avoid meddling with matters of which they are profoundly ignorant. The only resource open to the poor when attacked is that afforded by the hospitals, and in hundreds of cases death ensues without medical intervention or aid of any kind.

The following is an official return of the cases of cholera in the different hospitals since the commencement of the epidemic:—

	Cases.	Deaths.	Cures.
Hotel Dieu	1,111	502	437
La Pitie	565	289	229
La Charite	475	249	123
St. Marguerite	120	61	41
St. Antoine	138	75	45
Necker	181	98	84
Cochin	66	31	30
Blanjon	374	188	114
Bon-Secors	130	73	32
St. Louis	577	272	206
L'Ourcine	23	7	11
Enfans Malades	76	29	33
Clinique	30	23	7
Maison de Sante	76	42	21
Maison d'Accouchement	2	1	1
St. Lazare	43	21	14
Bicetre	210	194	24
Salpetriere	1,078	648	224
Incurables (men)	11	9	1
Incurables (women)	13	12	1
Enfans trouves	1	1	0
Menages	54	36	0
Larochefoucauld	5	3	0
St. Perine	4	3	1
MILITARY HOSPITALS—			
Valdegrace	448	116	232
Gross Caillon	627	215	228
Roule	367	177	89
Popincourt	142	77	0
Hotel de Invalides	57	33	19
	6,988	3,701	2,244

The number of deaths in private houses has been 3,012, and the total mortality 6,713. At Salpetriere several of the *internes* have been cut off by the disease; and at Gros Caillon no less than 12 of the attendants on the sick have fallen victims. Within the last day or two we have had a slight recrudescence, and during the week several individuals of distinction, as they are called, have been removed by the disease. Amongst them, I may mention the Princess of Wagram, widow of Marshal Berthier, and M. Latouche, Member of the Assembly, who was cut off in three hours. Many other Members of the National Assembly have been attacked within the last two days, several have died, and the evident insalubrity of the building has compelled the Assembly to remove its meetings to the old Chamber of Deputies. Here they will be more at home, and (may I remark *en passant*) can enjoy the prospect of Louis Philippe's portrait, modestly concealed by a green veil from Republican eyes, as George III. used to conceal the naked statues from the gaze of his consort.

The treatment pursued by the French practitioners does not deserve much notice. It almost exclusively consists in the administration of opiates and the use of stimulants externally. In the military hospitals vast steam-pipes have been laid down along the wards to administer external heat by wholesale, and the medical men speak favourably of the plan. It is certain that the mortality has been considerably less in the military than in the civil hospitals; but this difference may depend on the relative constitutions of the patients. I have not heard that any fair trial has been given here to the "saline method" of Dr. Stevens. A few incorrigible followers of Broussais still continue to bleed, and with fatal effect.

A great moral improvement is indicated by the fact that the presence of the epidemic has not given rise to any of those quack productions, or scarcely any, which usually follow in its wake. One or two puffing pamphlets and an anti-choleraic vinegar are the only indications of this tendency that I have noted. On the other hand, ever since the Revolution of February, we have been persecuted by daily advertisements from certain *virile* professors near Bedford and Soho-squares. They imagined, I guess, that we had been emasculated by the expulsion of Monarchy; but the "chaff" does not seem to produce an abundant harvest.

Apropos of these gentry, I may conclude by informing you, that Dr. Graham and his "celestial bed" have re-appeared in the person and practice of a Professor said to be an ex-Prefect of His ex-Majesty Louis Philippe. This worthy has opened two splendid establishments at Puyleveque-sur-Lot, where "he undertakes to procure a happy fertility for the majority of females reputed sterile. No payment required in case of failure."

ACADEMY OF MEDICINE.

M. VELPEAU, President.

M. Bédor, of Troyes; M. Desmytene, of Rouen; M. Sylva, of Grenoble; M. Gorré, of Boulogne; M. Gravis, of Calais; and M. Ravin, of St. Valery-sur-Somme, reported upon the cholera as it had appeared in their several localities.

M. Agnely, President of the Vaccine Commission, in Algiers, intimated that he had found upon camels pustules analogous to those of true vaccinia, as it appears upon cows.

M. Leblanc read a memoir upon the occurrence of the strongylus gigas, in which he said that this parasite was frequently found on the penis of dogs.

M. Bouvier reported the progress of cholera during the last week. He thought that the disease having reached its greatest intensity, was now upon the decline.

M. Gérardin, though fully sensible of the value of the weekly communications of M. Bouvier, could not, nevertheless, avoid seeing their great fallacy. Week after week it had been said that cholera was disappearing, but yet still it raged. One source of the error in the prognostications was, that the cholera as it now existed in Paris, was compared with that of 1832; whereas, it ought only to be compared with that of other localities. In Russia, the disease of 1849 had not been more severe than that of 1831. At Breslau, a city of more than 70,000 inhabitants, 6,000 had been attacked, of which the half had perished. In Berlin, with its 140,000 inhabitants, there had been 14,000 deaths. In all these places, the intensity of the disease had greatly varied; and it was his firm conviction, that Paris was not about to shake off the epidemic. There was another remark he wished to make. M. Bouvier always spoke of the two invasions of cholera in 1832. This he did not understand; for he could only conceive that the diseases of April and June of that year were the same. He trusted

M. Bouvier's prediction would prove correct, but he greatly doubted it.

M. Bouvier replied, that, if there were not two invasions of cholera in 1832, at any rate the disease exhibited two very distinct phases at the two periods.

SPONTANEOUS CURE OF CHOLERA.

Among the many proposals for the cure of cholera, a do-nothing treatment has been advocated. Broussais, in 1832, not only asserted that cholera, left to itself, was always fatal, but he went further, and said cholera was always fatal when not antiphlogistically treated,—an assertion which no one now believes; and, according to the views of Dr. Lombard, we may also doubt the truth of the first part of the proposition.

In 1832, cholera decimated the village of Ans, situated on one of the highest hills of the Meuse, and about half a league from Liège. One old woman, alone in her house, the family having all departed, was suddenly seized with vomiting and diarrhœa. She laid down on her bed, too exhausted to go into the village for assistance. There she lay four days, taking nothing but copious draughts of cold water from jugs within her reach. On the fourth day, the neighbours, missing her, broke into her house; for when they knocked at the door she was too weak to reply to their demands for entrance. Dr. Wasseige was summoned, and found, on arrival, that the patient's state had improved since first discovered. Learning the particulars, he continued the use of cold water, and in a few days the old woman recovered. At the hospital St. Abraham a similar mode of treatment has been practised by Dr. Sauveur, and, according to Dr. Lombard, with success.

There is nothing new in this statement. Cold water has been strongly recommended by many experienced men, and some of its advocates have spoken in high terms of its efficacy. But the absolute value of this method of treatment has never yet been positively determined. It even appears in some cases, that cold water does not enter the circulation, so completely is the power of absorption lost. In a case recorded lately by Dr. Garrod, several gallons of water were drunk in the course of a few hours, yet the solids of the blood were more than 270 parts in the 1000, although no purging had occurred subsequently to diminish the quantity of the water of the blood. In this case, the water taken into the stomach was immediately rejected, and did not appear to pass into the circulation.

SCOTLAND.

[From our Edinburgh Correspondent.]

One of the prevailing topics in our medical circles for the last two or three weeks, has been Mr. Syme's note to the Editor of a contemporary Journal, in which he informs him, with his compliments, in what sense the term "caries" is used in Edinburgh. To judge by the warmth of the discussions at some of our dinner-tables, on this rather nice point of pathology, Mr. Syme gives us more credit than we deserve, when he represents us as being of one mind as to its right signification. It is two or three months since a pungent leading article made the readers of the *Medical Times* aware that Mr. Syme had engaged in a contest with Mr. Henry Smith as to the expediency of removing the head of the thigh bone, in certain cases of disease of the hip-joint, and probably some of them have observed that Professor Fergusson and Mr. Norman have entered the lists on the same side with Mr. Smith. Mr. Syme's laconic epistle on the alleged Edinburgh sense of "caries," is his last reply to the arguments of these gentlemen; who, he affirms, employ the term in a different sense. We have been rather supine here as to the merits of this controversy till roused to attention by this bold stroke of Mr. Syme, who thus aims at making the Profession at large, in Edinburgh, parties, in a manner, to his opinions. And many of us are likely enough to adopt Mr. Syme's views, at least to a certain extent. The *Medical Times* has already taken a pretty decided side in behalf of the new proposal, and the younger part of its readers may feel bored by any further agitation of the question. But with our national characteristic in Scotland, of sober judgment, the most sanguine among us think the points in dispute still far from being exhausted. Mr. Syme is, in fact, the champion of the established opinions of the Profession. These opinions may require modification; but, to most of us, it appears a settled thing, that he has been hard pressed, in the meantime, rather by want of skill in fence than by the strength of the evidence brought against him. He is an acknowledged authority in several of the subjects concerned in the dispute,—witness caries and the excision of joints,—but withal, he is altogether destitute of the qualities which make a good disputant. He does not know the secret of coming to close quarters with his antagonists. He thinks to succeed by making the breach between him and them as wide as it can be made by words, instead of paring down his views so as to come as near as possible, consistently with truth, into contact with their's. When a man has truth on his side, this is the sure and easy way to triumph; and if he has not, this is the ready mode to convince himself of his error. Moreover, it cannot be denied that Mr. Syme is of a hasty temper, and, at the same time, so extremely jealous of any encroachment on what he thinks straightforward conduct in the pursuit of reputation, as to be very apt to strike on mere suspicion, and before he has taken time to ascertain if the supposed offender be really in the wrong. In Edinburgh it is now so well known, that, along with these infirmities of disposition, there is so much genuine honesty of character and real high-mindedness in the man, that his impatient sallies are readily forgiven, being set down to the account of an over-sensitiveness for the honour of the Profession. He has been cordially welcomed back to Edinburgh; and former differences being soldered up, there is a prospect of a long truce among ourselves from dissension, unless the Goddess of Discord herself, with some new apple in her hand, visit the shores of our Firth. But how can we expect that parties at a distance should understand Mr. Syme's ruling motives so well as ourselves, or that he himself, in regard to them, should lay aside his propensity to be over-jealous for the credit of the Profession, particularly as our mode of dealing with him tends rather to foster his peculiarities. We shall not be surprised, then, to see more battling like that we have alluded to between him and his antagonists and other fiery spirits of the South. Mr. Smith's case was exactly the thing likely to call forth Mr. Syme's ire. On a hasty glance, it seemed to advocate the removal of the head of the thigh bone as the rule of practice in morbus coxarius. If this had been Mr. Smith's meaning, Mr. Syme could hardly have been too earnest in denouncing the new rule. Mr. Smith, however, was entitled to have the account of his case taken in connexion with the papers he had previously published. In these we find his opinion to be, that this operation is not applicable to the majority of cases; that it is to be had recourse to only in the last stage of the disease; that dislocation of the head of the femur is a *sine quâ non*; that there must be evidence that the disease is confined to the upper part of the thigh-bone, and also that the pelvic bones are not affected to any great extent. These rules are excellent, why, then, should there be any dispute? It is not enough that the rules be excellent in themselves—they must be applicable to the disease in question. And here lies the real point at issue. It is a point which involves a question of facts: 1st, whether in morbus coxarius both bones become uniformly affected when the stage of caries arrives; 2ndly, whether the acetabulum be in general more extensively affected with caries than the head of the thigh-bone; 3rdly, whether, after the removal of the carious head of the thigh-bone, a carious state of the acetabulum is recovered from either with or without the use of the gouge and bone-nippers; 4thly, whether the cases of successful excision of the head of the thigh-bone hitherto reported, were really genuine cases of morbus coxarius advanced to the stage of caries. This last question, at the present moment, is paramount in point of importance, and the general feeling here certainly is, that Messrs. Fergusson and Smith have hardly felt sufficiently how essential it is to the success of their arguments, that no room for doubt should be left on this head. The real point at issue is, not how many times the diseased head of the femur has been excised successfully, but how many times it has been successfully removed in the third stage of unequivocal morbus coxarius. No doubt it may be found that pathologists are not yet agreed as to what constitutes morbus coxarius. According to Sir Benjamin Brodie, certainly our highest authority on this subject, there are two kinds of cases falling under hip-joint disease: the first including those of ulceration of the articular cartilages, occurring chiefly after puberty; the second including those of scrofulous disease affecting the cancellous structure of the bones, most common in childhood, but more rare in the bones of the hip-joint than in most other articulations. These two forms of disease are very different, and, unless reference be made to this distinction in the cases of excision said to have been performed successfully, any conclusion made from them is very defective. But there are forms of disease affecting the head of the thigh-bone, in which excision may be successfully performed, which cannot, by any latitude of terms, be brought under morbus coxarius; for example, caries commencing in the cancellous texture of the head of the thigh bone, and extending towards the joint, of which cases are recorded, and necrosis of the head of the bone, which, though rare, does occur. In short, even Professor Fergusson's case, that of Elizabeth ———, does not strike us as one unequivocally referable to either of the two heads of morbus coxarius admitted by Brodie. And most of us here think, that Mr. Samuel Cooper, were he still alive, would be surprised to find his particular account of Mr. White's case cited to prove the expediency of excising the head of the thigh-bone in morbus coxarius, remembering his emphatic declaration, "that the bones of the pelvis in that disease are always more diseased than the thigh-bone," a fact which displays the absurdity of ever thinking of amputation in those cases.

All here allow the question under debate to be one of much interest, and nothing is required beyond what exact reasoning on a practical question demands. But we hardly anticipate that Messrs. Fergusson and Smith will succeed further than in showing, that amidst the multitude of cases of morbus coxarius daily falling under surgical treatment, there are some exceptional instances to which the operation of excision may be applicable. But it still remains for them to show, how these exceptional cases are to be recognised. For Mr. Smith's own case, in which he excised the head of the femur and took away some carious portions of the acetabulum, is by no means exceptional. It bears the characters of a usual case of morbus coxarius. The Profession is under an obligation to Mr. Smith for publishing it, for it bears unequivocal testimony against the practice which he had before advocated. And Mr. Syme was perfectly entitled to hold up the final ill success of Mr. Smith's case, as a warning against any departure from the established maxims of surgery in the management of morbus coxarius. There was caries of both bones, caries besides of the lumbar vertebræ, and sinuses extending downwards from these towards the acetabulum,—plainly a case destined to prove quickly fatal, independently of any other internal disease, primary or consecutive. But Mr. Syme

was too anxious to make an example of Mr. Smith, and attacked his veracity in regard to a statement that the immediate cause of death was granular disease of the kidney. This might or might not be a concurrent cause of the fatal event; it was of no importance to the use Mr. Syme was entitled to make of the case; it was of no advantage to Mr. Syme's argument, and raised a strong sympathy on Mr. Smith's behalf, tending to obscure the real merits of the dispute. There is little difference of opinion in Edinburgh in regard to one point; namely, that however strict may be the rule which Messrs. Fergusson and Smith prescribe to themselves in the application of their principle to practice, they have not yet been able to express themselves guardedly enough to prevent inexperienced surgeons from applying it broadly, and with very little limitation, to cases of morbus coxarius in general. And here most of us cannot but agree with Mr. Syme, that, as a consequence of the large proportion of cases of morbus coxarius which never go beyond the first stages, and finally do well, numerous instances of supposed successful excision of the head of the thigh bone would, but for the opposition offered, have been quickly placed before the public, the result of unnecessary and therefore unwarrantable operations.

Mr. Syme's strong expressions, such as that the operation must be useless if the bones are carious, and unnecessary if the constitution be still able to bear up against the disease, even after suppuration and ulceration of the joint have arisen; and that, if caries of the bones has occurred, that the patient must die, have raised much discussion, and very different opinions have been expressed on this subject. If truth be our object, and not a mere war of words, the real question here is not whether Mr. Syme uses the word caries in a sense peculiar to himself, but whether the caries which affects the acetabulum in morbus coxarius, and which must generally be left after excision of the head of the thigh-bone, be capable, in these new circumstances, of spontaneous cure? There can be no doubt, that there is a state of caries finally affecting the bones of the joint in morbus coxarius, which has no natural tendency to pass into healthy action; or, in other words, which may be regarded as generally incurable; and this is the peculiar morbid condition of the osseous tissue, to which Mr. Syme wishes to limit the term caries; that is, spicular caries. In this view many of our most experienced Surgeons agree with Mr. Syme, while they admit that scrofulous caries, namely, a deposit of scrofulous matter in the cancellous structure of bone, accompanied by ulcerative absorption, is capable of resuming healthy action, the earthy matter being gradually thrown off. It is, however, beyond doubt, that while scrofulous degeneration of the bones concerned in the hip-joint is far from unknown, it is, nevertheless, less frequent than in many other joints, and that the caries which arises in the bones of that joint, particularly when the disease occurs after puberty, is generally the spicular caries—that form, well described by Mr. Syme as exhibiting, after maceration, an excavated and rough appearance, "the cancellated texture being remarkably spicular, white, and brittle, so as to resemble a spongy bone, which has been exposed to the action of fire."

Such, then, is an outline of the sentiments called forth among us here by the agitation of the points in dispute, up to the period at which we write.

Our weather has been excellent for some time past, yet not a few are on the sick-list. There have been some severe cases of erysipelas, and some fatal puerperal cases, as usually happens when erysipelas prevails. What is singular, however, there is not any greater proportion of erysipelas cases in the Infirmary than usual. There is a slight epidemic, marked by trifling sore throat, and great febrile prostration, bearing no small resemblance to influenza, though far from being so extensively prevalent. Under the head of Chloroform there is little new. In one case where it was used in a boy, under a slight surgical operation, it produced convulsions, leading, however, to no serious result. Dr. Simpson's papers on the subject have been collected, and published in America in a thin volume. We wait with some curiosity to hear more of Dr. Tyler Smith's new mode of catheterising the Fallopian tubes. The Report of the Central Board of Health on the subject of Quarantine and Contagion has fallen like a thunderbolt among our staunch contagionists—of which hereafter.

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THE MEDICAL TIMES.

SATURDAY, JUNE 9, 1849.

THE questions raised in the Report on Quarantine lately published by the Board of Health are of importance too great to allow us to pass by them without further comment. It is of moment, also, that the Profession should express its opinion on the several points mooted in the Report, and it is advisable that this opinion should be, if possible, unanimous. If this opinion cannot be unanimous in regard to matters of theory, it may yet be so in regard to matters of practice. If we find it necessary still to reserve our opinion respecting the degree of contagion of a disease, we may yet hope to determine the extent to which quarantine and isolation may be useful in preventing its extension.

We do not think that the Board of Health will have any difficulty in maintaining their positions that quarantines are ineffectual against cholera in all climates, and are needless against yellow fever in cold climates. This is the utmost they have at present advanced in respect to these two diseases.

The great point of controversy will evidently turn upon the efficacy of quarantines against Oriental Plague. We shall, no doubt, find, that considerable differences of opinion exist on this subject, and we are not certain that the general voice of the Profession will confirm the extreme conclusion of the Board of Health. They may be right in demanding modification of the Law of Quarantine; it is very doubtful whether they can safely demand abolition.

The most recent doctrines concerning the contagious nature of Oriental Plague, and the value of quarantine regulations in limiting its progress, are contained in the elaborate Report presented by a Commission, of which M. Prus was the Secretary, to the French Academy in 1846. In this Report the development and progress of plague were minutely investigated, and the opinions of the Commission were severely tested in the subsequent discussions in the Academy, and in the critiques on the Report contained in the French journals. The majority of the conclusions contained in the Report met with approval, and in this country in particular obtained considerable approbation. The principal of these conclusions were, that the Plague spontaneously originates in Egypt, Syria, and certain other countries, which resemble each other in hygienic condition; that every ten or twelve years this production is so intense as to produce an epidemic; that every particular and independent place of origin constitutes a special epidemic "foyer" or focus of the disease; that within the limits of such epidemic focus, the Plague extends itself by a continued action of the causes which produced it, and also by an influence exerted on those who approach the sick by the miasms emanating from the bodies of these latter; that mere contact abstracted from the action of miasms floating in the atmosphere has no influence in promoting transmission; that, in addition, the Plague can be transmitted beyond epidemic foci by the bodies of those who have fallen sick in such foci, but not by articles of merchandise or clothes; that cases of sporadic plague—that is, cases, occurring in the intervals of epidemics—do not produce the disease by evolving plague-poison, on account of the slight intensity of the disease, and the comparative purity of the surrounding atmosphere; that, even when plague is imported from an infected district into another locality, and affects individuals resident therein, these cases will not become sufficiently numerous to constitute an epidemic, unless the imported plague meets with similar conditions of atmosphere, hygiene, &c., to those which have been instrumental in causing it to be epidemic, in the place from which it has been brought.

In this Report the occasional contagion of epidemic plague is admitted, and we might say established. It is decided on good evidence that the bodies of the sick may impart the disease to persons beyond the epidemic focus, as indeed has occurred in several cases at Marseilles since the great plague of 1720. The admission of this fact necessitates the use of quarantines, unless we are prepared to *prove* that an imported poison *could not* spread, because, in the place to which it had been carried, it would not find the epidemic atmospheric conditions, nor unfavourable hygienic conditions, similar to those which have originated it. And although this is really the conclusion of the Commission, they have hesitated to apply it to practice, but, assuming as proved the possibility of transmission, propose to arrest it as heretofore by quarantine. The Commission does not, however, rely solely on quarantine, but recommends that the disease shall be combated by appropriate preventive sanitary measures, and that, when it becomes prevalent, means should be taken to remove the sick from the pestilential locality, to insure free ventilation, and to thin, if possible, the dense, yet still healthy, population of the place.

The Commission acknowledge, then, the contagious nature of Plague. They propose to limit this mode of extension by the same precaution as formerly, but they also indirectly indicate the partial and imperfect view which the law of Quarantine takes of the causes of the diffusion of Plague, and they propose to

remedy this by enactments based on principles altogether different from quarantine. That this is the correct view, that it is the one which will be arrived at by all who carefully study this subject, we firmly believe. It is possible, that in years to come, the hygienic measures recommended by the Commission may so utterly root out the Plague, that *all* preventive measures will be unnecessary. This is an object we should strive for; at present we are still far from its attainment.

The Board of Health have professed opinions very similar to the French Commission, only they seem to deny the transmissibility of the plague in any case, although they admit its contagious nature in the countries in which it is endemic. As regards this country, they deem all fear of it chimerical, and believe that our sanitary conditions are too perfect ever to allow it to become epidemic among us. They adopt, in fact, the opinion of the French Commission, that the old Plagues of London were not imported, but originated spontaneously, and they attribute their cessation to the healthier condition of the people. So far they may have ground for their belief. But the Board proceed to adduce an argument which appears to us not only erroneous, but absolutely damaging to their own opinions. They allege, that Typhus and Plague are identical, and this statement has been worked out and ably set forth by an influential daily Paper. The Plague, say these Writers, is the typhus of Egypt. Formerly, when London was as filthy as Egypt, it was the typhus of London developed to an intense degree; it has disappeared from London; it cannot return here; we can manufacture only its modern representative, the "Typhus mitior." Improve Egypt to the state of London, and you will convert the Oriental Plague into a disease not more malignant than English typhus. But this statement is based on no evidence, beyond a few vague comparisons, of the coarser external resemblance of Typhus to Plague, which are really of no weight. It is opposed to all we know with certainty of Typhus and Plague. Nay, more than this, it is an unfortunate argument to advance at this moment, when we have seen Typhus imported into all our large towns by the Irish paupers, and have seen it spread from these among the previously healthy residents of the invaded town. There are many men in England who will be disposed to say, prove to me that Plague is intense Typhus, and I will use my utmost power to prevent you from depriving me of the safeguard of quarantine. To ally Plague to so contagious a disease as Typhus, is to give us a reason the more to keep up our measures of prevention. At any rate, if *we* need not fear cases of sporadic Plague, we should yet advise the Italian States, or the Turkish Ports, to be rather shy of them.

The opinion at which we have arrived in reference to Plague is this: that its contagious propagation is only one of its means of spreading; that quarantines require to be modified, but not to be abolished; and that the exact extent of the preventive measures we should adopt, must be determined by additional inquiries. We are as yet on the threshold merely of the subject.

PSYCHOLOGICAL SCIENCE AND ITS CLAIMS.

On a previous occasion, in noticing the first volume of the *Psychological Journal*, edited by Dr. Forbes Winslow, attention was directed to this subject, and we are induced to recur to the consideration of it, partly at the request of several esteemed Correspondents, but especially from its importance, which is very far from being justly appreciated either by the Medical Profession or the public. It has high claims on the support of both. It is scarcely necessary to observe, that the term Psychology, is compounded of two Greek words "ψυχη" mind, and "λογος" a discourse.

We shall briefly in this, and in a subsequent Number, endeavour to point out the comprehensive relations of the science to insanity. The chemist, by means of analysis,—by the application of principles with which he is acquainted, resolves substances into their ultimate elements:—the artisan, from a familiarity with the tools with which he works, ministers to our comforts, to our wants, and to the diversified requirements of a refined and luxurious taste:—the astronomer, from a knowledge of physics, and of the laws governing the motions of the planetary systems, is enabled to predict eclipses, and to explain a variety of phenomena with a truthfulness that imparts to his pursuits something of the marvellous:—the mariner, from the ample resources derived from the same branches of science, measures, with almost as much accuracy, his exact point on the trackless ocean, as if circumstances had permitted him to employ the line and rule. Results like these are well calculated to astonish and delight the understanding, deeply imbued with the love of knowledge; they are illustrations of the power of man over nature, and he who warms not at the contemplation of such triumphs has much to learn.

There is another scientific department which has far higher claims on our attention,—the faculties, feelings, and emotions constituting the human understanding, by which these wonders are accomplished. The master-spirits of all ages have acknowledged its importance, and laboured to elucidate the objects of which it treats. It is, however, to modern times that we must particularly look for just views and precise facts in relation to Mind. Much has been effected by the genius of Hobbes, Locke, Berkeley, Condillac, Reid, Kant, Dugald Stewart, Gall, Brown, Mills, father and son, and by Bailey; but let it not be supposed that the soil, which these and others, scarcely less distinguished, have cultivated, possesses no riches to reward the enterprise of subsequent inquirers. Valuable as are the truths they have established, and often exquisitely beautiful their explanation of mental phenomena, these truths are, nevertheless, comparatively, only the germs of more comprehensive principles which remain to be developed, or to be traced with a juster or finer power of analysis.

Whether the mind be considered according to the views of one class of philosophers, who investigate its constitution by the aid of consciousness, or agreeably to the doctrines of the phrenologists, no argument is required to prove, that it is composed of a variety of faculties, which in no two individuals are alike, nor do they in any one person maintain an unvarying condition. Thought and feeling are constantly antagonistic. At one moment, one predominates, giving a dignity and nobility to the aspirations and occupations of man; at another, the emotions sway his conduct, approximating him, in his tendencies and attributes, to the brute. Independently, however, of these extremes, or the manifestation of pure thought and grovelling feeling, there is an intermingling of the light of the mind and the higher sentiments, which imparts to the domestic circle and social intercourse an inexpressible charm and pleasure.

To analyze the nature and influence of these faculties is the business of the Psychologist; and what other pursuit is fraught with equal interest or advantages to humanity! The cultivation of it, if successfully conducted, will enlarge the boundaries of all knowledge, for all are links of one vast chain, by making man better acquainted with the constitution of his own mind, and especially by placing in his hands a greatly improved power, by which to repress or control propensities, or to call forth and invigorate those faculties which exalt human nature. All education is based, or should be, on an analysis of the mental constitution.

The consideration of the Mind, in reference to the wide field of education,—the philosophy of which is understood by few, falls not within the scope of this inquiry. The contemplation of its powers, and their influence on human conduct, strictly belong to it, and he who has studied them most deeply is the best fitted to correct their aberrations. If it be indispensably necessary to the artisan, that he be familiar with the tools he uses, it is equally essential that he, whose function it is to treat insanity, though he cannot handle the powers of the mind, they are, nevertheless, the instruments by which he has to operate in every remedial measure, and, consequently, the skill he brings to bear will be proportionate to his knowledge of them. Schoolmasters, schoolmistresses, and the keepers of asylums, with some few splendid exceptions in each, rarely dream of the requirements which their office demands. They flatter themselves they are fully equal to the duties it imposes; and the public, as ignorant of such matters, frequently display little judgment or sound discrimination in their selection. With their tailor, shoemaker, or milliner, they are far more particular. They would ridicule the idea of employing any of these, unless they were thoroughly convinced they had enjoyed opportunities for becoming expert and clever. How much less alive are they in regard to the qualifications of those to whom they entrust their offspring, for the most important of all objects—his mental culture,—the formation of his character, on which his future destiny and position in society depend; or to the qualifications of those to whom they turn over their friends, when suffering from the most awful of all calamities—insanity. Asylums should not remind us of the entrance to the den of the feigned sick lion,—the footsteps should not generally point in one direction towards the door which receives; and will it for a moment be doubted,

that the proportion whose footsteps are inclined towards the hearth they have quitted, will be in the ratio of the ability, acquirements, or fitness of the individual whose business it is to treat this class of maladies? When will the public be aroused to the consideration of this subject, or sensible of its importance.

One mode, and one peculiarly calculated to enlighten the world on this matter, is, unquestionably, the publication of a Psychological Journal. We possess one, thanks to the enterprise and zeal of Dr. Forbes Winslow; and if if it be conducted in the future with the same talent and liberal spirit by which it has hitherto been distinguished, he will confer an invaluable boon, not only on the Medical Profession at large, but on all who take an interest in the science of Mind. The field which he opens out is magnificent in its views, exhaustless in its relations, and equally abounding in its practical applications.

If he persevere in the course which the wants of the age indicate and imperatively demand, he may rest assured that his efforts, not less meritorious than enlightened in their aim, will meet with the countenance and substantial support they deserve. They cannot fail of success in one direction,—the most important in its bearings,—teaching the professional and public mind to think; and though great good, flowing from the exertions of one or a few, is a plant of slow growth, his labours will sow the seed, and the genial seasons of better times, if not rapidly, surely approaching, will make it instinct with life, promise, and vigour, and, we trust, reward him for the capital necessarily risked in all such undertakings.

As evidence of the interest we take in Psychological inquiries, we particularly direct the attention of the reader to a Review of a Work in the present Number of the *Medical Times*. If the criticism be just, it shows how much is to be acquired on the science of mind. If men who presume to instruct, and who possess many of the essential requisites for the office, can thus err, what must be the mental condition of the many who have fewer claims on our consideration?

MEDICAL REFORM AND THE LORD ADVOCATE'S BILL.

It is rumoured that a Bill is shortly to be introduced into the House of Commons "for the better regulation of the Medical Profession." What kind of Bill this will be we are totally at a loss to conjecture, as the College of Surgeons has refused to sanction any measure which does not give it the power of examining all those who propose to engage in General Practice, as to their knowledge of surgery. That unanimity, therefore, which seemed to prevail amongst the high contracting parties, some months ago, does not at present exist, and fresh negotiations have been opened between them, in the hope that a measure may yet be planned which shall meet the approval of all.

The necessity for Medical Reform has arisen entirely from the defective nature of the Charters granted to our licensing corporations. The establishment of a College of Surgeons might have been of infinite advantage to the whole Profession, had its members been allowed to have exercised an influence in the management of its affairs. By an oversight, or by design, however, they have been excluded from the exercise of privileges which are usually considered as belonging to members of corporate institutions, and the College has ruled, till within the last few years, by a self-elected Council.

It might be expected, that the governing body, composed as it was of gentlemen who cultivated only the surgical department of the healing art, would be chiefly intent upon its advancement; and that they would be supremely concerned for the elevation of their order. The members have at least imbibed this notion, and they have, in consequence, been loud in their demands for Corporate reform.

Their first efforts were directed to the renovation of the College Charter, and the hope was, for a season, entertained, that the rulers would see the necessity of sanctioning such changes as would allow the Members to exercise an influence in the election of councillors, and in the direction of medical education. As the demands of the Profession were resisted by the College authorities, it was thought by a large number of General Practitioners, that nothing less than an incorporation of their order in a new Institution would remedy the evils abounding in the Profession; and, at the present moment, a draught of a Charter is under the consideration of the Secretary of State for the Home Department.

Now, we think that the great question of Medical Reform embraces two things—the elevation of the social condition of the Profession, and the suppression, so far as possible, of quackery.

The elevation of the social condition of Medical Men cannot well be accomplished without full justice being done to them. A liberal Profession requires liberal institutions; and, if ancient Colleges cannot be moulded to the spirit of the times, it is no matter of surprise that a demand is made for a new incorporation. A proper social position, moreover, cannot be attained without a high standard of medical education. We admit that much has been done within the last few years, by way of improvement, but yet much remains to be accomplished. The great subjects of Hygiene, of Medical Jurisprudence, of Psychology, are neglected in our schools, and our licensing Corporations do not examine candidates as to their knowledge in these departments of Medicine. A good measure of reform, therefore, will remedy these defects in our system of education, and hereafter we shall have a race of Practitioners well acquainted with those subjects.

In any beneficial measure of Medical Reform, there must be provision made to check, so far as possible, the progress of quackery. Upon the necessity of this there is but one opinion; upon the means by which it is to be accomplished, there are many. A penalty, easily enforced against illegal practitioners, we consider essentially necessary; but how the public is to be weaned from its inordinate love of nostrums, is yet an unsolved problem. It seems, that the tendency of the human mind, when left to itself, is towards imposture; and an American writer has well observed, that the freer the institutions of a country, the more rife and multifarious must error be. Dr. Manley, in a discourse lately delivered before the New York Academy of Medicine, takes up this subject with singular acumen; and he suggests the necessity of engrafting *human physiology* on our courses of general academic instruction. This, he thinks, would serve the double purpose of protecting against the assaults of quackery, and of furnishing that kind of intelligence which would enable the public to form a more accurate judgment of the character of their Physicians. This proposition certainly merits attention; but we fear that even supposing it were adopted, it would fail to produce the results intended, so long as quacks are allowed to publish the most consummate falsehoods to promote the sale of their nostrums. The common sense of mankind, it has been said, no less than medical records, teaches that the curative powers of medicine are determined, not by physiological precepts, but by direct observation of their action; many of the medicines which are surest in their effects are perhaps those of whose *modus operandi* we know little; and such being the case, there is no apparent reason why a non-medical person should disbelieve the assertions of nostrum vendors, more than those of medical treatises. Knowing that, in this matter, experience is the only test of truth, such a person wrongly judges the experience in both instances to be of equal value, for he does not take into account the moral character of the witnesses. Still less does he consider that the experience of the quack is a totally different thing from the experience of the scientific Medical Practitioner: the one consisting wholly in the reiterated prescription of a medicine of which he knows little, for diseases of which he knows still less; while the other is a constant growth in knowledge of the nature and distinctive characters of diseases, obtained by an analysis of their phenomena, and directed by the light of anatomy, physiology, and chemistry, as well as by that of sound medical learning.

We wait with anxiety the publication of the Medical Bill, which is said to be already prepared by the Lord Advocate. The Colleges and National Institute are busily engaged in negotiating,—the Profession must not slumber.

THE CHAIR OF MEDICINE IN UNIVERSITY COLLEGE.

We understand that Dr. Walshe has been appointed by the Council of University College to the Chair of Medicine, vacant by the resignation of Dr. Williams. The appointment reflects honour on the Council, and will prove highly beneficial to the distinguished school whose proceedings they direct. In the present state of our Profession, a teacher must be possessed of rare and high qualifications, in order to discharge efficiently the onerous and difficult duty of teaching practical Medicine. Indefatigable industry to keep pace with the constant progress of observation—skill to arrange and generalize an overwhelming accumulation of facts—acuteness to separate the essential from the contingent and unnecessary—clearness to present it easily to the mind of

the learner,—are all qualities which are evidently necessary for the teacher to possess, and without which originality and genius will be but indifferent instructors. But these qualities are not alone sufficient; the teacher must himself be an original investigator in the department he professes, else he will never communicate to his pupils the desire to search for themselves into Nature's hidden mysteries, and to gather the rich treasures which are found in her fertile bosom. The mind of the pupil has to be formed, not by the mere reception of the facts his teacher gives him, but by contact and intercourse with the mind that instructs him, and by imbibing from this mind a portion of its own originality and power of observation. The good instructor teaches how to learn, as well as indicates what to learn. The present Professor of Medicine in University College is one, if we mistake not, possessed of all these qualities. He is richly gifted both with the power of apprehending and of originating—a most diligent learner, he is also an original thinker. He is profoundly imbued with a sense of the value of the exacter methods of inquiry, and is professedly hostile to the vague theories and misty speculations which, in our day, have been permitted by some to supersede observation. University College has always been fortunate in her Professors of Medicine. Dr. Walshe is a most worthy successor to his eminent predecessors.

REVIEWS.

Report on Quarantine. By the General Board of Health.

(SECOND NOTICE.)

In continuing our analysis of the Report on Quarantine, it will be advisable, in the first place, to examine somewhat closely into the propositions on which the Board found their opinion of the uselessness of quarantine. It must be remembered, that these propositions apply exclusively to the three diseases against which we maintain our quarantine establishment: viz., Cholera, Yellow Fever, and Oriental Plague. They may or may not be applicable to small-pox, typhus, scarlatina, or pertussis. Whether they are, or not, is of no consequence to the present subject, as against these diseases we establish no quarantine.

It is evident that the several propositions adopted by the Board are of two different kinds. Some of them are derived from a study of the conditions of spread of pestilences, from which it is inferred that quarantines must be useless because they do not take cognizance of, or regard these conditions. Other propositions are based on the assertion that, experimentally, quarantines have failed; seeing that they have *not* protected and shielded from injury those who relied in them, and that, consequently, evidence cannot be adduced to prove their efficacy.

In the present state of knowledge this last statement, were it well founded, would be of greater weight than any considerations derived from more theoretical sources. We are a downright and a matter-of-fact people; we attach little importance to dogmas, however specious, if experience be opposed to them. If quarantines *have* preserved us from cholera or from plague, then, in spite of the reasonings of Science, a nation like the English will never abandon them. But if they have not,—if their employment originated in a chimera, and if, for these three centuries, their administration has been merely a gigantic blunder,—if it can be proved to us that our exemption has been owing to other causes, and that our safety has not been attributable to our own precautions, then we shall be only too glad to discard this cumbrous and wearisome machinery with which the error of our predecessors has so long and so needlessly burdened us.

Let us allude, first of all, to the theoretical propositions of the Board.

1. The Board allege that, for the spread of any of these pestilences, an "*epidemic constitution*" of the atmosphere is an essential condition. The nature of this epidemic constitution has not yet been fully elucidated, and in what its peculiarity consists remains still doubtful. But that there is some peculiarity appears probable from the following reasons:—

(a) These diseases occur at tolerably regular intervals in cycles of years. About every 25 or 30 years the yellow fever acquires a peculiar development, and an increased extension. It then declines to its minimum, from which it again subsequently rises. Cholera, within the last 30 years, has twice passed over the globe, and between these two visits many countries remained perfectly free from it. Plague also has, undoubtedly, exhibited the same tendency to return epidemically about every tenth or fifteenth year. Influenza also exhibits a very curious periodicity in its returns.

On account, therefore, of the regularity of these cycles, it has been supposed that they must be owing to some still undiscovered law, which, at stated intervals, reproduces the meteorological state most fitted for the diffusion of any of these epidemic diseases.

(b) But, in addition, it has been attempted to determine this meteorological state. An intemperature of the seasons has been said to precede great pestilences. The General Board cites, as recent examples of this, the meteorological disturbances which preceded the outbreak of epidemic influenza in London in 1847, and the phenomena which are described by Dr. Adair Crawford as ushering in the terrible epidemic of cholera in St. Petersburg in 1848. We suspect that the illustrations are less true than the doctrine they are intended to support, as both influenza and cholera have appeared epidemically, hundreds of times, without being preceded or accompanied by meteorological phenomena similar to those detailed by the Board.

(c) The doctrine of epidemic constitutions has been supported by the argument *per viam exclusionis*, that, after making every allowance for the influence of contagion, that is, of diffusion of poison from infected persons,—for the effect of bad sanitary conditions, &c.,—still we cannot account for the prevalence of the epidemic disease in a higher degree one year than in the year preceding it, or in an intenser degree in one country than in another in which the sanitary conditions are equally bad, and into which the disease has actually penetrated, otherwise than by supposing, that, besides these influences, there is some other important condition of extension. And what this should be, if it is not some peculiarity in the electric currents which course through the earth, or in the atmosphere which envelops it, it is not easy to say.

(d) Another reason for supposing that there is some truth in this doctrine of epidemic constitution is, that, for a number of years, we often see certain epidemic diseases almost absent, while others acquire a wide diffusion; then, in another series of years, these latter decline, and disappear before the increased prevalence of the former class. And, as the condition of the population remains the same,—as the diseases are always present, though in low intensity, and as, therefore, there is no want of poison,—as there is no lack of predisposed subjects,—how are we to account for this deficiency of diffusion on the part of certain of these diseases, except on the hypothesis, that there is some atmospheric state which is adverse to them, and which, for a term of years, prevents the manifestation of their full power? Moreover, how are we to account for the fact, that an epidemic disease will one time be extremely severe, as the cholera in these countries in 1832, and yet that, at its next visitation, when it traverses countries and nations who are, as far as we can see, equally prone to be affected by it, it falls most lightly upon them, as upon us has fallen the cholera of 1848?

Admitting that there is some truth in this old doctrine of "epidemic constitution," it is perfectly evident, that the founders of quarantine totally neglected it, and that the Board are quite justified in asserting, that quarantine does not touch "this primary and essential condition." But then the upholder of quarantine is by no means beaten from the field. "True," he may say, "over the epidemic constitution my precautions possess no power; no human skill can turn aside this evil, of whose nature we are ignorant, and of whose advent our science gives no indications. But what are the necessary conditions to insure the prevalence of an epidemic? Not merely the epidemic constitution, unless you mean by this term to imply the actual spread and transit of the special cause, or unless you believe, that in each locality over which this distempered atmosphere passes, the special cause is developed into existence and activity. To make the epidemic, you require, according to your own showing, that a special poison shall be present, to be influenced by the epidemic constitution. Now, herein lies my power. I cannot prevent the epidemic atmospheric condition from passing over a country, but I claim to be able to arrest the passage into that country of the special poison, without which the intemperate atmosphere is comparatively powerless. True, my view of these epidemics is partial, but it is adequate for its object. It regards only one condition, it may be, but that condition is the most vital of all."

In answer to such an argument as this, the General Board might at once reply, that in this statement, it is completely overlooked, that the evil of the present law is the maintenance of quarantine at *all times*, when, from the absence of the epidemic constitution, the special poison could not become epidemic, and therefore need not be so strictly barred out. But then, it may be asked, "who is to know when this undefined epidemic constitution is present or not? Give us the signs and tokens which herald its approach, and we will then limit our quarantine to the times of its prevalence; but, until you do so, who can feel justified in admitting a poison, which, for anything we know, may find, at any time, the favouring epidemic constitution in the most intense degree."

The Board might, however, take another ground. They might assert, that the special poison is not thus under the control of quarantine; that it travels in other ways than by human intercourse, and that, even when it travels in this way, isolation will not arrest it. And in replying thus, we believe the Board would have found the true answer; but then they would have abandoned their theoretical position, and have appealed to experience. We shall, therefore, return to this argument.

2. The second proposition advanced by the Board is, that in each country the severity of the epidemic is influenced in an extreme degree by certain local favourable or unfavourable sanitary conditions. Place a locality under the most favourable sanitary condition, and over that favoured spot the epidemic constitution, even though it bear with it the nascent seeds of pestilence, will harmlessly pass. In proof of this position as regards cholera, in addition to the evidence of the Sanitary Commissioners, the Board adduce the facts collected by Mr. Grainger at Hamburg. As regards plague they cite Mr. Ranken, the historian of the Pali Plague of India, and Dr. Hamont, who, in 1845, brought before the notice of the Commission of the French Academy, the sanitary condition of the Fellahs of Egypt. If our readers desire more evidence on this point than our limits will allow us to give in this place, it may be found, as regards cholera, in nearly all the standard works on this subject; as regards the Oriental Plague, it may be found explicitly set forth in the French Academy's Report on Plague and Quarantine; (a) as regards yellow fever, it is contained in abundance in the writings of Bancroft, Rochoux, and many others, and particularly

(a) Rapport a l'Academie Royale de Medécine sur la Peste et les Quarantaines, fait, au nom d'une Commission par M. le Dr. Prus, &c. Paris. 1846.

in the numerous works of that singular and enthusiastic inquirer, Chervin, whose keen interest in yellow fever caused him, for more than thirty years, to visit every spot in which it had ever appeared, and thus personally to investigate, at the risk of life, and with the loss of fortune, the condition of every locality in which this fatal disease had prostrated its victims.

We are fully prepared to grant this position to the Board, and to admit that they will circumscribe the range, or possibly destroy the very existence, of these three diseases, if they can insure a perfect sanitary condition of the countries in which they now prevail. In their attempts to do this they may reckon on our hearty co-operation and support.

But then, as regards quarantine, it may be at once objected, that the sanitary condition being yet imperfect, we have a right to contend that it is hardly fair, until such condition is perfect, to demand the abolition of that which we consider our safeguard. The advocate for quarantine may nearly repeat his former argument. "I will admit," he may say, "that a perfect sanitary condition would annihilate these specific poisons. Prove to me that your country is in such a perfect state, and I care not how many diseased persons I allow to enter. But, till then, I will prevent the poison from passing into these localities, which at present are as unhealthy as at any former period."

To this the Board have already replied by anticipation, that, however imperfect our sanitary condition may be, it is sufficiently good to repel and keep at bay at least two of these diseases, namely, plague and yellow fever. As regards plague, it is explicitly asserted, that this disease could not now exist among us; nay, more, it is contended that of late years, the type even of our endemic typhus has become altered. "During the last century a deadly form of fever, typhus gravior, scarcely to be distinguished from plague, frequently prevailed as an epidemic. But for the last thirty or forty years, not a single case of typhus gravior, answering to the description of the writers of that day, has been witnessed in London; this malignant form of disease has disappeared under the improved conditions of increasing civilisation, and has given place to the typhus mitior or the common typhus of the present day." (P. 43.) We are disposed to question whether this passage is true to its fullest extent. That typhus is less malignant now than it formerly was, we may admit; but, doubtless, it is still the same disease, and lately, in the terrible calamity which has fallen on a portion of the kingdom, we have seen typhus developed or prevailing among sanitary conditions as unfavourable as could ever have existed, and yet preserving the same specific characters which it presents every year in London, though doubtless it was aggravated as regards its intensity, and extended as regards its prevalence. And, at the present time, in Ireland, is not the sanitary condition so bad, that even Oriental Plague could find there a fitting habitat? We believe it is. Three years ago we should have agreed with the Board in thinking that our sanitary condition could keep at bay the Eastern Plague; but with the present state of Ireland, and of some towns in this country in which the Irish have collected, we are disposed to hesitate in our belief.

In addition to sanitary conditions, the Board bring forward another argument of a somewhat similar kind. They call attention to the fact, that some of these diseases require certain conditions, without which they cannot exist. The most ardent supporters of the contagion of yellow fever admit that the poison cannot exist at a temperature much below 75° Fahrenheit. Therefore, in a country whose mean annual temperature is more than 20° below this, and whose highest summer range never continues for many days at the temperature necessary for the perpetuation of the yellow-fever poison, it is really a mockery to impose a quarantine against a disease whose tenure of existence is of so frail a nature. So, also, plague is arrested by a certain degree of cold and dryness, and, consequently, even in the plague countries, its epidemic duration is limited to certain periods of the year. Therefore, admitting the value of quarantines, in this case, it would be needless to maintain them after the termination of the plague period, although a vessel sailing during this period necessarily carries a foul bill of health.

With the greater portion of this clause of their argument we fully agree with the Board, and we consider that it strongly supports their opposition to the Quarantine-laws as they now stand.

3. The third statement made by the Board is, that, before Quarantine-laws are brought into play, the health of the community has become sensibly affected. This opinion is not, we think, based on very certain evidence. It is perfectly true, that some of the older writers—and among them even Sydenham—believed, that, in the case of plague, they could trace the impression of the coming pestilence on the common diseases of the time; but then this belief was generally taken up after the plague had passed off, and when the minds of men were still profoundly affected by the scenes they had witnessed. To convince us of the fact, we have no evidence beyond the opinion of those writers; and, according to our present attempt to introduce certainty into medicine, we are not called upon, on such slender grounds, to adopt so important a conclusion. In respect of cholera, a similar assertion is made by Dr. Southwood Smith, who states, that, six months before its appearance in England in 1832, the type of fever in the London Fever Hospital underwent a remarkable and unprecedented change, from inflammatory to depressed, and that the common typhus assumed a choleraic aspect. We admit the value of the testimony of so eminent an observer, but we should like to have the observation confirmed by others.

Entertaining, therefore, doubts of the reality of this influence of the epidemic before the actual declaration of it by its proper symptoms, we are disposed to reject this clause of the argument as insufficiently supported by evidence.

If we now retrace the ground we have so hurriedly passed over, it is not difficult to arrive at the following opinion. The Board of Health have, we think, succeeded in showing, that the law of quarantine takes only a partial view of the phenomena of great pestilences; and that, in attempting to combat these diseases, we must proceed on principles which the founders of quarantine never discovered. They have proved, that to trust merely to quarantine to shut out from a country any epidemic disease, is a grave mistake, which all Governments should hasten to repair. The Quarantine-law confines itself to a consideration of the contagious virus, without ever remembering that the virus possesses but a feeble power inherent in itself, but acquires its gigantic proportions under the influence of conditions that surround it, and which conditions are, in many cases, under our control. But so far, we do not see that the Board have made out a case for the total abolition of quarantines. On these grounds alone, we could only demand, that legislative measures should co-operate with, and assist, them, at present, and possibly render them unnecessary hereafter.

Let us see, then, whether there are any other arguments to be arrayed on the same side.

In some parts of their Report, the Board seem inclined to adopt an opinion which has been held by a few eminent men, but which has never found favour with the majority of the Profession. It is what may be termed the extreme non-contagious view of epidemics; that view which attributes them, not to special viri increasing by means of their own action on the body, or in the favourable media which surround it, but to general atmospheric states,—"terrestro-aërial conditions," or "to one common agent, essentially the same in nature, which, under varying conditions, gives rise to various forms or types of disease." Or, as appears from other passages, the Board seem to infer, that an epidemic constitution, spreading equally over a whole country, will cause to be developed, in particular localities, the special cause of that epidemic. In this latter opinion there may possibly be some truth; in the former there is very little. If anything can be considered settled respecting these contagious and epidemic diseases, it is, that their symptoms are too regular and precise to allow us to refer them to any single agent which produces endless modifications of the disease according to the circumstances which surround it.

If these opinions were correct, quarantines, of course, would be utterly useless, as they could not shut out the epidemic constitution, or this "common agent" which is diffused with it.

But such opinions are too vague and shadowy to warrant any substantial objection to quarantine; and the Board have themselves set them aside by admitting the general doctrine of contagion.

We will pass on, then, to the propositions and arguments against quarantine which can be drawn from actual experience. These are:—

1. That it cannot be proved, that cholera, yellow fever, and plague, have ever been really arrested by quarantines.

2. That it can be proved, that these diseases have often entered countries in strict quarantine.

3. That this failure of quarantine may be owing to the impossibility of absolutely interrupting communication, and which impossibility is itself an argument against quarantine; or it may be owing—

(a) To a wrong estimate, by the makers of the Quarantine-law, of the diffusion-distance of the poison.

(b) To a wrong estimate of its durability.

(c) To the fact, that the disease spreads in other ways, in addition to actual transit of the poison by individuals.

To these propositions we must, however, return, in a third notice.

On Man's Power over Himself to Prevent or Control Insanity. Second Edition, enlarged. London: William Pickering. 1849.

This small work forms one of a series of books, of which fifteen have already been published, entitled, "SMALL BOOKS ON GREAT SUBJECTS." It will not for a moment be doubted, that the inquiry which it brings under notice, may, with great propriety, be classed under such head. We have read it with the attention it deserves, and we unhesitatingly recommend it to the careful perusal of all who take an interest in such investigations. It is, on the whole, well written, and exhibits throughout considerable research and thought. A great amount of important matter, richly suggestive in its character, is brought within a very small space. We do not, however, think that the writer is a philosopher, or deeply acquainted with the philosophical doctrines which have prevailed from Hobbes to the present day, on the constitution and operations of the mind; nor do we think that his reasoning is particularly distinguished for its logical precision or accuracy. The following is his classification of mental derangement:—

I. Morbid affections of the nervous system and brain.

1. Morbid affection of brain, caused by derangement of the sympathetic system, as inflammation, &c.

2. Morbid affection of the nervous system, producing delusions as to sight, sounds, &c.

3. Morbid affections of the hemispheres of the brain, producing loss of memory, &c.

II. Morbid affections of the intellectual forces.

1. *Inefficiency*, where either the appetites or instinctive emotions, &c., are left either wholly or partially uncontrolled.

2. *Misdirection*, where delusions of sense are reasoned and acted upon.

3. *Occultation*, where the organs of thought are impaired or wanting.

The Author argues, throughout the treatise, "that man has, in the resources of his own nature, the antagonist power, which, *if properly used*, can set at naught the evils, ay, and the so-called irresistible propensities too, of the bodily organism." This is the language of an amiable, but, we are afraid, of an enthusiastic philanthropist, and would scarcely have been employed, had he been more familiar with the philosophy of mind, the actual conditions of the insane, or with the mode in which circumstances excite or predispose to morbid man-

tal affections. He seems to regard all men as similarly constituted, having, according to his reasoning, the same intellectual power, the same passions, and, consequently, capable of exercising the same amount of control over their actions. The great difference, in his opinion, is to be ascribed to education. Where this has been attended to, he remarks: "It is well known, that minds so trained are not found among the inmates of Lunatic Asylums: and why? Are they less subject than others to the ills of life? No; *but they have learned how to bear them.* The wild whirl of passion which unsettles the brain of the ungoverned man, has no place in the mind of the Christian philosopher,—fortune is lost or won with equanimity; for he has that self-sustaining power within which riches cannot give or take away." This may be very nice writing, and the sentiments, if addressed to non-professional auditors, would perhaps be applauded as no less just than beautiful.

Where do we find this large class of Christian philosophers that bear, with comparative indifference, the loss of fortune, friends, or position in society? Is it among those whose business it is to teach such excellent doctrines, that we must look? Do we not observe them to be animated by the same worldly passions as belong to the common herd of mankind? Are they less keen in the pursuit of wealth, aggrandisement, or distinction? Certainly not. It is, therefore, strictly logical to infer, if they are thus *weak* in the chase after such things, that they will be equally affected by the loss of them. The Christian philosophy, which is deemed all sufficient in regulating and controlling the passions, on the occurrence of unexpected misfortunes, should, in the first place, *instruct them how to contemn such objects.* It should teach them to set a far less value upon them, than is displayed in the zeal and anxiety with which they are sought. Man is man whatever be his station in life; and it is the high function of philosophy to study his nature, actions, and tendencies, as they are modified by a variety of circumstances, over many of which he has little control or influence.

A just estimate of the responsibility of man can be formed only by taking into account the character of his mental endowments, the degree of culture they have received, and the social conditions in which he has been placed. The Writer, in treating of this power of the mind, imagined to be so efficient in preventing or correcting insane tendencies, does not take into consideration, *that the power is one thing, and the co-existing state of the brain another.* He expatiates on the qualities of the former, but he foregoes the onerous task of analysing the latter. Suppose, to illustrate our meaning, we were to describe the muscular strength of a horse, which, as displayed in drawing a vehicle, may be regarded as exemplifying the marvellous controlling power of the mind, the carriage following the regular motions of the animal, with the same passive obedience as the thoughts and feelings are stated to be led by this mental faculty. To show the difficulties opposed to the exercise of it,—in fact, the insuperable obstacles which render its determined efforts, at times, altogether inoperative; conceive, further, that two horses are attached to the other end of the vehicle, exerting the whole of their muscular energies in an opposite direction. What would be the result? The first horse would clearly be unequal to counteract the movements of the other two. And in the same manner, excited ideas or emotions will frequently carry the individual along by an irresistible impulse, in spite of the aroused efforts of the imagined controlling faculty.

It is singular, that all the instances which the writer gives, as showing the potency of this power, are instances *which exhibit the influence of another state of the brain*, and as widely different from it as the phenomena of sight are from those of hearing. We will briefly allude to some of the cases which he relates in illustration of the truth of his doctrine. In speaking of a madman, he says, "Before his confinement in the Bicêtre, this attack of madness seized him one day in his house; he instantly warned his wife, whom he loved very tenderly, and had only time to tell her to fly for her life. In the Bicêtre he had the same periodical attacks, the same involuntary desire to shed blood, which sometimes led him to make attempts against the Superintendent, whose compassionate care and kindness he was continually praising. This interior combat between his reason and his malady reduced him to despair, and he often sought to terminate by death a struggle quite insupportable. The straitwaistcoat was applied to curb his suicidal propensities." On this case, taken from a well-known work, by Pinel, he observes:—"Had this man had his mind as firmly imbued with the idea that suicide was wrong, as with the affection for his wife, he would, no doubt, have avoided it with equal care." —(P. 10.) This is equivalent to saying, that had he not had this ungovernable *impulse*, he would not have been a madman. The strength and consciousness of the impulse show that no effort, on his part, could possibly control it.

Again he remarks:—"Suppose an irascible man, incensed by a false report, which, however, he believes to be true; he seeks his supposed enemy, and horsewhips or knocks him down; he does not assassinate, because he fears for his own life if he does. The madman has the false report from his own senses,—wherein do the two differ? *Neither* has employed means within his power to ascertain the truth, and both are aware that such vengeance is forbidden. *I can see no distinction between them.*"—(P. 34.) How much a little mental philosophy would have improved the reasoning of this writer! He can see no distinction between an irascible man and a perfect madman. He says, the madman has not employed the means necessary to ascertain the truth of his impressions. One would imagine from such a remark, that he is supposed to possess some ideas, which are not insane in their direction or influence, which he ought to have used. This is an absurdity. What means can he employ, save his own ideas; these are the tools with which he must operate in every analysis or mental process; and if, from some cause, be it disappointment, jealousy, or loss of fortune, these instruments be out of order, or, in other words, present distorted or exaggerated images to the mind, in the name of common sense, not of philosophy, how is the unfortunate individual, by any exertion, to correct these unnatural impressions? They may be corrected by new impressions, *but not such as ordinarily arise from any voluntary effort which he brings into play*, which, throughout the Treatise, is the great argument of the writer, and in this consists the extraordinary fallacies which pervade his inquiry.

We are again told, that "in all other cases, the being sane or otherwise, notwithstanding considerable disease of brain, *depends on the individual himself.*" In support of his views, he adduces the opinion of Dr. Conolly, to this effect, that "the affection of the brain, which causes these delusions, *is not* madness, but *the want of power and resolution to examine them, is.*" Now, really, where is the philosophy in this refinement? The affection of the brain, which produces these delusions, is *not* madness; "but the *want of power to examine them, is.*" In other terms, the affection must do one of two things: it must either render the ideas too vivid to be controlled, or it must directly weaken that part of the mind with which volition is associated. In either case, how can the individual be strictly responsible for his actions; or how can it be known that being insane depends upon himself?

Among the several cases which he gives as illustrative of the good effects of the *will* is the following:—A young female maniac, as related by M. Foville, was ultimately cured by the preparation for applying the actual cautery to the neck. "Elle avoua, quand elle fut guérie, que le frayeur causée par le fer rouge avait plus que toute autre chose contribué à ramener sa raison." On this the Writer remarks, that in those instances where the actual cautery succeeded, "the success was owing to the stimulus it gave to the *will* of the patient, who, till then, *had been too indolent* to exert its full power over the brain." He does not appear to be sensible, that the emotion of fear, and not the volition of the patient, produced that thorough change in the condition of the brain which led to the recovery. The *will*, which was subsequently supposed to be exerted, *had new mental states to operate upon*, which the mere desire to create could not have given rise to. All the other cases which he relates are of the same kind, and the conclusions which he draws from them are equally fallacious. Whenever a strong impression is made upon the mind, whether from the fear of punishment, or the occurrence of domestic misfortune, exciting new trains of thought, he invariably ascribes the beneficial result to the invigorated efforts of the *will*,—a conclusion at variance with all sound philosophy.

The further analysis of his observations would not be uninteresting; but, as they are of the same illogical character, we shall spare our labour and the patience of the reader. The Work deserves commendation for its aim, and for the motives which have led to its production. The Writer means well, and his views will probably stimulate others, far abler than himself, to study this important branch of psychological research. We take our leave of him with feelings of respect, but at the same time regret, that he has not brought to bear on the inquiry a juster and larger spirit of philosophical reasoning. "Small Books on Great Subjects," may occasionally be of great use, but unless the Writers be fully equal to the undertaking, they had better employ their talents in composing "Small Books on Small Subjects," leaving to others the enterprise of venturing a little further from the shore.

MR. ROSS IN REPLY TO DR. TURLEY.

My dear Sir,—The pressure of my engagements has prevented my replying to your last communication at an earlier period; I trust, therefore, you will excuse the delay. I have recently had the pleasure of an interview with Dr. Stevens, who has, with much kindness and a laudable zeal for truth, submitted to me a variety of documents relating to the cases of cholera that occurred at the Coldbath-fields Prison, and I have thus had before me, in addition to your own able letters, the fullest details that it is possible now to obtain in order to form a judgment upon the matter at issue.

The impeachment of the claim of Dr. Marsden to any credit in the discovery or application of the saline treatment in cases of cholera is made good; firstly, by positive testimony published by Dr. Marsden himself, and, secondly, by his rigid silence on this renewal of the discussion. That there may have been some modifications of the treatment as subsequently employed by Dr. Marsden may be true; but Dr. Stevens's claim to be considered as the originator of the saline treatment, and as the first to suggest its application to cases of cholera, is indisputable. I have the utmost pleasure in making this statement, and hope it will gratify Dr. Stevens. Honour to whom honour is due. I have not, throughout my lectures, mentioned the name of Dr. Marsden, nor given him any credit as the author of the Saline Treatment; I have merely quoted the statistics of the Greville-street Hospital, and contrasted them with those of other Institutions; and if, by implication, it could be inferred that Dr. Marsden, not Dr. Stevens, deserves the credit of the introduction of the Saline Treatment, it was more than I intended, and would be unjust to Dr. Stevens.

With respect to the cases that occurred in Coldbath-fields' Prison, I feel it incumbent on me to express the opinion, that it appears Dr. Stevens was hardly used. Although in the absence of that kind of professional documentary evidence disqualifying the ability of the Government Inspectors to form a correct judgment on the cases and circumstances presented to them, or indubitably impugning their veracity, which alone could be satisfactory to a judicial mind, I may not be authorised to reject wholly their testimony, and to adopt that of Mr. Wakefield and the Visiting Justices; yet I am prepared to pay the utmost regard to the credibility and integrity of Dr. Stevens, and feel persuaded that he would not assert more than he believed to be true, and that what he believed to be true he would not hesitate to assert.

One cause of the discrepancy may have been the rapidity with which a case of cholera alters its character. The diseased man of the morning may be the hale man of the midday, and thus many cases which presented, on their first admission into the sick wards, unquestionable symptoms of cholera, may have lost the characteristic signs of the disease in a

few hours, and nothing but general debility may have remained. A reluctant witness might, with such facts, find an excuse for scepticism.

Dr. Stevens's character and reputation and, however, far above the reach of petty malice and envious detraction. His name is historical; his opinions are still on their trial: whether true or false, the admirable diligence of inquiry, the love of truth, and the sagacity which have distinguished his career, will place him in one of the loftiest niches of that temple which gratitude has consecrated to the honour of genius. As a lasting reputation can, however, be based only on truth, its claims are rather damaged than strengthened by doubtful evidence. If Dr. Stevens's views are correct, as I have no doubt they are, it is unwise to profess that they must stand or fall by the evidence of the practice in Coldbath-fields. Every age and every year will accumulate testimony in support or disproval of his doctrines; and it is not so much by the results of a single experiment, as by the aggregate experience of mankind, that opinions must be judged, and truth vindicated.

Believe me, my dear Sir,
Yours very faithfully,
GEORGE ROSS.

24, Farringdon-street, June 5, 1849.
To Dr. Turley, &c. &c.

DR. GRIEVE'S REPORT OF THE CHOLERA AT DUMFRIES.

[To the Editor of the Medical Times.]

SIR,—In the *Medical Times* for the 26th of May, 1849, is an article on Epidemic Cholera, as it appeared in Dumfries in 1832 and 1848, by Dr. Grieve, one of the Physicians to the Dumfries and Galloway Royal Infirmary. The greater part of this article appeared in the May Number of the *Monthly Journal of Medicine*, published in Edinburgh, in which the statements regarding the Infirmary are in direct opposition to the real facts. I say so without the slightest hesitation, as the whole of the cases of cholera admitted were under my care, with the exception of six, who were admitted subsequent to the 1st of January, 1849, when Dr. Grieve's time of attendance commenced. During my time of attendance, (from the 1st of September,) I do not think Dr. Grieve was more than three times in the wards, and, of course, could not know what was going on unless I had informed him. Moreover, a fortnight before his article appeared in the *Medical Times*, I told him that it was not correct as it appeared in the *Monthly Journal*, and the part to which I refer is *copied* into the *Medical Times*. I also have sent a report of cholera in Dumfries to the *Monthly Journal of Medicine*, in which the state of affairs at our Infirmary will appear; so that, in the mean time, I will refrain from entering more particularly on the subject.

I am, Sir, your obedient Servant,
W. T. BARKER, M.D.,
One of the Physicians to the Dumfries and Galloway Royal Infirmary.

Dumfries, June 2, 1849.

OPEN SHOPS AND HOSPITAL SURGEONS.

[To the Editor of the Medical Times.]
"Who shall decide when Doctors disagree."

SIR,—We will, if you please, imagine that some dozen young men of equal capacity, age, and acquirements, are launched upon the ocean of active life about the same period,—equal in everything appertaining to themselves, as individuals, requisite for the honourable practice of their Profession,—unequal only in the gifts of Fortune:—how different the ultimate destination of each! Can it be supposed that a fair wind and favouring gales shall blow on all? I trow not. How many are shipwrecked,—how few, with difficulty, weather the storm,—how varied the roadsteads, or the harbours, that offer a secure riding place to the storm-beaten mariner! But, from the metaphorical let us descend to the practical, and demand in what light do these matters present themselves to those who have had some considerable experience in life? Some enter the Services—Military, Naval, or Indian; some the Postal service; and others jog on in Pure, General Practitioner, or shopkeeping line. The *Services* provide for their own, and those living at home are taxed for their support.

The *successful Pure*, sitting at home in his easy chair, with picture-hung walls, well-carpeted room, and smart footman, pockets his guinea fee with a smile, blandly insinuating his wish that the patient should renew his visit and accompanying fee.

The *unsuccessful one*, oppressed with difficulties, merges into the common herd; his *habitat* is as difficult to define as that of the collapsed balloon, the fly in winter, or a dead donkey. Finally, he is swept down the gulf of time, to be no more seen, known, or heard of,—lost even to the memory of all, save his unfortunate creditors.

The *General Practitioner*, with horse, gig, brougham, or pair, drives a *thriving trade* in *pill, draught, mixture, lotion, liniment*, and various other topical or general applications, all having reference to and promoting Nature's law of the abhorrence of a vacuum, and tending to equalise the condition of the pockets of the patient and Practitioner.

That these things are so, I defy any member of the Profession to deny. A shop-keeping Surgeon, even according to the line of argument adopted by those adverse to him, does no more than this.—Ah!—yes!—horror!—he sells—sells patent medicines. "Hinc illæ lachrymæ."

I enter not,* Mr. Editor, upon a defence of patent medicines; but, as an established fact, the customer frequents that shop which supplies his most numerous wants at once. The druggist trenches on the surgeon by prescribing, and the surgeon returns the compliment by selling what are termed druggists' goods, of which number "patent medicines" form a very inconsiderable share. Although taunted with the great profit accruing from that source, I for one can positively assert that I have often thought of relinquishing their sale on account of the inadequate remuneration arising therefrom; but have found in reality that, not having the article wanted, the customer left the shop, refusing to buy anything else.

I keep not a shop for amusement but for profit, and I have yet to learn that commercial enterprize (displayed under what form you will) restricts the view, narrows the mind, cripples the energies, or implants dishonourable principles in a man's breast. Philosophers generally have held opinions the converse to these. Having begun life under the "res angustæ domi," I have honourably worked my way to the position I now hold, regardless alike of the scoff, taunt, or averted eye, of some of my companions in early life. Having performed my duties to my patients conscientiously, I care little for the opinions of those who have but lately emerged from a similar position to my own, distinctly proving the truth of the old adage, "Mount a beggar on horseback and he will ride to the devil!" This is not the age in which public opinion is to be coerced by men who, in the broad field of politics are *liberals*, but in their own narrow sphere are *illiberals* of the good old Tory times.

In conclusion, allow me to ask, How are the Profession to live? by what legislative enactment? by what prescriptive right to labour, will you provide wealth, rank, and station for its members? How! exclude the man of intellect but narrowed means, and admit the man of money? All cannot be consulting surgeons; all cannot affiliate on a hospital; all are not to be forbidden to practise midwifery; as are the Fellows of the Royal College of Surgeons of London. Who are to attend to the poor? Will you have none but *Pures*, and no resource but the gratuitous advice of the hospitals; or Pures when it suits their convenience or caprice? No, Sir, leave medicine as all other occupations of life—restrict it not, or it languishes; educate to a certain standard, and let men practise as inclination, circumstances, or means permit them, and the public will then, as now, select its favourites.

I have the honour to remain, Sir,
Your obedient Servant,
FREDERICK CHARLES JONES,
M.D., Edin.; M.R.C.S., Edin.; L.A.C., London; and *now* Surgeon to the Royal South London Dispensary.

69, Blackfriars-road.

* Have these gentlemen ever used Dover's Powder, Fowler's Solution, James's Powder? and from whom emanate those plaudits of Roach's Embrocation and Powell's Balsam?—*vide Lancet.*

SAFETY OF INFANTS IN BREECH AND FEET PRESENTATIONS.

[To the Editor of the Medical Times.]

SIR,—Having perused Mr. J. O. Fletcher's letter in answer to my communication in the *Medical Times* of the 28th April, and having observed that some remarks which he has been pleased to make require notice, I beg to so far trespass on your indulgence as to have some further observations inserted in your valuable periodical. I must, however, premise, that the letter of Mr. Fletcher has not convinced me that I am in error on the subject under consideration. Had it done so, I should have made the fact as public as my former communication, and have given Mr. Fletcher much credit for calling the attention of the Profession to a subject of so much importance.

Mr. Fletcher has replied to my letter in the order that I took up his, and I feel that I cannot do better than follow in the same course, and take each part of the subject separately.

1. In answer to my first interrogatory objection, as to whether children really do die from loss of blood in breech and feet presentations, Mr. Fletcher confidently says, *Yes*. Now, if he had somewhat qualified his assertion by stating, that children do not die in all these cases from loss of blood, then I should have had no objection to join in his opinion to a certain extent, although I should go much further than he would allow, and say, that, in the majority of cases, death results from asphyxia or pulmonary apoplexy. The question, in this case, would then have been one of degree only; for I do not deny that death results, in some cases, from loss of blood, but this occurrence I believe to be not very frequent—indeed, it is an exception to the general rule.

Mr. Fletcher brings forward the testimony of Dr. Richard King in support of his opinion. If the statement of authors has any weight with Mr. Fletcher, then I might give that of almost every author on obstetrics, viz., that the danger to the fœtus results from compression of the cord, and not from a want of it; therefore, so far as the opinion of obstetricians is concerned, the preponderance is almost entirely in my favour. I would observe, however, that, in the sciences, no man's *ipse dixit* ought to be received, unless it is proved to be true; still, when nearly all authors state that a certain circumstance happens during a certain process, I would submit, that that statement is, to say the least, entitled to some credit.

As to the physical signs which a child presents in these cases, I reiterate what I before stated. I do not mean to say, that I have not seen the *pale bluish* appearance of the countenance, and flaccid state of the limbs. These, however, have happened when the head of the fœtus has been a long time in being expelled, and where life has been past recovery. No longer since than the 10th April last, I had a case of midwifery in which the feet were first expelled, where the countenance of the child, when born, was bloated and livid from congestion.

Mr. Fletcher's reasoning about it being more difficult to kill a child in the uterus or vagina from asphyxia than from syncope, and his statement of Dr. Edwards's experiments on animals, may be all very well so far as regards animals in the lower scale of organization. I do believe that there is less urgency for the necessary changes in the blood in new-born infants than at any other period of life, and it is a wise provision that it is so; for, were it otherwise, how much more frequently would death occur in feet and breech presentations than it does.

Mr. Fletcher must also know, that arterialization is so essential for the manifestation of the vital phenomena, that, in the highest animals, life will only subsist a *few moments without the necessary changes in the blood, and without the influence of the blood so changed* upon the various organs; for the greater the complication of the organization, the greater is the state of dependence of the organs on each other. Simple animals will live longer than animals higher in the scale, and revival from the state of asphyxia is much more easy in the lower animals than it is in man; consequently, death is much more liable to occur in man than it is in animals. Mr. Fletcher's statement, that the child in the uterus or vagina is not entirely excluded from the air, requires no remarks, although much might be said on the subject,—indeed, it does not deserve consideration as an argument.

2. Mr. Fletcher, in answer to my second question, as to whether hæmorrhage can take place into the placenta in so great a degree as to endanger, or cause the death of, the child, says, that hæmorrhage can take place into the placenta just as easily as into the lungs. That the placenta will hold more blood than is usually contained therein, in a natural state, must be evident to all; but, from my former question, and the succeeding remarks, it is evident that reference was made, not to the state of the placenta, but to what was the state of the vessels of the cord in these cases. I have seen the placenta just as much congested, or gorged with blood in natural labour, as in any other kind; indeed, it is not of very unfrequent occurrence. Here no injury to the child has been the result, so far as I have noticed; consequently, I should infer that the congested placenta is no proof of *hæmorrhage having taken place from the child.*

Allusion is made to the degree of hæmorrhage which occurs, and Mr. Fletcher seems to think that the words "*great degree*" were incautiously used by me. I am fully aware how small a quantity of blood will destroy a child; and when I used the words, they were intended to be taken in a comparative sense. Surely that is a great degree, no matter how *small* it may be, when the life of a human being is endangered.

For Mr. Fletcher's information respecting the stretching of the cord, and also respecting the stretching being equal to pressure, so far as regards the impediment to the circulation in the arteries, I must refer him to Dr. F. H. Ramsbotham's work "On the Principles and Practice of Obstetric Medicine and Surgery," where, at page 316, in the second edition, he says, that, "as soon as the funis has appeared externally, we must bring down a fold in order to prevent its vessels from being stretched. It has been shown that the umbilical arteries run in a twisted direction around the vein, and it is a necessary consequence that a compression of their cavities and a diminution in their calibre, would take place quite as easily from a tightening of the cord, as from actual pressure being applied to it. We cannot prevent the direct compression which the funis must suffer between the child's head and the pelvic bones, but we may prevent tension, by bringing down a portion as a loop; and it is very possible, if we neglected this precaution, that as the body was being expelled, the cord would be so stretched as to impede the circulation and destroy the infant's life. I would also respectfully request Mr. Fletcher to read two paragraphs at page 322 of the same work, which are too long for quotation in a communication like the present. Dr. Ramsbotham is correct when he says, that the funis is on the stretch in these cases, for I have verified the same in my own practice. It was not my own description when I remarked that the arteries are usually seen twisting around the vein.

If Mr. Fletcher will take the trouble to place a funis on the stretch, he will find that the vein will be excluded from participating in the stretching, in so far as diminishing the calibre of the vessels is concerned, and he will also find that the onus of the stretching falls upon the arteries. This stretching diminishes the calibre of the vessels so much, as to interrupt the circulation—nay, I doubt not, but that it will of itself stop the current of blood through the arteries, and thus produce death to the fœtus. Mr. Fletcher's philosophical reasoning is all very well in its proper place, but he will find that it will not answer his views in the case under consideration, for he may prove by experiment with the umbilical cord, that by stretching the diameter of the spira, *i. e.* the vein, will not be diminished, because the vein is much longer than the arteries, and because it is so situated in the cord that it escapes being at all affected by such a process as stretching.

3. I asked, in the third place, "Have we ever pressure on the vein and not on the arteries, during the process of parturition, in the class of cases under consideration;" and Mr. Fletcher, in answer says, that he did not state in his former communication we had pressure on the vein and not on the arteries. He certainly does not say so distinctly, but I understood him to infer such was the fact, otherwise I should not have asked the above question. I would now ask any candid person, if any other impression would remain on his mind after reading Mr. Fletcher's letters in the *Medical Times*, of the 14th April, than the one I have imbibed. We can only draw an inference, but that inference is such as to leave little room for doubt as to what meaning this part of his letter is intended to convey. That the vessels of the funis are compressed in breech and feet presentations, is the opinion of nearly all Authors; indeed I do not see how they can think otherwise, for it appears to me impossible for them to escape pressure, if we carefully examine into the mechanism of the process in these cases. We will suppose (which is sufficient for our purpose) that the breech and lower extremities have been expelled, and that the shoulders are engaging the brim of the pelvis. At this time it is just possible that the funis may escape pressure, but the os uteri during its action is generally pretty firmly encircled around the shoulders, and here we should have pressure on the funis made by the cervix uteri, independently of the bony structures of the mother. When, however, the fœtal head has engaged the brim, the os and cervix uteri have to undergo a still greater dilatation than they have yet done; the head has, moreover, to be moulded, as it were, to the mother's structures, and the difference between the size of the fœtal head, and the dimensions of the pelvis is generally so slight that it is impossible for such a small structure as the funis to escape pressure during parturition. When the uterus is acting, and when the head is passing through the brim, we have two kinds of compression of the cord exercised at one and the same time, independently of the stretching; one by the os and cervix uteri acting on the fœtal head; the other, by the cord being compressed between the head and the mother's structures. If, at this time, the state of the funis is examined, it will be found placed on the *stretch*, because we have the propulsive power of the uterus forcing the child through the pelvis, without the same propelling force being exercised on the funis; for the latter is, as it were, an isolated substance, and is not acted upon in the same manner as the child; consequently, during the exit of the head from the uterus, the cord is so firmly pressed upon at the brim of the pelvis, (unless it accidentally falls into the hollow at the sacro-iliac synchondrosis, that it does not descend in the same ratio as the child, and the stretching is thus produced, of which Mr. Fletcher seems to doubt the existence. This is the reason that authors direct the accoucheur to hook down a loop of the funis in these cases. At a further stage of the labour, the soft parts of the mother have to undergo still further stretching, and how the funis can here escape I cannot conceive, for the head is so firmly embraced, that it appears to me utterly impossible for it to be otherwise than compressed during the exit of the child's head.

Having thus glanced at the arguments of Mr. Fletcher, which are worthy of notice, I beg, in conclusion, to state, that I took up his former communication without the slightest wish to detract anything from its merits. My sole object was simply to give expression to sentiments which I then believed, and still believe, to be right,—sentiments which are also shared in by the great body of the Profession. Finally, I must view this letter as a closing statement of my opinions on the matter now under discussion, unless some peculiar circumstances should arise which would induce me to alter that opinion; for, although I am not insensible to the great necessity that yet exists for further investigation into many subjects connected with professional practice, still I do not think any arguments would at present lead me to change my views on the matter in dispute, and, were the correspondence continued, it would lead to no good result, either as regards ourselves or the Profession generally.

I remain, Sir, your obedient servant,
JAMES LANCASHIRE, M.R.C.S,
and L.A.C., London.

Stand, near Bury, May 31, 1849.

CARCINOMA OF THE CAPUT COLI.

[To the Editor of the Medical Times.]

SIR,—Should you consider the following case, which has lately come under my notice, as worthy the perusal of your numerous readers, I should feel obliged by its insertion in your valuable periodical, as I believe cancer in this situation is very rare.

Your obedient servant,
JAMES EDWARD DICKINSON.

11, Hart-street, Bloomsbury.

C. C., 81 years of age, florid complexion, sanguineous temperament, married and mother of seven children, besides having had two miscarriages about eighteen months or so back, and one miscarriage six weeks before her present illness; beyond the miscarriages had never been laid up by illness previous to the latter end of December, 1848, at which period she was seized with violent spasms affecting the bowels, producing extreme pain over the whole abdomen; the bowels at this period were relieved every day regularly, presenting nothing particular in form, colour, or consistence; pulse was natural, urine healthy, tongue clean and moist. Some mild aperient medicine was given, consisting of blue pill, hyoscyamus, and colocynth, followed by a black draught in the morning. These medicines produced a free evacuation from the bowels, but still the violent pains in the bowels came on periodically, producing great torture and knuckling of the intestines. The aperient as above was repeated, and ½ grain of pulv. opii prescribed at bedtime, which, however, had no sensible effect on the spasmodic pains, they still continuing, and the bowels acting daily; opium and morphia in i. gr. and ij. gr. doses being given with a view to alleviate the pain, which, however, they did not do.

Thus matters continued until the 8th of January, 1849, after which day no action of the bowels could be obtained in spite of castor-oil, cal. c. colo., croton oil, enemas; in fact, the whole routine of purgatives were given, but to no purpose, a few scybala only being dislodged from the lower bowels by means of an elastic tube. Hot baths and local fomentations were alike useless, and on the 19th of January fæcal vomiting set in, and this continued at intervals up to the time of her death. On the 27th of January this patient began to sink, the tongue became dry, brown, and coated; the pulse small and quick; skin cool and clammy; features shrunken; voice whispering and feeble; and on the 29th of January this patient died, the bowels not having been relieved for twenty-one days.

The autopsy disclosed a carcinomatous state of the caput coli, at the ilio cæcal valve, which parts were one mass of scirrhus, of the colloid structure, and on being subjected to inspection by the microscope, presented a very good specimen of the alveoli and granules peculiar to that species of carcinoma; there was not complete obliteration of the intestine, but a crow-quill might be passed through the constriction. The viscera were all healthy.

Remarks.—This case appears to me to be extremely interesting, as indicating to what an extent organic mischief may go without exhibiting any pathognomonic symptoms of its existence; here was a disease, usually painful in the extreme, yet giving no evidence of pain, for the pain was referred to the small intestines only, and that periodically, no pain, at any one time, being ascribed to the right iliac fossa, where the disease was found, although, from the portion of intestine above the seat of the disease being much distended with liquid fæces, there must have been considerable pressure on the carcinomatous intestine.

In this case there was an absence of the lustreless eyes, of the leaden countenance, of the sad, anxious expression of features, and emaciation, so characteristic of cancer, and nature seemed to succumb more from an absence of imbibition and assimilation of nutriment, than from the usual lancinating, sickening pain of cancer, that rides riot over its unfortunate victims.

I see that Dr. Watson narrates a case of scirrhus of the pylorus, in which there was an absence of all pain referred to the part, the pain being seated in the loins, leading to the supposition of mischief there, fæcal vomiting only making its appearance two days before death.

Another remarkable feature in this case was, I consider, the absence of all peritonitis, taking into account that for twenty-one days no action of the bowels had been obtained; yet on the *post-mortem* not a trace of peritonitis was visible. I should also state that, a short time previous to the first appearance of the detailed symptoms, I was given to understand the patient had received a blow or kick in the right iliac fossa, and this probably acted as an impetus on the pre-existent disease, causing its rapid development. There was no hereditary tendency to cancer, either in the present or previous generations.

BELLADONNA IN NEURALGIA.

[To the Editor of the Medical Times.]

SIR,—I must crave a corner of your valuable journal for a word or two in reply to your somewhat captious Correspondent S—z.

If S—z will permit me to continue his quotation from my paper, which runs thus—"I generally begin with grain doses of the soft extract every four hours, until the system is under its influence; and if the affection is not entirely removed, continue its use, in smaller doses, administered night and morning. I have never observed any unpleasant consequences or cumulative effects result from pushing the remedy to this extent,"—he will perceive that I by no means advocate the incautious and inordinate use of belladonna. Every judicious practitioner, in prescribing so potent a remedy, will carefully watch its effects, and regulate his proceedings accordingly. Much of the uncertainty complained of in the action of belladonna, no doubt, arises from the very variable strength of the extract. When properly prepared, I believe it to be not only a safe, but an efficacious remedy in the class of cases alluded to.

Probably S—z has never had an attack of the "tic," or he would be glad of something even "very much like" "medicinal aggravation," in preference to the "infinitesimal" nothings which he appears to support.

I can assure "S—z" that I have not seen Jahr's Homœopathic Manual, or Hahnemann's article on Belladonna; however, I consider it no less a duty to cast my mite into the reservoir of Professional knowledge, no matter what "solemn dicta" may thereby be attested. While we avoid errors of commission, we must take care that we do not run into the opposite extreme of omission, and fail to afford relief by the inefficacy of our doses.

I beg to remind "S—z" that many patients will

die *sooner* from the *want* of energy than from active treatment.

It is a pity "S—z" writes anonymously, and thus diminishes the value of his experience.

I remain, Sir, your obedient Servant,

JOHN POSTGATE.

Kilham, June 4, 1849.

VACCINATION IN ENGLAND.

The following is a copy of the report of the National Vaccine Establishment for the year 1848-49, addressed to the Secretary of State for the Home Department:—

TO THE RIGHT HON. SIR GEORGE GREY, BART., M.P., HER MAJESTY'S SECRETARY OF STATE FOR THE HOME DEPARTMENT.

"May 26.

"Sir,—The Board have the satisfaction of reporting that their foreign and domestic correspondence continues to furnish testimony of the efficacy of vaccination in the great majority of cases.

"During the past year 174,991 charges of lymph have been distributed, and 11,790 children have been vaccinated by the surgeons appointed in the London districts. The Board have likewise received returns of 88,482 cases vaccinated with lymph sent from the office of the National Vaccine Establishment.

"The Board have furnished large supplies of lymph for the use of the army and navy, and they rejoice that it thus falls in the course of their duty to transmit the genuine lymph to a large body of men amongst whom it is almost impossible to keep up a self-supply.

"In consequence of an alarming prevalence of small-pox in several of the West India Islands, orders have been received from the Under Secretary of State for the Colonies that lymph should be forwarded by every packet in addition to the usual periodical supplies. The Board have complied with these directions, and intelligence has been already transmitted to them of the great efficacy of the lymph so sent.

"A large supply of lymph has been forwarded to Aden and to Scinde. The Board have thus the satisfaction of returning the real boon of protection to that quarter of the globe whence the palliative measure of inoculation was first introduced into Europe.

"Possessing that valuable boon, the Board regret that, according to accounts they have lately received, the practice of inoculation should still partially prevail in one part of the United Kingdom, viz., Ireland. On the other hand, it is encouraging to them to recur to the enlightened expressions used by the Lord Chief Justice of England on the illegality of the practice in this country, and they trust that the influence of so sound a judgment may be extended throughout Her Majesty's dominions.

"We have, &c.,

"JOHN AYRTON PARIS, M.D.,
President of the Royal College of Physicians.
"EDWARD STANLEY,
President of the Royal College of Surgeons.
"JAMES ALDERSON, M.D.,
Senior Censor of the Royal College of Physicians.
"Countersigned by C. HUE, M.D., Registrar."

MEDICAL REFORM.

THE MEMORIAL

Of the Associated Physicians and Surgeons of Shropshire and North Wales, and of other Physicians and Surgeons practising in the provinces.

To the Right Hon. Sir GEORGE GREY, Bart.

Your Memorialists, in expressing their gratitude for the laudable anxiety you have evinced to bring the question of Medical Reform to a successful issue, cannot refrain from again pointing out to you, that no adjustment of the grievances under which the Profession has so long laboured will be conclusive or satisfactory, unless a just and fair system of representation is accorded to the great body of the members in their several Colleges.

And it is matter of much regret to your Memorialists, that no indication of any intention to carry this into effect appears in the scheme emanating from a Conference of the Corporate Institutions; but, on the contrary, that further arbitrary powers are to be conferred on the College of Surgeons, and its members to be dissociated from that College, in which they have acquired their diploma and title.

Your Memorialists would fain hope, that in legislating on this subject a wise government would not withhold from a body of educated men, in their respective Colleges, that boon which in municipal institutions has been accorded to every rate-payer in the kingdom.

Your Memorialists consider the institution of a new College of General Practitioners as a great public and professional calamity,—uncalled for in a Profession wherein the most crying evil has always been the unnecessary multiplication of institutions, and the diversity of their several qualifications; but when it is proposed, by the establishment of such new College, to perpetuate grades and distinctions which have no existence in reality; to confirm the monopoly and injustice of the older Institutions, and to allow them to repudiate their proper members, in order that they may become tenant occupiers of a College possessing neither a Medical nor Surgical title; your Memorialists cannot but look upon such a scheme as pregnant with future evil, if not degradation to the Profession, and they sincerely trust you will not sanction the establishment of any such ambiguous Institution.

Your Memorialists may state with confidence, as the universal sentiment of the Profession, confirmed by a host of most respectable evidence adduced before the Medical Registration Committee, and previously before the Education Committee of 1834, that no scheme of Medical Reform can be effectual or permanent, unless it provide for the efficiency and respectability of the whole Profession, by securing for all the adoption of one uniform standard of education, combined with such examinations as shall be a fair test of qualification in each of those sciences, a knowledge of which may be considered necessary to the formation of a competent Medical and Surgical Practitioner.

Now, your Memorialists would observe, that the scheme of the Conference comprises no such uniformity of education; but, whilst it stringently provides for the lowest grade being instructed equally in medicine and surgery, would permanently establish, if sanctioned by the Legislature, the practical absurdity (as has been well pointed out in the Memorial from Manchester) of the Fellow of the College of Surgeons being authorized, *without any medical examination whatever*, not only to practise every department, but further to do so with the prestige of superior rank; and would, in like manner, leave the Fellows and Associates of the College of Physicians devoid of any test of their having obtained a knowledge of the principles of surgery.

Your Memorialists, therefore, earnestly entreat you to counteract so gross an anomaly, by providing, in any Bill to be introduced into Parliament, such a modification of the Colleges of Physicians and Surgeons, as shall insure that all their members, of whatever grade they may be, shall undergo, in the first instance, a joint and uniform test of their qualification to practice both in medicine and surgery; and your Memorialists consider such an arrangement not less requisite for the well-being and harmony of the Profession, than for the safety of the public.

As another advantage of such uniformity of education, your Memorialists would point with pleasure to the facility which it will afford for a simple and effectual plan of Registration; nor have your Memorialists any objection to the division of labour, and the consequent partition of the Profession into the two classes of Physician and Surgeon, or again, of each of these into a higher and lesser grade; but other titles and designations, more particularly if necessitating or leading to the formation of a new College, whereby future Practitioners are to be alienated from the time-honoured Institutions of their ancestors, would, in the estimation of your Memorialists, not only be superfluous and uncalled for, but positively injurious.

Your Memorialists, in conclusion, are extremely anxious that no scheme, having for its object further monopoly or aggrandisement on the part of the Corporate Bodies, should obtain your approval or concurrence; but that the just requirements of the Profession and the public should be imbodied in a liberal and comprehensive measure of Medical Reform, based on the principles of

"Representation" for the Members in their several Colleges;

"Uniformity of Education;" and

"Assimilation of Qualification"

for like degrees and titles, throughout the kingdom. Such a measure, your Memorialists conceive, would be beneficial to the public and satisfactory to the Profession.

HENRY JOHNSON, M.D., Shrewsbury,
President of the Shropshire and North Wales Association.

May, 1849.

MEDICAL ETHICS.

The following important aphorisms have been forwarded to us by an esteemed correspondent:—

1. Never send for a Medical man until you have tried every recipe in Buchan, or, under the plea of economy, subjected yourself to be nearly drugged to death by some neighbouring druggist.

2. Never convenience your Medical attendant by sending for him early in the morning; but always send your message late on in the day, especially after he has been three or four times past your door: he will then have to come solely on your account.

3. Always, after having taken the first dose of medicine, send for your Medical attendant to come again immediately, to inform him that you are no better, and that the medicine has done you no good.

4. Never, in the night time, send your Medical man word what is the nature of your complaint, lest he, instead of turning out of bed to visit you, should only send you some medicine.

5. Always take, at the same time with the medicines of your Medical attendant, some quack medicines or other old woman's remedies; and, if you recover, of course give the said quack medicines the praise.

6. Always, in a dangerous case, when having got a change for the better, call in the aid of a Physician, lest your old Medical attendant should derive the credit of curing you.

7. Never recommend or speak flatteringly of the services of your Medical attendant, lest, by so doing, you increase his practice, and thereby run the risk of his visiting you less frequently.

8. Never think that your Medical man has any other patient to see than yourself. Always keep him waiting a long time; and detain him, at least half an hour, to listen to the recital of symptoms which are of no importance, and which he has heard some fifty times before.

9. Always, in case of an accident, send for five or six Medical men to come on immediately; and let each, on his arrival, be informed that you have been taken to the Infirmary.

10. Never pay your Medical man's bill until you again require his services; and then think him amply repaid, with great profit, if you return him his own bottles.

MEDICAL BILL.

HOUSE OF COMMONS.—MONDAY, JUNE 4.

The Marquess of Granby asked the Lord-Advocate whether it was his intention to embrace in his promised Medical Bill, or by any other means to make an alteration in the existing Charter of the Royal College of Surgeons of England, as well as of the Royal College of Physicians of London, by which the grievances that the great body of its members have complained of and petitioned against should be redressed?

The Lord-Advocate was understood to reply, that it was not intended to make any alterations in the Charter of the Royal College of Surgeons of England, but that he believed it would be necessary to make some alterations in the Charter of the Royal College of Physicians of London

The learned Lord, in reply to Mr. Wyld, also stated that he would make the best haste he could in introducing the Bill for the amendment of the laws relating to the Medical Profession.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, 31st May, 1849.—Thomas Bryant, Kennington Common; William Cator, Northwold, Norfolk; Charles James Shearman, Rotherham; George Hulme Beaman, King-street, Covent-garden.

ROYAL COLLEGE OF CHEMISTRY.—We congratulate the Subscribers and Members of the Royal College of Chemistry. Out of debt is out of danger; and now, the difficulties that weighed so heavily upon the progress of the Establishment being, in a great measure, overcome, and the Council "determined not to incur, a second time, the responsibility of a building debt," we have no doubt of the success of this most useful Institution. A General Meeting of the Subscribers and Members was held on Monday, at the College in Oxford-street, Sir

Charles Lemon, Bart., in the chair, to receive the Report of the Council and of the Professor, Dr. Hofman. Much is due to the former for their endeavours to carry into effect the purposes of the Institution, and they have set a bright example to others, and earned for themselves the thanks of the scientific world at large, by imposing a *pro-rata* contribution among themselves towards extinguishing the debt. Twenty-six gentlemen of their body contributed 50*l.* each, and three others are ready to advance a similar sum, if necessary. The labours of Professor Hofman have eminently contributed to the present well-being and increasing prosperity of the School; and it is gratifying to learn, that no less than nineteen communications, some of them of great scientific worth, have been made to the Chemical Society of London by young men working in the laboratories of the College. Under a Professor so able as Dr. Hofman, and a Council so willing to assist, and so energetic and prompt in action, the College cannot fail of success. It is already sailing before the wind with wide and flowing sheets; for its income is on the increase, and the public interested in its progress. The receipts for the past year amount to 3,191*l.* 12s. 4d.; the expenditure to 2,791*l.* 5s. 4d.; leaving a balance of 400*l.* 7s. The College has our hearty wishes for its success.

Obituary.—Lately, at the Parsonage, Poynton, Cheshire, Joseph Bellott, Esq., aged 82, Consulting Surgeon to the Stockport Infirmary, who was, to use the words of his nephew, the present Staff-Surgeon to the Stockport Infirmary, one of the "oldest regularly admitted men," being House-Surgeon to the Westminster Hospital, London, 1787; passed the Corporation of Surgeons, London, for Assistant-Surgeon in H.M. Royal Navy, Feb. 15, 1789; and Surgeon 3rd June, 1790; served in H.M. ship Pegasus on the coasts of Spain and North America; retired from the Naval Service, and received his commission as Surgeon to the Stockport Volunteers from His late Majesty, George III, 3rd June, 1795; appointed Surgeon to the Stockport Regiment of the Local Militia, by the Lord-Lieutenant of the County, September 24, 1808. On the 30th ult., at the residence of his friend, Spencer Freeman, Esq., Stowmarket, William Copperthwaite Clough, Esq., Surgeon, aged 40.

Health of London during the Week.—The 895 deaths registered in the week exhibits a satisfactory decrease of 68 on the weekly average of five springs. The mortality from the zymotic or epidemic class of diseases continues to fall, the deaths in last week having been 209; those in the preceding week, 233: the average is 198. Scarlatina has now declined rather below the average, and numbers 29 fatal cases. Typhus, which, during the previous 13 weeks, ranged from 33 to 46, was fatal in the last week to only 23,—an unusually small number for this disease, and hardly exceeding one-half of the average. Small-pox, also, is fatal to few at the present time; the weekly numbers during last month were respectively, 12, 6, 8, 6, whilst the average is 21. The mortality from hooping-cough declines, though it is still above the average. Measles appears on the increase, and has, last week, nearly doubled the average, which is 21 deaths. The deaths from diarrhœa and dysentery were 19; the average of the season is 14. Cholera is slightly increasing; for though one death forms the weekly average of former springs, the fatal cases registered during the last four weeks have been 3, 1, 5, 9. Of the last nine cases, five occurred in public Institutions,—namely, two in the Dreadnought Hospital, one in the Holborn Union, one in the Chelsea, and another in the Battersea workhouse. Both bronchitis and pneumonia grow less fatal, though the former is still above the average, while the latter is below it. A woman in the Leather-market, sub-district, Bermondsey, died at 54 years of age, of "bowel complaint and debility, hastened by want of sufficient nourishment, no application having been made to the parish authorities." A boy of two months, at Somerstown, was "found dead in bed, suffocated from inhaling impure air." A woman of 52 years, died from "vomiting blood, caused by excitement." Inquests were held on the above three cases. A man, of 36 years, died "suddenly, after illness, probably from intemperance," but the cause of death is not attested either by Coroner or medical man. The mean reading of the barometer was above 30 in. on Monday, Tuesday, and Wednesday. The mean of the week was 29.978. The thermometer was highest on Thursday, when it reached 74°.9; the mean of the same day was 64°.3. The mean of the week was 60°. 3. On Thursday, the mean temperature was higher than the average of the same day in seven years, by 7°.4, though it was below it on the first two days of the week. The mean of the week exceeded the average by 1.3.—*Registrar-General's Return.*

Cholera.—Newton Ferrers.—Within the last ten days three fatal cases of alleged cholera have occurred at Newton Ferrers, Devon. These deaths, it is stated, have been reported by the medical attendant to the Board of Health, as having been caused by Asiatic cholera. We have much satisfaction, however, in adding, that no further indications of the disease have occurred, either in Newton Ferrers, or the adjoining hamlet of Revelstoke; but influenza and other descriptions of sickness prevail in both places.

This fearful epidemic seems to be extending its ravages in all directions. We heard of it prevailing in New Orleans and other parts of the United States. In our own country it is heard of in various localities. Many of them, Gloucester, for instance, in the very spots where it was most fatal in 1832-3. It seems to have returned to Scotland, and the accounts from Ireland speak of several fatal cases in and around the metropolis, the mortality, however, being almost wholly confined to the lowest classes, the residents of the courts and lanes, which are rarely free from disease of some type or other. It is also reported that the pestilence has again broken out in the Queen's Royals, now lying encamped in the Phœnix-park, Dublin. The barracks in Ship-street have been fitted up as a temporary hospital for the reception of military patients. Our own Correspondent is silent on the subject.

Vienna.—The cholera begins to show itself here again with some violence.

By the last mail from Malta, we learn that this fearful scourge has been committing great ravages at Cairo and Alexandria, especially at the latter place, arising, it is supposed, from the humidity of the atmosphere caused by the lakes Mareotis, Maadia, and Etko, and from the Mahomudia Canal. The deaths are reported as amounting to about 120 a-day; every morning numbers of men are found dead in their beds.

Syria.—A correspondent writing from Jerusalem says:—"The abundance of apricots, mulberries, and other fruit, some of which is not ripe, sold in the markets, had caused several cases of common cholera; and the sudden and great variation in the temperature contributes towards the unhealthiness of the season, for we have ague and continued fever very prevalent, and also some severe cases of ophthalmia."

Small Pox.—This disease is ravaging the island of Dominica, and producing a great mortality amongst the inhabitants.

THE MEDICAL BILL.

STUDENT'S CLAUSE.

Be it enacted—That no student shall,
Along the streets at midnight with a pal,
Swagger, cigar in mouth, on mischief bent,
On pain of being styled a rakish gent;
Or swill vile half-and-half the livelong day,
Then from "half-price" to "finish" make his way;
Visit the skittle-ground instead of "Guy's,"
Or the "Swell's Guide" before old "Thomas" prize;
Or make the "Governor" again fork out
To pay for lectures what is meant for stout,
And grog, and devill'd kidneys, and to pay
For sprees, when had before the beak next day:
Nor shall he, when at length the cash is fairly out,
His instruments commit, or "Celsus," to the spout.

City Commissioners of Sewers.—At this meeting, Mr. Simons reported that the sanitary state of the City was most satisfactory. The mortality of the month of May, which had just closed, compared with that of 1848, shows a decrease of 25 per cent. Mr. Simons also observed, that he was engaged in very important investigations relative to the condition of the courts and alleys of the closer parts of the City; and that he should, at an early day, make a report thereof to the Commissioners, accompanied with suggestions for their consideration. We have great expectations from the exertions of this officer, and hope that the points of cleanliness and order to which we have so often adverted, will form part of his suggestions. The practice lately adopted at the West-end, of employing the poor hourly to cleanse the streets, might probably be carried out also in the City; it would be very beneficial. In excavating for a sewer near Salisbury-square, Fleet-street, the lower jawbone of an extinct species of animal, called by Professor Owen, to whom it was submitted, the Rhinoceros Ticorrheniis was discovered. It appeared not to be full grown, as the back teeth yet lay in the cells, not having reached the edge of the jawbone. The specimen is rare, only two others being known in the kingdom. It was imbedded on the top of the blue clay, 14ft. 6in. below the surface, and 500ft. from the river wall, above the level of high-water mark. It is now deposited in the City Museum.

Poisonous Nature of Effluvia from Dead Bodies.—Mr. Mackinnon, M.P., at a meeting respecting burials in towns, stated the following fact:—"A lady having died, her body was placed in a coffin, upon which was nailed a plate, describing her virtues, age, and station in life. The nails fastening this plate were, unfortunately, so long, that they passed through the wood and lead of the coffin, which caused the effluvia of the body to escape, and the gas proved of so noxious a nature, that four of the deceased's daughters, who inhaled it while pining over the coffin, died within a fortnight afterwards."

The General Council of the British Association for the Advancement of Science has appointed the time for holding the ensuing meeting in Birmingham. The members will arrive on Wednesday, the 12th of September; the business of the Association will commence on the following day, and be continued each day (Sunday excepted) until the following Wednesday, when the proceedings will close. During this very interesting period the various Sections will meet to receive reports, papers, and communications, and determine upon the proceedings of the next year. Excursions will take place to scenes of geological interest in the neighbourhood, and the evenings will be devoted to *soirées* and lectures, which will be graced by the attendance of ladies.

Domina Blackwell at Birmingham.—This lady last week attended the Queen's Hospital, Birmingham, and witnessed the operation of amputation of the thigh. She appears to be about thirty years of age.

Scurvy in the New Forest Union.—We beg to call the attention of the Poor-law Board to the scurvy cases in the New Forest Union, and to suggest an immediate inquiry as to the sufficiency of the diet there, not omitting the consideration of the milk supplied to, or withheld from, the paupers.

Utility of Nettles.—It is a singular fact that steel dipped in the juice of the nettle becomes flexible. Dr. Thornton, who has made the medicinal properties of our wild plants his peculiar study, states that lint dipped in nettle juice, and put up the nostril, has been known to stay the bleeding of the nose, when all other remedies have failed; and adds, that fourteen or fifteen of the seeds ground into powder, and taken daily, will cure the swelling in the neck, known by the name of goitre, without in any way injuring the general habit.

A Quack's Prescription.—Death.—On Saturday an inquest was held upon the body of Ann Flannigan, a young woman residing in Wakefield. She had a scrofulous sore on her hand, about half an inch square, which did not prevent her from following her usual occupation. She applied to an Irish quack, who promised a speedy cure of the

hand, and ordered her to procure a bottle of tar-water. Having put a powder into it, he ordered her to take a wine-glass full fasting every morning. She took the first dose, and in less than three minutes was a corpse. The liquor found in the bottle was partially analyzed by Mr. Greenwood, surgeon, who believes it to contain impure subcarbonate of ammonia in large quantities, naphtha, or oil of tar, and sulphuretted hydrogen in large quantities. He also thought it probable that it contained prussic acid. —Verdict of "Manslaughter" against Francis Daly, *alias* Murphy, who is described as a man about 5ft. 6in., a hawker of brushes, but occasionally practising quackery. The police are in search of him.

CULTIVATION OF THE LIQUORICE PLANT.—This plant is cultivated extensively in some parts of England, in order to supply its roots for various economical purposes, but chiefly for those of the druggist and the brewer. The proper soil for it is dry, sandy, very deep, and as rich as can at all comport with these other properties; and it must be trenched-tilled with either plough or spade to the depth, if possible, of three feet, and ought to be entrenched with spit dung manure, at the rate of about twenty double cart-loads per acre. The ground, thus prepared, is assigned for rows of plants, at distances of two feet from row to row; small triangular holes are made with spade, along the lines, at distances of eighteen inches from hole to hole; and shoots from the heads and sides of old roots, each with several eyes, are planted in the holes. The planting is commonly done in March; and a weeding and stirring must be given in autumn. As the plants are small during the first summer, a crop of onions is often taken in the interstices of the rows. The roots require three years to attain sufficient maturity for use and profit; they are taken up about the end of November by a process of re-trenching the ground; and they are then washed, and trimmed of their fibres. The smaller roots are lopped off, dried and ground into powder; and the larger roots packed up and sold to druggists and brewers. A fair crop yields from 18 to 20 cwt., and brings an average price of about 45s. per cwt.; but the cost of digging up the roots and preparing them for market amounts to no less than 10*l.* per acre. Wheat is commonly taken after the liquorice; and in consequence of the highly fertilized and mechanically favourable state of the soil, it rarely amounts to less than four or five quarters per acre, and frequently amounts to seven or eight.

PHRENOLOGICAL DEVELOPMENT OF RUSH.—We have been favoured with the following communication made to a gentleman of this town, which we insert:—"London, May 3, 1849. My Dear Sir,—I fear the opinion I have formed of the head of Rush comes too late to be of use; but some contradiction should be given to the unguarded observations that have appeared in the Norfolk and Suffolk papers, respecting his phrenological development. I have carefully examined the cast you were so kind as to send me, and I come to this conclusion:—Amativeness, large; philoprogenitiveness, large; inhabitiveness, medium; concentrativeness, large; adhesiveness, small; combativeness, large; destructiveness, large; alimentiveness, large; secretiveness, medium; acquisitiveness, large; constructiveness, large; self esteem, medium; love of approbation, medium; cautiousness, small; benevolence, medium; veneration, medium; firmness, large; conscientiousness, small; hope, very large; marvellousness, large; ideality, medium; wit, large; imitation, medium; individuality, medium; weight, large; colour, medium; locality, medium; number, large; order, small; eventuality, medium; time, medium; tune, large; language, large; comparison, medium; casuality, low. The great point in Rush was his large hope, which, with concentrativeness equally large, and very little caution, and less conscientiousness, impelled him onward to his destruction. Of course, the animal passions predominate, and he would sacrifice everything to their gratification. It is a head very like Greenacre's, Burke, Hare, &c.; but it is far from being flat on the top, or without veneration or benevolence, as has been stated. I remain, my dear Sir, yours very truly, and in much haste, T. PURLAND."—*Ipswich Journal*, June 5, 1849.

OVERFLOW OF THE MISSISSIPPI.—The city of New Orleans, after being for some time afflicted with cholera, which swept away many of its citizens, is now threatened with even a more fearful and irresistible foe in the overwhelming waters of the Mississippi.

MORTALITY TABLE.

For the Week ending Saturday, June 2, 1849.

CAUSES OF DEATH.	Total.	Average of Five Springs.
ALL CAUSES	895	963
SPECIFIED CAUSES	892	959
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	209	198
SPORADIC DISEASES:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	36	48
Tubercular Diseases	165	200
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	104	123
Diseases of the Heart and Blood-vessels	46	34
Diseases of the Lungs, and of the other Organs of Respiration	127	131
Diseases of the Stomach, Liver, and other Organs of Digestion	69	62
Diseases of the Kidneys, &c.	13	11
Childbirth, Diseases of the Uterus, &c.	2	8
Rheumatism, Diseases of the Bones, Joints, &c.	6	8
Diseases of the Skin, Cellular Tissue, &c.	4	1
Malformations	4	3
Premature Birth and Debility	23	21
Atrophy	23	17
Age	33	50
Sudden	10	11
Violence, Privation, Cold, and Intemperance	18	33
Causes not Specified	3	4

TO CORRESPONDENTS.

"Nemo."—The gutta Percha "varnish," used to prevent access of air to wounds and ulcers, is made by dissolving the gum in sulphuret of carbon.

"Pharmacien."—For the accommodation of our Correspondent we have procured from an eminent pharmaceutical chemist the following recipe for making the Concentrated Infusion of Senna:—℞ Sennæ Alex. Opt., lbs. 3 (avoir.); Zingib. Jam. Incis., lb. i. 10 oz.; S. V. R. 5 lbs. Macerate for seven days, press and strain the liquid; add to the residue lb. 18 oz. of Sennæ Alex. and seven gallons of distilled water. This is to macerate for twelve hours. Then, having poured off the liquid and strained it, evaporate by a water bath to 16 lbs. Pour upon the residue two gallons of cold distilled water, and let them stand for two hours: press and strain. Mix together the tincture and the other liquids. This concentrated infusion will not spoil by keeping.

"Ajax."—1. He can be admitted by paying the usual fee. 2. The Secretary should be addressed by letter.

"M. B."—A corpus luteum in its earliest stage affords no proof of impregnation having taken place.

"A Surgeon, Liverpool."—The Medical Bill is not yet published; it is said, however, to be already prepared.

"Magister."—The indenture will be received by the Apothecaries Society.

"A Provincial M.D."—A Fellow or Licentiate of the London College of Physicians can only obtain the appointment.

"Sigma."—A similarity has been observed between the disease mentioned and morbus Brightii.

"A Constant Reader."—The coroner must give a warrant, to entitle a medical witness to a fee for a *post-mortem* examination.

"A Legal Practitioner."—We cannot give the composition of the popular quack medicine to which our correspondent refers. Consult Dr. Paris's Pharmacologia.

"Crites."—The statement should be forwarded to the Director-General of the Army Medical Department.

"Alexander N."—There is no difficulty in obtaining admission to the Parisian Hospitals. No fee is demanded.

"Medicus."—The Licence of the College of Physicians is not a medical degree.

"Scrutator" exhibits great anxiety for the settlement of Medical Reform. The question which he asks, however, can at present, only be answered by the gentlemen engaged in arranging the plan.

"Mr. Temple."—An opinion cannot be formed without a specimen of the article.

"G. M."—The Charter is silent on the subject.

"A Subscriber, Gosport."—No provincial hospital containing fewer than 100 beds is recognised by the London College of Surgeons.

"Not a foreign M.D."—Degrees procured from foreign Universities confer no right to practice medicine in England.

"Paracelsus."—The Tincture is not injured by keeping, though it deposits a sediment.

"Horatio, Glasgow."—Hard warts may be destroyed by inflammation, decomposed by caustic, or extirpated by the knife. It is best first to soften them by a poultice containing soda, after which the top of the wart is pared off, and a mineral acid applied till the whole is destroyed.

"G. L., Birmingham."—The stains of iodine may be removed from the skin by washing for a few minutes with milk. The stains must be recent, otherwise the milk has no action on them.

"Psychologist."—We cannot furnish the statistics: in Turkey and Egypt, however, insanity is said to be more rare than in Europe or America.

"Publius."—Hydrocyanic Acid is not met with in the substance mentioned.

"Mr. Kemp."—There is no penalty for selling poisons. The law is very deficient on this point, and, in consequence, we find the most illiterate hucksters in villages vending poisons to any one who may ask for them. The increase of the crime of secret poisoning demands a speedy interference on the part of the Government.

"An Annual Subscriber."—The amount of the bill can be recovered in the county court.

"Philo-Veritas."—(1) There are no penalties against illegal practice in the United States. Quackery, in consequence, abounds to a fearful extent, and the intelligent members of the profession are directing their attention to the means of suppressing it. (2) We can not state exactly how many licensing medical corporations there are in the States.

"Hygiene."—We cannot promise to insert a paper which we have not seen.

"A Bartholomew Pupil."—Pus possesses no solvent power over the substances of the body.

"William."—The lectures in the University of Giessen advertised as public, are free; and poor students may obtain gratuitous admission on making proper application to the University. For the other lectures, the fees are from six to eight and twelve florins for each half-year. The fee for the diploma is £22 10s.

"M."—Platinum, in form of sponge, always contains a quantity of air; and hence, when a jet of hydrogen gas is let to play upon a portion of spongy platinum, water being formed, the ball of metal becomes red hot, and inflames the gas.

"M.D., Dublin."—The Court of Examiners of the English Apothecaries' Company is chosen from the members of the corporation. It is possible, therefore, for the said Court to be composed of non-professional persons.

"Mr. Mansfield."—We decline offering an opinion on the subject.

"Adolescens."—In the London Pharmacopœia, published 1720, the troy ounce was first ordered to be divided into the same fractions of drachms, scruples, and grains, as the avoirdupois, for the purpose of dispensing all such drugs as were ordered by weight.

"Chirurgus."—Alum may be administered in small and frequent doses, either in milk or any other convenient vehicle.

"Mr. P. Cartwright, Oswestry."—Communication received.

"J. W."—We are not aware of the nature of the communication referred to.

"W. M. C., Liverpool."—Lobelia Inflata is a plant which grows in the United States, and is a narcotic poison, similar in its operation to tobacco.

"Mr. Coxworthy's" communication will probably appear next week.

"M. R. C. S., a Subscriber, Tottenham Court-road."—The only way we know by which an appointment may be obtained into the East India Company's service is by making application to the Court of Directors. All necessary information on the subject may be obtained on application at the East India House.

"Mr. J. Langley, Southampton-street, Fitzroy-square."—The subject was adverted to a short time ago in the columns of the "Medical Times."

"Kâf" is thanked for his communication.

"X."—We have made some further inquiries in reference to practitioners engaged in practice prior to 1815, but not of age, and we find that eminent counsel are divided in their opinion on the subject. It is certain, however, that no proceedings will be instituted by the Society of Apothecaries against any one who was actually engaged in practice in 1815, though not twenty-one years of age.

"Lector."—Communication received.

A correspondent who asks our opinion in reference to a patient afflicted with peculiar blotches on the skin after venereal sores, is informed, that so far as we can judge from the description, the disease is of a syphilitic nature. Potass. iodid. may prove useful as an internal remedy, and the ung. hyd. nitr. diluted, as a local application.

"Mr. H. Mudge, Bodmin, Cornwall," writes us as follows:—"On page 239 of Gregory's Edition of Liebig's 'Animal Chemistry,' (1842) there is this paragraph: 'According to all the observations hitherto made, neither the expired air, nor the perspiration, nor the urine, contains any trace of alcohol, after indulgence in spirituous liquors; and there can be no doubt that the elements of alcohol combine with oxygen in the body; that its carbon and hydrogen are given off as carbonic acid and water.' Now, if any of the numerous readers of the *Medical Times* can give a reference to where the 'observations' on either or all the three excretions above-named are recorded, he will greatly oblige."

ERRATUM.—In Mr. Clegg's paper last week, describing an instrument for applying leeches to the neck of the womb, p. 604, col. 1, line 24 from bottom, instead of "when there is a relaxed state of the ligaments, and a tendency to retroversion," read "anteversion."

ORIGINAL LECTURES.

LECTURES ON MATERIA MEDICA,

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS.

By GOLDING BIRD, M.D., F.R.S.,
Materia Medica Professor to the College.

[Reported expressly for this Journal.]

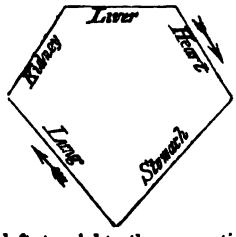
LECTURE IV.

THE MATERIA MEDICA OF THE CHINESE.

MR. PRESIDENT AND GENTLEMEN,—I now beg to introduce you to a Chinese apothecary's shop, containing the medicines by which their physicians profess to combat disease. Many of them are attractive on account of their curious character, and some are old acquaintances; for I find among them no less than thirty-five old friends, and which have played an important part in the Materia Medica of this country for many years. This collection came into the possession of our College some years ago, and it is remarkable, that it is scarcely at all attacked by insects, owing to the large quantity of essential aromatic odour which pervades it; for I may mention, that the Chinese select their drugs with a view to their sensory qualities. I have been encouraged to bring this subject before you in consequence of our possessing a very remarkable MS. bearing somewhat on it. At a certain period it was thought important by the Chinese to revise the old works on medicine; for it appears that they regard anything as of value only providing it be old, thus forming their opinions in the ratio of antiquity and in an inverse ratio to their novelty. In consideration of this necessity, a special volume was dedicated to this purpose, and was translated into English at Macao, by Mr. Thoms; it is a curious book, and from it I shall bring before you a few specimens. But first, with regard to the notions of the Chinese authors in connexion with certain philosophical opinions. Their prominent views of the *modus agendi* of drugs are much the same as those which characterise the abettors of the doctrine of signatures; in fact, had the author of this MS. been acquainted with Crollius, he could not have produced any theory more nearly allied to it,—that doctrine being alluded to throughout its pages. Like the ancients or the classics, the Chinese believed in a certain number of primordial elements; they consisted of five,—wood, fire, earth, metal, water,—and they believe that everything is composed of these, that everything sprung from nothing, and that from this nothing a something was formed. In this belief, following Crollius, they regarded man as a microcosm, the seal and impress of the Great Maker of the earth, and accordingly they supposed that the five elements found their representatives in the living body; thus wood had its representative in the liver; fire in the heart; earth in the stomach; metal in the lungs; and water in the kidneys; and their medicines were appropriated in accordance with this belief. This was their simple plan of choice. It was supposed that the representatives of these elements were in some way or other connected with particular colours, and in states of disease the prominent hue of the patient would be a useful index. Thus green was supposed to signify wood, and since bile was green, this colour was held to be indicative of hepatic affections; red represented the element fire, and indicated affections of the heart; yellow, of the stomach, for which some remedy of an earthy origin was to be employed; white, of the lungs, with a metallic medicine; and so on. They appear to have no notion of anatomy; but there is a curious mode in which medicines are supposed to act on the different parts. The Chinese repudiate the notion of medicines acting on the nervous system; they seem hardly aware of it, but look to the vascular system as most important, and believe that the heart, liver, and so on, are each the centre spot of particular vessels. Thus, the heart commences a series of vessels which terminate in the palm of the hand; those of the stomach end in a solitary vein going to the great toe of the right foot; the veins of the lungs in the joints of the fingers; or take the following Tabular view:—

Element.	Medicine.	Act on	Extend their Influence
Wood	Green	Liver	To the cutaneous arch of the veins in the foot.
Fire	Red	Heart	Vascular arch on the palm of the hand.
Earth	Yellow	Stomach	Along a vein ending in the great toe of the right foot.
Metal	White	Lungs	Joints of fingers and intestines.
Water	Black	Kidneys	Veins of the groin.

Then they carry their odd notions a little further, for they suppose a series of vital energies in the body; every one of the five organs bear to each other the relation of parent and child; thus: the heart is the son of the liver; the liver the mother of the stomach; and the stomach the son of the heart. Thus, if you put the five organs in a circle, or thus:—



going from left to right, the respective sons will be to the right, and the mothers to the left. Having made out, as well as they can, the particular organ involved, they then endeavour to ascertain whether it is in excess or deficient of the vital force. If the function is in excess they purge the son; if deficient they strengthen the mother. If there was disease of the lungs, they would give diaphoretics. If the functions of the heart were performed violently, they would appeal to the stomach; and if the action of the stomach were weak, they would stimulate the heart; thus showing that they have some notion of setting up a compensatory action of another part. I pass now to the work to which I have alluded. It is entitled, "The E-tsung King Kan, or Chinese Imperial Medical Work." The origin of it is curious, as will appear from the following:—

"PREFACE.

"The Physician Tseen-tow-paou, with Wangping, and Wookeen, Physician of the Medical College, in obedience to Imperial Order issued on the 17th of the 11th Moon, of the 4th year of Keenlung, which was to this effect:—

"'You Physicians of the Royal College are required to revise the medical works, and print a new edition, whereby the healing art may be improved.' We, on receiving the summons, were successively overcome with fear and joy (for the medical art having long fallen into disrepute, chiefly owing to books teaching variously of the art, whereby persons know not whom to follow). Now, as you our Prince, view your people as your children, and desire that they attain longevity, your benevolence is great, it is as vast as the world, for by this act you confer longevity on ten thousand ages.

"On receiving the decision of your Ministers, we, Tseen-tow-paou, Chin-che-King, and Lew-yew-to, grateful for Celestial favours, beg to inform Your Majesty, that the ancient Sovereign, Fich-he and his successors, were acquainted with the changes which took place in nature. They knew how the principles of heaven and earth were blended in the transactions, and how the inferior principles unite with the superior; this is what those sages alone were competent to; hence their doctrine was that of heaven.

"In the time of the Chou dynasty, which commenced 1105 before Christ, there was a Chingtsae, Medical Officer, who had charge of the Royal Person, as well as of the people. His power was great in the time of the Hau dynasty (it commenced 189 B.C.); and later the medical practice was esteemed one of the arts, and those who were acquainted with it were not considered ordinary persons. In succeeding ages, the medical art was viewed lightly; rarely an individual was found but who followed it for a livelihood, and not from benevolent motives to benefit mankind; hence those who delighted in the science were ashamed to recognise such. Thus, in after ages, eminent physicians became fewer and fewer, and, as the art declined, it ceased to be transmitted.

"You, our Sovereign, should remember, that your Royal Ancestor (Kang-he) and Royal parent (Yung-chung) possessed benevolent minds; but it is you who has issued the order for correcting and revising medical works. Independent of our opinion of the medical art, it is really of the first impor to all throughout the empire, and may not be compared with other arts.

"Of ancient works there are—(here they are enumerated). They appeared during the reigns of (names of Emperors) and others (B.C. 2,622). During the Yin dynasty, about 1,700 years B.C., that justly-celebrated Minister, E-yun, published the Tang yih Pun-tsaou. In the time of the Chun-Kiue, about 300 B.C., Peen-seeh wrote the Nan-King. During the After Han dynasty, A.D. 229, Chang-Ke wrote the Shang-han-Aun, which treats of diseases occasioned by colds. These works appearing in the early periods, are now difficult to be understood, arising chiefly from erroneous copying and printing.

"From the Sin dynasty, and downwards, (A.D. 286,) medical works appeared without number. Though many writers wrote ably, yet, as each retained his particular tenets, their works, when examined, are at variance with each other; besides, they have their obscurities, which excite doubts, and which in this work are removed.

"The Medical art may be said to commence with Chang-ke, (about A.D. 229,) for all works prior treat of medicine without prescribing. The works of Shan ben-lun, Kin-keoei, Yaou-leo, and Tsa-ping-lun, were the first works which prescribed for the patient. Having cases, with prescriptions, the medical art was confided in,—hence with them sprang laws to last for ten thousand ages, and their works were esteemed sacred.

"In the new work it will be necessary to correct what is erroneous in the Shang-han-lug, and enlarge the work, as well as add explanatory notes, then publish it for the use of all throughout the empire. We, therefore, request the use of all medical books in the Royal Library, and that an order be issued through the provinces to collect all ancient medical works. Should there be works of which the blocks from which they were printed exist not, or new medical works not yet published, or traditional works, that the District officer be required to induce the possessor to present the same to the Medical Board, or dispose of or allow copies to be taken.

"The compilers of the new work propose commencing with the Three Ancient Sovereigns, and trace the subject to the present reign. To arrange each disease under its proper head,—to exclude what is contradictory, retaining what is lucid and essential, and adding to it what modern practice has discovered, to form two works. The smaller, to treat briefly of diseases, adapted to the use of the learner; while the larger work (the accompanying work) will investigate the subject profoundly. This will assist the medical men who may have to give instruction, and be of incalculable value to the student. The medical art thereby will be understood, and for millions of ages bestow on the people longevity.

"Before commencing this work, we desire to know what usage is to be adopted, and, when complete, how it is to be distributed. To these questions we wait your Majesty's reply.

"Keen-lung, 12th moon, 4th year.

"IMPERIAL REPLY.

"The Ta-heo-sze Go-urh-tae, is required to consult with the Medical Board, respecting compiling

the New Medical Work, as to the expense and number of persons necessary, and to preside over the same.

"Respect this!"

The works named in this Preface, describe the medicines which are in our collection. To give some idea of the dates, I may state that, according to them, Noah was 200 years old when the book was published, about 1,700 years before the Christian era. These works are not very difficult to be understood, because the Chinese language undergoes none or very little change; they are religiously refrained from modifying the characters of their language; and some of the blocks used for the earlier editions were also employed for the later. It was deemed very important to go back to the older works, one of which was published in the time of the prophet Malachi,—a work of a clinical character. The result of the Imperial reply, as above quoted, was the drawing up of a council of the men of Pekin, and they set to work to compile, and at last produced forty large volumes. These form a perfect Encyclopædia of Medicine, as it was then understood, and which reveals their utter ignorance of the structure of the body. In the seventh volume the arterial system is sketched, and they there describe that an artery which supplies the stomach with blood begins at the nose and passes downwards. They believe that the veins of the mesentery commence at the joint of the great toe, and extend upwards. In the tenth volume we have a plan for recovering people from drowning. They say, a person when drowned dies because he is saturated with water, and thus all his organs get damped; and the best way to treat such an one is to get a cask of fresh-burned lime, and envelope him in it; for, as lime has a great attraction for water, so it will draw out the water from all the parts. They believe that in the body there are two great antagonistic powers; and it is only as their equilibrium is preserved that health is kept up. Thus Ying and Yang are the male and female principle, and this male and female principle seems to be always at work either building up or destroying the body. Ying is the vital force, and Yang the destroying. With reference to their Therapeutics, they believe all sour medicines belong to the element wood, and apply them to the liver; bitter medicines belong to fire, applied to the heart; sweet to the earth, applied to the stomach; acid or pungent to metal, applied to the lungs; and salt to water, applied to the kidneys. These are their tests. Then various coloured medicines are arranged in the same way; and neither should we smile at this, for the great Linnæus published, in one of his books, a description of plants in which he connects the medicinal properties of herbs with their colour; thus, black plants are narcotics, and so on. On looking over the drugs in this collection, as I said before, we meet with some old acquaintances; and I may remark, that, with one or two exceptions, I find the Chinese according to them the very properties which we believe them to possess. This is curious, when we remember, that there could have been no intercourse on the subject, especially since these were described at a period when Noah had not built the ark. Thus the Rubia was used as an emmenagogue; the artemisia as a diaphoretic; angelica, for flatulency, and as a general stimulant; the flowers of the nymphia or water-lily, with which all are acquainted; the nymphaceous plants have all narcotic properties; but they say it grows in water, and therefore it will expel water in the body; and the leaves do not get damp, therefore they will cure colds. The Apium Sylvestræ was much employed as an anti-scorbutic; wormwood, as a bitter tonic; and rhubarb for the large intestines and stomach. In the order Papaveraceæ, several medicines were found; one found growing under our hedges in the moist parts of Surrey, has very thin sinuated leaves, with a yellow flower, and capsule single-celled; on breaking it a juice exudes of a brilliant yellow colour; Crollius adopts this for the treatment of jaundice; the Chinese also use it, and for the same purpose. Hellebore is also used for the treatment of apoplexy and as a drastic purgative; and it may be recollected, that the fibres of the root were used by Hippocrates as a purgative. There are also in this collection, and used as medicines, camel's hair; the wood of the pine tribe, used as an anthelmintic; savine, as a stimulant to the uterus; and tea, cloves, myrrh, camphor, and assafœtida. The bark of the fruit of the pomegranate was much lauded as an astringent. The metallic class of medicines was limited. The Chinese had no acquaintance with chemistry, as will appear from the uses they made of these agents, with one exception; for I find here sulphate of copper and native copper; oxide of lead, native mercury, and what they call mercurial sublimate. They also employ arsenic for diseases of the skin; loadstone, native nitre, alum, and salts of soda. Of the animal preparations, there are dried species of lizards, and tree lizards, the tails of which are supposed to be active remedies; here are also two animals—the male called Ko, with a coarse skin, and the female Kae, with the skin fine and the body and tail small: they live on trees, and there embrace each other, and will not separate. These were administered to persons afflicted with indecent propensities, by taking a small piece in their mouths. Here we have, too, the skin of the hedgehog and the scrapings of stags' horns. One drug here is very curious, consisting of minute sections of the horns of the goat, and made as beautifully as any that could be cut for microscopical purposes; tortoise shells; snakes and scorpions, dried and roasted; the exuvia of rattle snakes; the true Chinese blistering fly, used as a very active diuretic; rabbits' dung, for hysterical affections; centipedes; a powder consisting of a mixture of phosphate of lime and phosphate of ammonia, obtained from boys' urine, and a drug—gypsum; this is exposed to the autumn evenings for a certain time, and then dried. This is recommended in convalescence after chronic diseases. Then there is a glue prepared from asses' hides; when a patient is very weak, he is recommended the roasted bones of a tiger's leg.

I shall now refer to a Chinese work on Midwifery, entitled "Treatise on Midwifery, New Edition, in the fifth year of Taou Kwang, (1825,) translated by Dr. Lockhart," and communicated by Dr. Churchill to the *Dublin Journal of Medical Science*, 1842. The origin of this work was as follows:—In the 18th year of Kea-King, (1814,) and the 6th month, one Chou-Ping-Hang, the Han-hoe magnate of Canton, had an infant son, aged one month, very ill, upon which he vowed that if the child recovered, he would republish forty copies of this work; and it so fell out. In reference to the fœtus, they suppose that the child gets out by its own effort; it is supposed to sit quietly down in the womb, as in an arm-chair, and, when it thinks proper, takes a somersault and comes out head first. "When the melon ripens the tendril breaks." Hence they say that many women have children six months after marriage, and others may have a child even four years after their husband's death. If presentation occurs in any other way, they hold it to be a proof that there has been some meddling, and say, "It is abhorrent to nature to slay at the gate of life; therefore difficult labours always depend on meddling." It is only when labour is hastened that it comes out feet first,—this is the "water-lily birth;" if, stopped half-way, the hand comes out—the "begging-salt birth;" sometimes the fœtus is unwilling to come out, and should then never be urged against its will. The Author abhors the midwives, or "welcome-life women." To ascertain if labour is coming on, they are to grasp the middle finger, and, if there is a distinct pulsation in the first joint, "let her go to the tub directly"—the mother sits over a tub of water, into which the child falls. The rules are:—"1st. Sleep; 2nd. Bear the pains; 3rd. Slowly come to the tub." If the uterus is torpid, they recommend pills composed of rats kidneys and the brains of hares. If there is suspended animation of the child the practice is not to cut the umbilical cord, but to burn through the cord by a lighted paper dipped in fragrant oil. To promote after-labour, they give the mother a cupful of boy's urine warmed, occasionally mixed with an equal quantity of wine. For deficiency of milk, they give her Wang-puh-lew-hing, a mixture of serpentaria and camel's hair; and lastly, for dysentery in the child, they recommend two doses of the dry fæces of a dysenteric patient.

ORIGINAL CONTRIBUTIONS.

TWO CASES OF TRAUMATIC AND ONE OF IDIOPATHIC DELIRIUM TREMENS; USELESSNESS OF OPIUM, RECOVERY FROM CALOMEL, TARTAR EMETIC, &c.

Communicated by GEO. CORFE, Esq., M.D.

IDIOPATHIC DELIRIUM TREMENS.

James Friend, aged 32, who represented himself as a book and time-keeper on railway works, drove to the Hospital-gate on the evening of April 15, between nine and ten, in an excited state, alleging that his wife and relations had given him poison, and that he had ordered the cabman to drive with all speed to this building. For this journey, which he declared was from Acton, or seven miles from town, but which proved to be scarcely half a mile, viz., from the neighbourhood of Manchester-square, he gave the cabman 8s. 6d., and 2s. 6d. more for driving fast, and, in order to be still more liberal, he made him a present of half a sovereign for himself. These facts were not ascertained until a few days afterwards, otherwise we should have detained the driver and insisted on his reimbursing the man's pocket with, at least, twenty shillings. The patient in question was a short, square-formed, strong man, and his conversation with us was so calm, and carried on with such an absence of any nonsense, that some gentlemen who saw him before I did, in the admission-room, doubted whether it was not a slight case of mania, and that, as the only hallucination under which he laboured was in reference to his suspicion of being poisoned, the belief was somewhat heightened in their minds of his suffering from aberration of intellect, independent of any physical cause. However, when I commenced a quick cross-examination about his affairs, his circumstances, the way and mode in which he believed they had poisoned him, &c., he stumbled in his evidence, and soon betrayed unequivocal marks of delirium.

He readily assented to take up his quarters in the ward, but insisted on having his waistcoat placed under his pillow. The nurse, however, soon afterwards informed me that he had a good deal of money about him, and that he had placed it in the waistcoat pocket, and begged me to make him deliver it up. I accordingly asked him for his waistcoat, and found 15*l.* 5s. together with a handsome silver watch, which I handed over to the custody of the steward.

He was now made to swallow ten grains of calomel, and in one hour he fell asleep, and continued dosing until 4 am. of the 16th, notwithstanding the shrieks and cries of a poor fellow who was dying in the ward with severe cardiac disease. At five the noise of the above dying man suddenly awoke him, and he started up in bed, as if greatly frightened. He was now given ten grains of cathartic extract, but soon afterwards he leaped out of bed, ran down the ward hallooing and shouting "Murder!" "Police!" "Murder!" "Here are two men with loaded blunderbusses standing ready to shoot me!" I entered the ward by the sister's room, for the ward-door had been locked to keep him from rushing into the street, and I found him crouched down at the door, shaking with fear, horror depicted in his countenance, and assuring me "that he should be a dead man if I left him one moment, and as for those women," added he, (pointing to the sister and the nurse,) "they are worse than all, for they let the men in to shoot me. Oh, Sir you have saved my life! one minute later, and I should have had their bullets into me. I put myself under your protection; I'll go with you wherever you choose to take me," &c., &c. I walked with him into the sisters' room,

helped him to put on his trowsers and shoes, and went with him down stairs to a private room. At twelve o'clock he took ten grains more of cathartic extract, with half a minim of croton oil, as the bowels had not acted. At three p.m., he was still in great agitation about the police and the armed men, restless and sleepless.

Up to this period, although he was in his private room, he could not be induced to go to bed, and I determined not to coerce him till I was compelled to do it. However, he had been talking to his attendant very eagerly about the narrow escape of his life, when he suddenly asked for the water-closet. A bed-chair was shown him, and he passed upwards of half a pan full of dark, fetid, loose, fœcal matter; he then crawled to the bed and threw himself down exhausted and fell asleep.

Three P. M.—Has slept two hours, when he awoke and saw a charwoman pass his window, and he leaped out of bed, hallooing after her, and could not be persuaded but that it was his wicked, cruel wife as he represented her. He was now ordered ʒss. Tinct. opii in camphor julep.

Six P. M.—More noisy and unmanageable; bowels have not acted again; has had no more sleep. Perspiring freely, but not profusely.

Hyd. chlor. gr. v. statim.

Ten P.M.—Disinclined to sleep. Obliged to be strapped in bed. Hallucinations more vivid and distressing.

Abrad. caput. emp. canthar. vertici capitis;
Liq opii indiensis,(a) ♏. xv. statim et post horas 4.
Hydr. chlor., gr. ij.; opii pulv. gr. ss. quartis.

April 17.—At four this morning, having obtained no sleep from the opiate, his bowels began to act freely, and when he was visited at 10 a.m. he complained bitterly of the sharp physic we had given him; but having passed four or five more fetid evacuations, he was calm, and dosed during the intervals. Pt. in hydrochl. c. opio.

Vespere.—Has continued dosing throughout the day; bowels still acting freely; evacuations less offensive, and paler.

18.—A decided improvement; somewhat exhausted with the free purgation; has dosed many hours during the night; some portions of sleep were very sound.

Vespere.—Irritable and fretful from the frequent calls to the night chair. Habt. liq. opii indiensis ♏xii. hor. som.

20.—Gums slightly touched; perfectly conscious and rational; is craving for solid food. Omit hydrochlor. c. opio.; H. sennæ co. cras. et post horas iij.

21.—Several copious watery and healthy evacuations; has slept soundly, and talks like a rational man, laughing at the absurd hallucinations that he was, as he says, such a fool to believe were real.

It appears that he came to London three weeks ago, and spent his whole time in drinking, so that he was scarcely sober one hour together. His wife and family were left in the north, and he had squandered away ten or fifteen pounds at various pot-houses, and had been locked up on one occasion for drunkenness, and was fined at the Marylebone Court-house, and turned out of doors by his relatives.

His wife came to the Hospital April 22, and the man was cautioned about returning to his former habits; and, after thanking us for our great kindness, he left in company with his wife perfectly well, but wondering how he should get on without a head of hair.

COMPOUND FRACTURE OF TIBIA AND FIBULA.—DELIRIUM TREMENS.—SLEEP INDUCED BY CALOMEL AFTER OPIUM HAD FAILED.

Frederick Tebay, aged 48, upholsterer's man, fell down in a fit of intoxication a week ago, and fractured both bones of the leg, for which he was admitted April 4, at 8 p.m. Soon after the adjustment of the leg in junks, he betrayed unequivocal evidence of delirium tremens, which, it was stated, had manifested itself for two or three days. Pil. camp. opiat. gr. v. stat. et rep., 2 dis horis.

April 5. Has passed a very restless night, talking about and rambling upon a variety of subjects connected with his business. His appearance is most ludicrous. He is a thin-featured man, has lost one eye, and squints with the remaining one; his nose is long and tapering, its tip, however, is finished off with a rubicund globular knob, on which he insists wearing a pair of black spectacles, in order that he may see his different friends who call to transact business with him, as he fancies.

April 6th.—10 a.m. It is computed that he has taken from eighteen to twenty grains of opium in different forms since his admission on the 4th, without the slightest indication of sleep. He now lies in a low muttering state of delirium, constant subsultus tendinum, pupils contracted. Black sordes over the gums, and around the lips, picking at and dragging off the bed-clothes, scalp hot, pulse very small and scarcely perceptible, bathed in perspiration, and is unable to be roused. Refuses food, and has some difficulty in deglutition. Bowels open only once since admission, scantily.

Mr. Shaw requested me to prescribe for him, as he thought that the treatment which I had formerly advocated in my papers on the "Physiognomy of Diseases," published in the *Medical Times*, might be admissible here, since it was evident that opium had been carried to its full extent without any beneficial result; indeed, he appeared to be rapidly sinking under its influence. He was accordingly ordered hydrochlor. gr. x.; statim abrad. caput; emp. canth. vertici.

Two p.m.—There is already a manifest improvement. He lies dosing without any subsultus or picking of the bed-clothes, and the pupils are less contracted. Ext. col. comp. x.; ol. crotonis ♏ ss. statim.

Ten p.m.—Has continued to sleep through the day; but is again rather agitated and fidgetty. Rep. hydrochlor. gr. v. stat.; h. sen. co. cras.

April 7, ten p.m.—Has passed four or five copious, dark, fetid evacuations, and falls asleep as soon as his bowels have acted. On questioning him, he replies, "Here I am, Sir, sleeping away my time, and am very comfortable."

April 8.—Still heavy for sleep; bowels freely acting, yet evacuations more natural in colour and odour.

April 25.—It is unnecessary to add any further report of this case; but I would merely observe, that it was a most striking instance of the uselessness of opium to produce sleep, and the amazing influence of calomel in relieving the gastro-hepatic circulation. The effect of this action is to carry off those poisonous agents from the accumulated cystic bile, which react upon the nervous system, in a manner somewhat similar to the influence which urea, in Bright's disease, also acts upon the brain, &c. The patient is still in the accident ward, and his general health as well as the limb is steadily improving.

DELIRIUM TREMENS AFTER DISLOCATION OF THE SHOULDER.—INEFFICIENCY OF OPIUM.—RECOVERY FROM CALOMEL AND TARTAR EMETIC.

Benjamin Parker, aged 55, a stout fat man, with a bloated countenance, a ladies' shoemaker, was admitted under Mr. Moore, April 20, with his right humerus dislocated forwards, and his arm an inch shorter than the left. It was very moveable, but no crepitus could be detected. Various efforts had been made to reduce it, both with and without the use of chloroform. When Mr. Moore saw him he was perspiring, nervous, and trembling, just like a man on the verge of an attack of delirium tremens. Mr. Moore succeeded in reducing the shoulder by steady traction downwards and backwards by means of jack towels, whilst he raised the head of the bone by a third towel.

In the evening the general symptoms continued, and the house surgeon, Mr. Dunstan, ordered him tr. opii. ♏xx. sp. æther. sulph. co. ʒi. in camphor julep, but this draught produced no effect upon him, and he was found two hours afterwards sitting up in bed, not delirious, but sweating, restless, and trembling greatly. Bowels have acted once. He was ordered to sip at a pint of porter with four oz. of gin in it, and the following draught, tr. opii. sp. æth. s. co. aa. ʒss.; M. camp. haust. ammon. acet. aa. ʒv. 2 dis. horis donec somnus supervenerit.

April 21.—Has slept some hours in the night, but says he dreamt much. Pulse feeble. Trembles still, but does not perspire.

11 p.m.—The house surgeon was summoned to him; he had become more noisy, delirious, and insisted on going out. Liq. morph. acet. ʒi. stat.

22.—Still delirious, walking about the ward, poking his head under his neighbour's fracture cradle, where he insists on saying his wife is, to her disgrace and to his annoyance; fidgets about his work, &c. To have twenty minims of liq. morphiæ acet. every 2 hours.

Vespere.—It was found absolutely necessary to remove him to the delirious room, and to strap him in bed; he went there shouting "Murder!" and rebelled violently against all coercive measures.

23rd.—Has slept a little, and his bowels have acted; he has an haggard appearance of wildness about him, but is less delirious. Pulse very feeble. Continue the morphia every three hours during the day and every two hours during the night.

Ten p.m.—Was found asleep; but at half-past one a.m., the house-surgeon was called to him, he had not slept since half-past ten p.m.; he took his morphia at twelve, and, about an hour afterwards, his manner became altered; he was restless, breathed heavy, and said that he felt as if he was about to die. He was tremulous, sighing and drawing his breath laboriously; complaining of weight at the epigastrium, and of pain and heaviness of the head, especially in the forehead, which was hot; skin warm, dry, and harsh. Tongue glazed, of a brownish red colour, and dry. Pulse 110, small, unsteady both in force and in frequency. Eyes congested and staring, pupils contracted, neither dilating when the lids were closed, nor contracting when a strong light was brought close before them.

We found by computation that he had taken, up to this period, twelve grains of opium and six and one-third grains of acetate of morphia. I now suggested that the opium should be wholly abandoned; that the head should be shaved, a blister applied along its vertex, and ten grains of calomel placed upon his tongue and washed down with half a grain of tartar emetic in solution, and that the latter remedy should be continued every four hours, which was accordingly done.

24th, six a.m.—Attendant reported him "quite natural and comfortable, and that he became quiet within half an hour after the above treatment."

25th.—Has continued to take the antim. p. tart. since the last report, and has passed a quiet night; his hand scarcely shakes at all; bowels freely open; evacuations dark and very offensive; head cool; blister sore; eyes still rather suffused, and mucus clinging to them (ophthalmia tarsi); pulse soft and frequent; appetite improved; tongue clean. There is an unnatural intensity or heartiness of manner with him still, although so much improved.

30th.—Has been allowed to get up and walk in the hospital garden, and as he continued to improve, he was discharged this day quite well.

Middlesex Hospital, June, 1849.

(a) This preparation is Jeremie's sedative solution of opium, but which we have designated with the above title. This dose is equivalent to 35 minims of laudanum.

RETROSPECT

OF THE

VARIOLOUS EPIDEMIC OF 1847-8, AS IT APPEARED IN LONDON.

By GEORGE GREGORY, M.D., Physician of the Small-pox and Vaccination Hospital.

Small-pox has prevailed as an epidemic in London, uninterruptedly, for about twenty-three months—that is, from May, 1847, to the end of March, 1849. What has happened on so many other occasions, has happened also on this. Measles has succeeded as the master epidemic, on the decline of small-pox. It was this circumstance, among others, which induced the pathologists of an

earlier age to associate intimately small-pox and measles, and to believe that the two diseases arose from the same contagion. The fact of the frequent succession of these two maladies, as epidemics, is established beyond doubt, and some pathological connexion between the two disorders is thereby rendered probable. It has occurred to me, as I have elsewhere hinted, that this pathological affinity may possibly consist in some new combination of the elements which compose the variolous miasm, gradually effected in the progress of an epidemic. The same elements, in altered proportions, may develope, at one time, the variolous, at another, the rubeolous germ. It is not an unreasonable presumption, that the other exanthematic miasms, the vaccine, varicelloid, and scarlatinal, are only modifications of a few elementary principles. Chemistry affords an excellent illustration of such a doctrine, in the relation which subsists between nitric acid, nitrous acid, nitric oxyde, and nitrous oxyde.

The subsidence of small-pox as an epidemic in London, and the substitution of measles for it, has suggested to me the expediency of taking a retrospect of this long zymotic visitation; in the course of which I shall have an opportunity of recording the principal occurrences at the Small-pox Hospital during the year 1848, many of which may be conveniently placed in a tabular form.

I may begin, by remarking, that the deaths by small-pox recorded in the Metropolitan Tables of Mortality, during the epidemic which has just ceased, amount to 2718, as the following Table will show:—

TABLE I.

Deaths in London by Small-pox.			Total.
During the Quarter ending	Jan. 26, 1847	181	
" "	Sept. 25, "	320	873
" "	Dec. 31, "	372	
" "	April 1, 1848	388	
" "	July 1, "	381	1,617
" "	Sept. 30, "	435	
" "	Dec. 30, "	413	
" "	March 31, 1849	228	228
Total Deaths by Small-pox in London, during two years of Epidemic prevalence			2,718

Average Deaths per Week, 26.

With this we may compare the admissions and mortality at the Small Pox Hospital during the same period:—

TABLE II.

ADMISSIONS into the Small-pox Hospital during the Epidemic of 1847-48, with the Mortality, arranged in Quarterly periods.

Admitted.	1847.		1848.		1849.	
	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
First Quarter ...	...	...	184	41	91	19
Second Quarter .	137	15	163	40	...	...
Third Quarter ...	132	28	186	42	...	...
Fourth Quarter .	154	32	163	45	...	...
Total	423	75	696	168	91	19

This Table gives a total of 1210 admissions in the course of the two years, with a total mortality of 262, which is at the rate of (very nearly) 22 per cent. The total deaths by small pox in London during the same period being, as we have already seen, 2718, it follows, that nearly one-tenth of the mortality by small pox in London takes place at the Small Pox Hospital. Estimating the general mortality throughout London at 20 per cent., (that is, 2 per cent. below the Hospital mortality), it follows that the total number of persons attacked by small pox in London during the two years of its epidemic prevalence, (viz., from April, 1847, to March, 1849, inclusive), was 13,590; which is at the rate of nearly 19 per diem, 133 per week, or, more accurately, 1700 per quarter.

The admissions into the Small Pox Hospital during the year 1848, amounted, as the last Table indicates, to 696. For the following very careful analysis of these 696 cases, I am indebted to Mr. Marson, the Resident Surgeon of the Hospital.

TABLE III.

Admissions into the Small-pox Hospital in 1848, distributed into Classes, with the Character of the respective Cases in each Class, and the Corresponding Mortality.

Admissions.	Cases.	Normal Small-pox.						Abnormal Small-pox.						Result.	
		Confluent.		Semiconfluent.		Distinct.		Confluent.		Semiconfluent.		Distinct.		Recovered.	Died.
		Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.		
Persons unprotected	254	188	95	52	8	7	...	1	...	1	...	5	...	151	103
Persons previously vaccinated — with Cicatrices ...	365	58	27	22	1	7	...	71	10	66	...	141	...	327	38
Persons previously vaccinated — without Cicatrices	63	42	21	7	...	2	...	7	4	3	...	2	...	38	25
Total after Vaccination	428	100	48	29	1	9	...	78	14	69	...	143	...	365	63
Persons previously Inoculated ...	3	1	1	...	...	...	...	1	...	...	...	1	...	2	1
Having previously undergone Vaccination and Small-pox	1	1	1	...	...	...	...	...	...	...	...	...	...	...	1
Total having Small-pox	686	...	...	...	...	...	...	...	...	...	...	...	...	518	168
Persons not having Small-pox ...	10	...	...	...	...	...	...	...	...	...	...	...	...	10	...
Total Admissions	696	290	145	81	9	16	...	80	14	70	...	149	...	528	168

The total number admitted in 1848 (696) has been exceeded only on one occasion since the establishment of the Hospital eighty years ago; viz., in 1838, when sixteen additional cases were received, making a total, in that year, of 712.

The principal facts embodied in Table No. 3 may be thus briefly summed up:—

Of the 696 cases admitted, ten proved not to be small pox. Of the 686 cases of variola, 254 were persons who had never undergone small pox, nor been subjected to vaccination. Of them 103 died, being at the rate of 41 per cent.

428 persons believed themselves to have been vaccinated, and relied on vaccination as their security against small pox. Of them, 365 bore on their arms cognizable cicatrices. 63 reported themselves as vaccinated, but showed no marks. Of them there died 25, which is at the rate of 40 per cent.; while of the 365 vaccinated *with* cicatrices there died 38, or nearly 11 per cent.

The mortality upon the gross admissions (168) is 24 per cent., a rate considerably in advance of that of 1847, which was only 18 per cent., but identical with that of the epidemic of 1844-45. This latter epidemic extended through fifteen months, viz., from April, 1844, to April, 1845, inclusive. In this period 861 patients were admitted into the Small Pox Hospital, of whom 203 died, which is very nearly 24 per cent.

By far the larger proportion of persons admitted into the Hospital in 1848 consisted, as usual, of adult males. 65 persons only were admitted under ten years of age. Of them there died 23, being at the rate of 35 per cent. One boy, nine years of age, left the hospital on the 14th November, 1848, in good bodily health, but with the sight of both eyes irrecoverably lost. Ophthalmia was not, however, so prevalent last year as on many former occasions.

The great difficulty with which we had to contend throughout the greater part of the year 1848, but especially in the months of April, August, September, and October, arose from erysipelas, and those associated affections (pudendal gangrene, Cynanche, peritonitis, diarrhœa, &c.) which, in a recent number of the *Medical Times*, I generalised under the the title of Ochlesis. Never, probably, since the foundation of the Hospital, had the ochletic miasm so thoroughly pervaded the wards. Erysipelas facialis, the normal type of the malady, was of an exceedingly grave character. It affected very many of the convalescents from the severer types of small pox, and not a few of those who were admitted with mild attacks of the varioloid disease. It is difficult to separate the mortality by erysipelas and ochlesis purely, from that by the accompanying variola, but I may state that of the total number who died (168), 28 displayed symptoms of the superadded malady; viz., 11 among the unprotected class, 12 among those vaccinated *with* cicatrices, and 5 among those vaccinated *without* cognizable marks.

The proportion of persons admitted after undergoing vaccination in early life continues to increase. During the past year, 62 out of every 100 persons admitted, believed themselves protected by prior vaccination. Of the 428 cases admitted under these circumstances, 129 had the disease in severity throughout; 78 exhibited confluence at the outset; 221 had the disease mildly throughout.

Among the persons admitted after vaccination, it was ascertained that many had been vaccinated in Germany and Italy, where the greatest attention is paid to insure correctness in the process. Many had been vaccinated in country districts of England and Wales by practitioners of acknowledged skill, whose names are known, and afford every assurance that the process was duly performed. Several of the number were vaccinated in London at the stations of the National Vaccine Establishment; and ten stated themselves to have been vaccinated, in early life, at the Small Pox Hospital. Of these one died.

The records of the hospital afford, in most instances, good evidence of the sufficiency of the vaccine process, as there conducted. A cursory examination which I lately made of these documents supplied data which possess an interest sufficient, I think, to justify their appearance in this retrospect, although a few cases only belong, in strictness, to the epidemic of 1848.

Case 1.—Elisabeth Just, aged four months, was vaccinated at the Small Pox Hospital, May 7, 1813, by Mr. Wachsel. The course of the vaccination is noted, throughout, as normal. She was attacked with small pox on Christmas Eve, 1829, being then sixteen years old, after undergoing scarlet fever in St. Bartholomew's Hospital. The disease proved severe, and the convalescence tedious.

Case 2.—Charles Salter was vaccinated at the Small Pox Hospital, April 12, 1814, being then ten months old. He was admitted a patient of the Small Pox Hospital, March 2, 1833, being then nineteen years old. He had the small pox so mildly that he was discharged March 4.

Case 3.—Mary Bush was vaccinated May 1, 1815, at the Small Pox Hospital by Mr. Wachsel. Course of vaccination reported on four different occasions as normal, viz.:—vesicles elevated, lymph with areola, areola, scabs. She took small pox when aged 18; was admitted into the Small Pox Hospital November 17, 1832; disease confluent, laryngeal, of great intensity. She died November 24.

Case 4.—Eliza Quily, vaccinated at the Small Pox Hospital, January 13, 1825, aged three months. Course of vaccination normal. In July, 1841, she took small pox, being then 16 years of age. The initiatory fever was severe. The disease *turned* on the seventh day. No pitting remained.

Case 5.—George Dale, vaccinated at the Small Pox Hospital, Friday, December 11, 1818. Vaccination regular. Admitted into the Small Pox Hospital July 11, 1838, nineteen and a half years after vaccination. Has three perfect cicatrices. Small pox superficial, mild, and mitigated, without danger, but perfectly unequivocal, preceded by much fever; eruption extensively diffused. Discharged well, July 18.

Case 6.—Rebecca Oram, vaccinated at the Small Pox Hospital, November 3, 1819, by Mr. W. Wheeler. She was then aged two months and three weeks. Course of the vaccination normal. April 9, 1849, at the age of 29, she was admitted into the Small Pox Hospital, having on her arm four excellent cicatrices. This was the second day of eruption, and fourth of fever. The small pox proved confluent, severe, scarcely, if at all, modified. She recovered, and left the Hospital April 27.

Case 7.—Emma Forbes, vaccinated July 1, 1819, at the Small Pox Hospital. In December, 1837, when aged 18, she had a smart attack of small pox, under the care of Mr. Streeter. There was no danger, except what arose from accompanying pregnancy. She recovered, and on the 11th of February, 1848, was delivered, at the full period, of a boy, who exhibited no trace of having had small pox.

Case 8.—Sarah Forbes, sister to the above, was vaccinated at the Small Pox Hospital, May 17, 1816, aged five months. The vaccination ran through its stages normally. She caught small pox from her sister Emma about Christmas, 1837, when aged 22, and was under the care of Mr. Fortescue, of Smithfield-bars. She died, and was buried January 9, 1838.

Case 9.—William Harris, vaccinated at the Small Pox Hospital, April 18, 1820. Course of vaccination normal. Took small pox when aged 16½ years, and was admitted into the Small Pox Hospital August 1, 1836. Disease semi-confluent, unmodified. He recovered, and was discharged August 15.

Case 10.—James M'Masters, vaccinated at the Small Pox Hospital, May 14, 1821. Course of vaccination normal. Admitted into the Small Pox Hospital, having small pox upon him, May 6, 1831, being then 10 years old. Disease distinct, mild, but unmodified. Three good cicatrices were on the arm. He was discharged May 20.

Case 11.—Emma Dawkins, vaccinated at the Small Pox Hospital, June 13, 1825, by Mr. Wheeler, when aged three months. The vaccination ran a normal course. In July, 1841, being then sixteen years of age, she took small pox. The initiatory fever was severe. The pocks turned on the seventh day. No pits remained.

Case 12.—Emma Coombes, vaccinated at the Small Pox Hospital, May 28, 1827, aged five months. Admitted into the Small Pox Hospital Feb. 18, 1847, nearly twenty years afterwards. Several cicatrices were perceived. The disease proved to be a mild varioloid. She was discharged March 9.

Case 13.—John Sharp, vaccinated at the Small Pox Hospital, May 24, 1830. Course of the vaccination normal. Took small pox Feb. 1, 1841, at the age of eleven. He was seen by me Feb. 4. Eruption mild. Initiatory fever severe.

In this series of cases, it will be seen, that the earliest age at which small pox appeared, subsequent to vaccination, was ten years (Case 10); and the most advanced, twenty-nine (Case 6). Two out of the thirteen cases died (Cases 3 and 8).

To these instances of small pox succeeding vaccination I beg leave to subjoin a few well-marked cases, of recent date, illustrating the incubative period of small pox.

Case 1.—Elizabeth Frost, aged twenty-two, was attacked with small pox Nov. 7, 1847, and was admitted into the Small Pox Hospital the following day. She visited her brother, then lying ill of the small pox, at the Hospital on the 25th of October. Interval from exposure to eruption fourteen days.

Case 2.—Harriet Black, aged twelve, residing in the Experimental Gardens, Islington, sickened for the small pox Dec. 6, 1847, and left her home for admission into the Small Pox Hospital four days afterwards, viz., Dec. 10, 1847. Residing in the same house with her was her elder sister, Sarah Black, aged eighteen. She sickened for small pox Dec. 18. Eruption appeared Dec. 20. She was admitted into the Small Pox Hospital Dec. 22. Interval from first exposure to the variolous effluvium from her sister (Dec. 6) to the appearance of eruption in herself (Dec. 20), fourteen days.

Case 3.—Frederick Howard, aged twenty, visited the Small Pox Hospital, to see his brother, March 12, 1848. Sickened for small pox March 23. Eruption appeared March 25. Interval from exposure to eruption thirteen days.

Case 4.—Jane Blomfield, aged twenty-two, visited her sister, then a patient at the Small Pox Hospital, on Tuesday, Sept. 12, 1848; she herself sickened for small pox Sept. 22. Eruption showed itself Sept. 24. Interval from exposure to eruption twelve days.

Case 5.—Joseph Brown, aged 19, swept the chimnies of the Small Pox Hospital, Dec. 9, 1848. He was attacked by small-pox, and the eruption developed itself Dec. 23rd. Interval from exposure to eruption, fourteen days.

The department of the Hospital devoted to vaccination has been in great activity during the past year, as always happens when small-pox is epidemic, and public alarm is excited. The number of persons vaccinated at the Hospital in 1848, was 3292. The number of medical practitioners supplied gratuitously with vaccine lymph, was 2492. A very large proportion of these were country practitioners. The demands from Ireland, during the past year, were unusually numerous. It is probably known to most of the readers of the *Medical Times*, that armed vaccine points are issued, free of expense, to all medical practitioners in the country, who may apply for the same. The application to be made, by stamped letter, addressed, "Resident surgeon, Small Pox and Vaccination Hospital, King's-cross, London."

I may add, that a new Small Pox Hospital is now building at Highgate, near the Archway, which will be ready for occupation in the spring of 1850.

RECORD OF CASES ILLUSTRATIVE OF NERVOUS PHENOMENA.

By R. TUTHILL MASSY, M.D., Physician to the Exeter Dispensary.

PARALYSIS INDUCED BY COLD APPLIED TO THE NERVOUS BRANCHES IN THE HAND AND FOOT.

Case 1.—Hemiplegia.—Anne Williams, aged 7, spent the greater part of yesterday amusing herself with washing baby-clothes in cold water. This morning she could not move her right leg and arm to get out of bed. The arm is quite dead to motion, but not to sensation; leg the same; intellect clear; stomach healthy; no intestinal or urinary derangement. Balneum calidium statim; calomel gr. iij.; statim sumend.

If the calomel does not move the bowels in three hours, she is to get a dessert spoonful of castor oil.

On the third morning from the attack, she awoke well and without a trace of the paralysis. The medicine opened the bowels freely twice; the discharges were natural, and she had a good night's rest.

INSANITY AND SUICIDE, WITH REMARKS.

Case 2.—A man, aged 50, in comfortable circumstances, leaped out of bed, seized his wife, aged 47, as she stood dressing at the glass, with her back towards him, and cut her throat; his bloody footsteps were traced into the adjoining room, where his daughter slept. Luckily for the daughter, she had got up early and left her room to prepare breakfast; he returned to the foot of his bed, and opposite the same looking-glass, cut his own throat; he fell by the side of his wife.

When I saw them both lay on their backs, the man's eyes starting from their sockets and directed towards the ceiling; the woman's head was turned round towards the man, her eyes were fixed on the cut in his throat, and her index finger pointed at the cut; her whole expression exhibited accusation, and she all but spoke the word "murderer."

The tragedy must have engaged at least five minutes since the cutting of his wife's throat; her heart's action must have ceased, all the blood must have escaped through the arteries and veins of the neck as they were fully opened. Yet without this vital fluid could the brain act? Could the features speak? Could the hand be raised and the finger directed at the very wound by the mind—by reason?

The membra nictitans of a decapitated frog is rapidly shot across the eye, if you touch any part of the conjunctiva, and this experiment I have repeated with success after fifteen minutes' decapitation.

The heart of a frog, taken from the chest, and placed on my hand, was kept pulsating for twenty minutes, by pricking it now and then as the contractions became feeble.

Reflex action may have caused this third eyelid to wink, and muscular irritability may have caused the heart to contract; but what caused this woman's position. I have been trying to attribute it to accident; but this I cannot do. The position was too expressive of the occurrence; for the wife looked as if she had known all that had happened to herself and to her husband. Here we had the brain alive after the death of the heart.

ANÆSTHESIA OF HEAD AND NECK, WITH PARTIAL PARALYSIS A SEQUELA OF A CONTINUED FEVER.

Case 3.—John James, aged 25, by occupation a surveyor, with a fair complexion; he came under my care for a common continued fever, of which he got well; but, after a week's convalescence, he got a relapse from some indiscretion in his diet, and, with his febrile symptoms, he complained of a queer feel about his mouth. He found he could not eat without pushing the bit with the hand from between the gum and cheek, and then had a difficulty in swallowing; he could not spit out, nor close his lips so as to hold anything between them. The tears flow down his cheeks; the lower lids droop and look swollen. He has loss of sensation in the scalp, face, and neck; the lower lip is sensible to the touch and to motion, but the upper lip is completely paralysed, deprived of sensation and motion; he has a difficulty in articulating labial words; the tongue can be protruded equally and evenly. For this affection he was salivated, and blisters were put to the back of the head and nape of the neck.

After a month's ineffectual treatment, he left for the country, taking with him some strychnine pills, one-eighth of a grain twice a-day.

I believe he got well, as I heard nothing more of him.

A PECULIARLY CIRCUMSCRIBED LOSS OF FEELING IN A HEALTHY WOMAN, WITHOUT ANY APPARENT CAUSE.

Case 4.—Rose Sargent, aged 21, has felt a swelling for some days on the outside of the left thigh. On examination I cannot discern any swelling, nor is there any comparative difference between both thighs; the peripheral sensation is gone, and the introduction of a needle is not felt over a surface that my hand might cover; it is defined to within two inches of the great trochanter, and six of the knee. She was under treatment for one week; anæsthesia continued; she has not since returned for advice.

PARAPLEGIA, WITH THE POWER OF FLEXION.

Case 5.—Margaret Brown, aged 15, of fair complexion and healthy constitution.

About two years ago, she was on the road to see a friend, when she clung to the back of a passing cart to get a ride; in getting up, she rested with her stomach placed on the cross rail, the wheel of

the car quickly rolled over a large stone, and, jolting her up, threw her chest and stomach against the rail.

Three weeks after this accident, (which appeared trifling,) she found she could not take a weight on her head, and in a few weeks more she became doubled together.

A blister to the chest removed these symptoms, and she got quite well, and continued so for eighteen months, when one morning, on making an effort to get out of bed, she found she could not move her legs.

Present state.—She remains on her back in bed, always occupied in reading or knitting; she cannot walk or stand; the feet feel hard and rigid; the toes are stiff, and cannot be flexed, except by pinching the integuments of the thigh; then the knees jump up and out, and become flexed gradually after the quick pull up and out of the knee. It is really curious to see those two first movements. During the gradual flexion she can check the coming up of the legs.

Any of the attendants pulling or pinching the integuments of the thigh, makes this girl call out against being tickled; then it causes her to laugh joyfully, and then the legs are drawn up in bed as described.

Catching the integuments on *either* thigh is sufficient to cause the laughter and the pulling up of *both* legs.

A warm bath removed this paralysis of two months' standing, and for three days this girl could walk about her room. On the fourth morning all the symptoms returned; she could not use her legs or move in bed.

The warm bath was again used without benefit.

A blister along the spine gave no relief.

A seaton introduced over a tender point in the lumbar region made her cross and irritable, without doing any good.

The catamenia has not yet appeared.

Tonics and country air were the last directions given.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

[From our own Correspondent.]

The week which has just passed over our heads has been pregnant with agitation of every kind; but I shall, of course, notice only that occasioned by the sudden, and, at the same time, most violent recurrence of the prevailing epidemic.

This awful visitation was apparently occasioned, at all events accompanied, by a remarkable increase of atmospheric temperature; the first five days of the week were burning hot—that constant heat which is the more oppressive that it is untempered by the breeze either from land or sea. With the increase of heat came the increase of pestilence—a perfect explosion. Every quarter of the metropolis and its environs was simultaneously attacked with the same violence—the whole city was enveloped at one and the same instant, in the shadow of death.

The following official returns indicate the progress of the disease since my last letter; but I have good reason for thinking that the mortality has been underrated by one-third at least.

On the 1st, the mortality stood thus—Deaths, in city, 77; in hospitals, 58: total, 135.

On the 2nd, the disease suddenly assumed its grave character, and the returns were—

	Deaths in City.	in Hospitals.	Total.
2nd	136	64	200
3rd	324	133	457
4th	318	132	440
5th	379	160	539
6th	364	138	502
7th	377	162	539

The military hospitals are not included in the above returns. The mortality in these establishments has been about 100 a day; and, as a total, I may affirm, without any exaggeration, that the daily mortality reached a sum little short of 800. If I remember right, the worst day of 1832 gave us a mortality of 1,000 only. You may, therefore, imagine the universal terror and confusion which prevailed, especially as "public report" that "*monstrum horrendum, cui lumen ademptum*," exaggerated every circumstance connected with the attack. Yet the reality was sufficiently serious. Every quarter of the city was attacked at the same time, and hence every one had to deplore the loss of a relation or a neighbour, an acquaintance or a friend. In many cases the disease assumed a degree of malignity beyond example, and patients were cut off within an hour, without diarrhœa or vomiting. The ominous expression, "poison," began to gain currency amongst the people. On Tuesday, from want of proper arrangements, the supply of coffins and doctors became suddenly insufficient. *La garde*, as the phrase runs here, (that is, three men and a corporal,) was frequently sent to force the medical men to attend, while the bodies of the dead were transferred to their last abode, in carts instead of hearses. This exhibition produced general dismay, and it was immediately reported, that the daily mortality exceeded 1,000 — 1,500, — even 2,000. The authorities seemed to encourage these sinister reports by obstinately withholding from the public the official returns; and it was not until Friday last that any such returns were published, or that any general system of medical relief was adopted.

At one time, indeed, the idea of endeavouring to produce an atmospheric change by the simultaneous discharge of a great number of cannon was spoken of, but, ere man could move, Providence came to our relief. On Friday we had a tremendous thunder-storm, which lasted, without intermission, for six hours; since then the temperature has become actually cold, and I believe a very marked improvement of the public health has taken place. The discharges of electric fluid, during the storm alluded to, were immense, and, without yielding to credulity, we might almost conceive it to have been a Providential interposition.

The storm swept down from the north, and as it touched near St. Denis, the hills which, as you know, enclose Paris in a perfect amphitheatre, it broke up into two columns, following to right and left the summits of the hills, and thus embracing within the electric influence the whole city with its environs.

The change of atmosphere has been most complete since then, and, as I remarked, there has been a steady, though not very great, diminution of mortality from the disease. As usual, it continues to select many victims from amongst the higher classes of society. The number of Deputies attacked still continues great, and I should not be surprised if the Assembly were to adjourn to the end of June. Three Ministers, viz., M. Bulhieres, M. Tracy, and M. Passy, have been attacked within the last two days, and it is said that the Archbishop of Paris was attacked yesterday. M. Rulhières, Minister of War, had only just completed visiting the military hospitals, and His Grace the Archbishop had not long left the death-bed of Marshal Bugeaud when the symptoms of the disease manifested themselves. The old Marshal, after a brave struggle with the malady, died on Saturday evening, at seven o'clock. He was attended by Chomel, and one of his oldest friends, Cruveilhier, closed his eyes.

In alluding to the Minister of War and the Archbishop of Paris, I had no idea of suggesting the contagious nature of cholera; but I must observe, that the doctrine of contagion has gained considerable ground here since the epidemic of 1832. The question of contagion was debated at the Academy of Medicine during the last two meetings, and nearly all the speakers, with Velpeau, the President, at their head, pronounced themselves in favour of "contagion under certain circumstances." To prevent any untoward influence on the public mind, it was agreed that the debates should not be published, and the precaution, it would appear, was not superfluous, for one of the speakers affirmed, that in a certain locality, near Paris, the sick remained without succour, and the dead without sepulture, through fear of contact with those attacked by the disease. Civilization, it seems, has not made much progress in many parts of "La Belle France;" and political doctrines have taken a strange tendency towards Vandalism. Thus are all our palaces converted into prisons, hospitals, or barracks. The Chateau of St. Germain is now a prison; the Tuileries both a barrack and an hospital; even private residences affect the same destination, and the Presidential residence of General Cavaignac, and the Hotel of the Austrian Embassy, as property of the State, are being converted into cholera hospitals.

Apropos of hospitals, I must not forget the new "Hospital of the Republic," which occupies the famous site of the Clos St. Lazare, and which will form, when finished, one of the most magnificent establishments in Europe. But this vast monument merits a description apart.

The dissecting rooms at Clamart have just been closed, by order of the authorities, until the end of June.

Our academic news of this week does not afford anything of importance and interest. The Academy of Medicine is, of course, exclusively occupied with the prevailing epidemic; but neither in the facts produced, nor in the doctrines propounded, do I find anything with which we are not perfectly familiar in England. The French, I may observe, are remarkable for their ignorance of everything that passes abroad, and hence are perpetually falling into the error of advancing theories that have been long exploded elsewhere. Thus, one Practitioner has endeavoured to revive the doctrine of animalcules in connexion with cholera, and recommends for treatment nitrate of silver with ammonia. At the Institut, M. Cheneau read a long memoir on the use of digitalis in epilepsy,—a remedy the value of which has long since been determined by the writings of Starkey and others.

SCOTLAND.

[From our Edinburgh Correspondent.]

The Report of the Central Board of Health on Contagion and Quarantine, fell last week, as intimated in a former communication, like a thunderbolt among our stanch contagionists of Edinburgh. The sensation was the stronger, that it was produced at the moment when opposition began to run strong against that provision of the Bill, now before Parliament, for the extension of the English Public Health Act to Scotland, by which the superintendence of all sanitary measures in Scotland is to be vested in the same Central Board from which the Report in question issued. We cannot help being out-and-out contagionists in Edinburgh. There is hardly a man in the Profession here who has not suffered typhus in his own person. Thus, every brother Practitioner we meet, affords an example of some one of the many modes in which its contagion operates. And yet the disease is almost unknown in the classes of society to which Medical Practitioners belong. It often happens, that the young practitioner escapes the disease while he attends persons affected with fever at their own houses in dispensary practice, where all the circumstances deemed most conducive to the spread of epidemic fever are accumulated—bad drainage, narrow lanes, confined, overcrowded houses, poverty, uncleanly habits, tainted air,—and yet finally catches it in the fever-wards of the hospital, where all possible efforts are made to reduce these circumstances to a minimum, and where there can be but one kind of accumulation, namely, that of the exhalations from the bodies of the sick, in which, by our hypothesis, the poison resides. One fact, in particular, does not accord with the hypothesis of the Central Board, which is, that the disease is frequently caught in wards which betray no sign of tainted air, or of any other of the noxious influences which rank among the concurrent causes

of fever, along with contagion. The object of free ventilation, with us, is to dilute the poison: its object, according to the doctrine of the Central Board, is to prevent the accumulation of certain influences, the presence of which is essential to the operation of the poison. We concede to these influences the property of powerfully aiding the effect of the poison; but we consider the poison itself to be the main and essential agent—the *sine qua non*. The Central Board pronounces epidemic atmosphere the essential condition. That we cannot admit as regards typhus. Epidemic influences merely impart a much stronger tendency to the disease. Typhus is never out of Edinburgh; but for considerable periods of time it falls to a minimum, the noxious influences before referred to being always present in much the same degree. Thus the poison does not leave the town, and the concurrent circumstances, or those which favour its operation, remain present; yet, the disease fails to prevail extensively. Again epidemic influence arises, when the disease rapidly spreads from its lurking places. All this is hypothesis, cry the partisans of the opposite view. No doubt it is. But what else is the whole Report of the Board. Try the respective merits of the two hypotheses, as regards typhus, and prefer that which best agrees with the whole obvious conditions under which the disease arises. Here there may be room for dispute. But one thing is certain—our hypothesis has more than one decided analogy on its side. Small-pox is a febrile, a contagious, and an epidemic disease. The poison, as few will deny, is essential to the production of that disease—yet the poison is at all times lurking in some localities, and is of itself sufficient, if applied at any time in a state of concentration, to excite the malady. And yet the disease does not tend to spread otherwise than slowly. An epidemic influence arises, and then this pestilence rages far and wide. To this the course of typhus is exactly parallel, the difference being, that the poison of typhus is a hypothetical, not a demonstrable substance, like the poison of small-pox. If the Board object to small-pox, as not in strict analogy with typhus, let their medical advisers try to get them out of the difficulty by choosing measles as having a less demonstrable virus. We are ready to meet them on either ground.

It is manifest that the doctrine of contagion in all diseases that are not distinctly communicable by inoculation (among which we concede typhus and the plague to be), rests, for the present, not on conclusive observations, but on analogy: Take away, then, the cases of disease, which, like small-pox, can be beyond doubt produced by inoculation, and the doctrine of the spread of any epidemic, from person to person, would not retain, at least to those who think with the Board, more than the shadow of a foundation. But, if the sole medical idea of the spread of diseases from person to person be drawn from inoculable diseases, it is plain that the Profession is not yet in a condition to assume any hypothesis in regard to diseases merely supposed to be communicable which does not run completely parallel to the course of the diseases proved to be communicable.

When the poison of small-pox is described as demonstrable, all that is meant is, that the tangible matter to be procured from a pustule contains the poison. If the matter of a pustule be largely diluted, it will fail to excite the disease by inoculation. So on our hypothesis, the exhalations from the patient's body in typhus being largely diluted with air fall short of exciting the disease. There is no ground of analogy, for saying that incidental noxious influences, or an epidemic atmosphere can play any higher part than to increase the susceptibility of the system to be affected by the poison. Depressing affections of the mind hold the same place in the production of typhus as those noxious influences, and even of the epidemic atmosphere, saving the power of the latter to modify the activity of the disease in the individual. Nor, under this view, is there any room for the distinction between contagion and infection. There is a poison produced in the bodies of the affected; in the one case it is mixed up with a liquid secretion, which may be collected from the surface of the body; in the other, it escapes into the air along with volatile secretions, and becomes more difficult of observation, merely owing to the expanded form which it has assumed.

The Board might have spared itself the trouble of proving influenza non-contagious. Nobody dreams of any analogy between it and small-pox. Influenza is the type of a purely epidemic disease—dependent on some temporary terrestrial or cosmical unknown influence. The hypothesis must be held to be established, because it squares exactly with the facts observed in its spread over the earth. But it is almost *sui generis*, and therefore not to be reasoned from without the strictest limitation of the conclusions. As to cholera, if it be contagious at times, as many of our townsmen are persuaded, it requires a special consideration, as it must in that case, as far as can be judged, in the mean time, present an example of a disease propagated in general, like influenza, by a mere epidemic influence, and at other times becoming, like small-pox, contagious.

There is a general agreement among the members of the Profession here as elsewhere, that quarantine requires a complete revisal. But, many of the grounds on which the Board condemns it cannot be admitted. The argument on the subject of *fomites* is very juvenile. The ludicrous description of the physician's cuff spreading an epidemic through his daily walk, would be a bright passage in a second-year student's maiden speech in the Medical Society. Dr. Southwood Smith should have made his colleagues aware, that a tablespoonful of sulphuric acid taken into the stomach might destroy life, but that the same quantity, diffused through a gallon or two of water, not only becomes innocuous, but forms an agreeable and healthful beverage. He should have told them, also, how the operation of cause and effect differs in the living body from its simplicity in mere physical nature,—how wayward, where living action is concerned, is the susceptibility to the influence of a cause,—how numerous the antagonist forces which may counteract its operation for the time,—in short, that the living system is not always found in a fit of susceptibility, or in a mood to have its actions disturbed by influences from without, unless these be applied in their utmost state of concentration. And we think the Board itself, uninstructed, might have perceived, that, though thousands upon thousands of bales of cotton have been exported from Egypt, during the plague, to different ports of Europe, without conveying the disease, it is not, therefore, to be inferred, that cotton cannot so imbibe the poison as to spread it to a distance. Surely as much might be said of any country in which small-pox was prevalent. Whence could the quantity of the poison be obtained to impregnate so many bales in the ordinary channels of commerce? Does this statement show, that if a person affected with the plague lay throughout the disease on a bag of cotton, that cotton could not become so impregnated as to communicate the pestilence to another person who afterwards lay on the same bed? The Board have, perhaps, heard, that a worsted thread, drawn through a small-pox pustule, was formerly used to inoculate for small-pox, by being simply tied round a healthy child's arm. Would any one think of calling this tradition in question, because many packs of wool had been spread, without injury, over the country, from some of our great wool-marts, at a time when small-pox was prevailing there? Again, what kind of argument is it, that because influenza and cholera cannot be kept out by quarantine, that therefore plague cannot be kept out? What is this but the old unfounded *à priori* reasoning by which Science was kept in the dark for ages?

But the proposition which has most astounded us here is, that fever is not introduced into Britain by Irish tramps,—that it is generated among them either on their voyage from Ireland, or after their landing, that is to say, contagion and fomites being thrown overboard. Our doctrine on this head is very simple. The emigrants have been exposed to contagion before leaving Ireland; they bring with them rags saturated with the poison; the disease occurs in some on the voyage—in others after they land. This is, to be sure, an hypothesis; yet surely as good as the hypothesis of the Board, which requires the unsupported assumption, that contagion springs up daily from epidemic influence acting on filth.

The Report is, according to our ideas, full of the most gratuitous hypotheses; it does not represent the sentiments of the Medical Profession, either in England or Scotland. It does not rest on the common sense matter-of-fact views which characterise the inhabitants of Britain. It exhibits opinions, and clothes diseases with an aspect which denotes a peculiar calibre of mind—a cast of mind more prized in the coteries of Paris, Berlin, and Vienna, than within the sober precincts of this island,—a turn of thought which is very injurious, and which has a great aptitude for reducing things to method and order, by cutting off the difficulties which root beneath the surface, but which is not, according to our prevailing belief, that reach of intellect which most certainly distinguishes truth in matters of complex inquiry.

Such, then, is a sketch of the general sentiments of the Profession here on the subject of the Report; and there are but few who will dissent from these views.

Edinburgh, June 13, 1849.

IRELAND.

(From our Dublin Correspondent.)

CHOLERA IN DUBLIN.

This disease is steadily and slowly spreading in the Irish metropolis. During the week ending June the 11th the number of cases admitted into the various hospitals were as follows:—Kilmainham Hospital, 102; Brunswick-street Hospital, 46; Green-street Hospital, 40; these, together with 9 cases which occurred in the 2nd Royals, give a total of 197 during the week, being an average of 28 per diem. Of the foregoing 197 cases 95 died, and 81 are reported to be recovering. This gives a large apparent mortality of between 46 and 47 per cent. The fact is, however, that the mortality, in proportion to the cases attacked, is diminishing throughout the city, in accordance with the ordinary law of epidemics. Amongst the military, however, who have only come within the sphere of the disease during the last fortnight, the mortality has been relatively excessive. Up to the 11th instant, 72 soldiers in the 2nd Royals were seized, of whom 42 died. If we examine the Hospital returns for the last three weeks, we will find that, although the numbers are increasing, the disease is becoming milder among

the general population. Thus, in the week ending May 28, there were 124 cases, and 62 deaths; in the week ending June the 4th, there were 147 cases, and 68 deaths; and in the week ending June the 11th there were 188 cases in the civil hospitals and 90 deaths. This shows a reduction in the mortality from 50 to 46 per cent. But in the commencement of the epidemic the disease was much more fatal than is represented by the foregoing numbers; for, of the entire number of cases which have occurred in the Dublin hospitals, or among the military, amounting in all to 750 cases, there have been 348 deaths. It may be remarked, that, in many instances, the cases brought into hospital are already in collapse, and that in general the people have the greatest objection to leave their own homes. A popular remedy has attracted a great deal of attention among the poorer classes, and has, it appears, been countenanced to some extent by the Roman Catholic clergy; it is a strong decoction of sorrel (rumex acetosa) with a little table-salt dissolved in it. One would be inclined, *à priori*, to suppose that the quadr.-oxalate of potash, that this plant contains, would be more likely to produce cholera, than to cure it; and, indeed, Dr. Kirwan, the City Coroner, stated, at a late meeting of the Sanitary Association, that he had been called on lately to hold inquests on three persons who were supposed to have been poisoned with it. Our readers will recollect that Dr. Prout has stated, that he experienced a considerable increase in oxalate of lime deposits from the urine during the epidemic of 1832; and Donné has shown, that by the internal use of sorrel, oxalate of lime crystals can be produced *ad libitum* in the renal secretion. If these statements be confirmed, and that sorrel prove really useful in cholera, it will constitute a rare new argument for the homœopathists, at present badly in want of one.

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THE MEDICAL TIMES.

SATURDAY, JUNE 16, 1849.

In accordance with our intention, from time to time, to lay before our readers the most advanced opinions on particular subjects either directly or indirectly connected with Medicine, it is now our purpose to develope the present state of knowledge on one of the most important acute diseases of this country, whether its mortality or the number of those annually attacked be considered. From the Returns of the Registrar-General, it appears, that the weekly average mortality from fever in the metropolis alone varies from 40 to 50. The last few years' reports of various Fever Hospitals show that about 12 per cent. of those attacked with fever die; so that we shall not be far wrong if we assert, that from 14,000 to 15,000 persons annually suffer from fever in London, and that from 1,000 to 2,000 fall victims to its ravages; and when to this are added the fearful epidemics which, from time to time, desolate Ireland and parts of Scotland, we shall not be accused of overstating the importance of the subject. The names of men the most renowned in our Profession are associated with investigation into various points connected with the pathology or treatment of fever, not to mention foreign writers. Sydenham devoted a large portion of his works to fever; with Cullen it was a favourite object of speculation,—his theory of spasm who can forget?—and, in our own times, Tweedie, Bright, Stokes, Graves, Alison, and Christison, have made it a subject of special study.

Setting aside all theories, we shall succinctly lay before our readers the ideas which, during the last twenty years, with trifling modifications, have been practically entertained by the majority of British Practitioners on the subject of fever; and then endeavour briefly to explain the views of the American, French, and few British Physicians, who have, since 1837, advanced and supported by evidence which appears almost irrefutable, opinions on the subject entirely opposed to those generally held in this country.

The great text books of the higher class of Students and of Practitioners, for some years past, have been Drs. Elliotson's and Watson's lectures, and the "Library of Medicine." The two former being by the celebrated Professors of Medicine at two of the largest London Colleges; the last edited by one who, for a quarter of a century, has held the post of Physician to the London Fever Hospitals, the article "Fever" in the same bearing the name of an Edinburgh Professor, possessing an European reputation, these works may fairly be considered to represent the views of British writers and of the majority of British Practitioners, on the subject of fever, up to the present moment.

These writers agree in representing continued fever to be a constitutional disturbance, unconnected essentially with any local lesion, but capable of being complicated in its progress by change of structure in any or every organ of the body; thus they assert, that the brain may become, during the course of fever, the seat of congestion, or even of inflammation, bronchitis, or pneumonia supervene, the abdominal organs be implicated, and ulceration of Peyer's patches and enlargement of the mesenteric glands ensue; that, although one or all of these lesions may be occasionally present, none of them are necessarily so, because fever often proves fatal without the most careful examination after death revealing any deviation from normal structure; they further maintain, that the poison emanating from a patient labouring under fever, unattended with local complication, may excite fever in another, which may be accompanied by any of the multifarious lesions before alluded to, and they insist, especially, that fever without intestinal disease evolves a poison capable of producing fever with ulceration of the agminated glands of the small intestines.

The differences allowed to exist between the various forms of continued fever are said, by writers of this school, to be merely analogous to those which are observed between the several varieties of scarlet fever, or of small pox; and these differences are further stated to depend on some *unknown* local, constitutional, and hygienic conditions; but above all, on an *unknown* and often varying (atmospheric?) peculiarity termed the epidemic constitution. This latter being manifested only by its effects is,—so far as *actual knowledge* on the subject has attained,—independent of the physical, chemical, or electric conditions of the atmosphere. Furthermore, this constitution is alleged, by British writers, to stamp fever anew as it were, at every *unknown* change in its own *unknown* conditions, to cause those cases that would in one year have manifested themselves as inflammatory fever, in the following to assume the symptoms of typhus; these same writers affirm, that it is by these varying peculiarities of the epidemic constitutions that,—unfortunately for the progress of therapeutics and of our knowledge of the treatment of fever, as derived from experience,—all discrepancies in the accounts given by authors of the best modes of treating fever are to be explained; and, not only are differences in the general characters of the disease caused by this epidemic constitution, but particular symptoms and lesions found after death are ever being produced or modified by this all-powerful agent; *no one* feature of the disease is constant; one or all its symptoms may not only be present or absent, but if present may assume to themselves characters the most opposite to those they usually exhibit. The diagnosis—as the rule—is only to be made *per viam exclusionis*, fever cannot be defined unless it be negatively;(a) it has no proper symptom and no constant lesion; it has all symptoms and all lesions (b); it revels in the most contradictory; it glories in the most opposite; it is everything, it is nothing. Yesterday, our patient's disease was inflammation of the brain; to-day, it has passed into typhus; to-morrow, an examination after death reveals extensive consolidation of the lung; and so the disease, after all, was pneumonia.(c) In opposition to these *sketches* of fever we have the more definite descriptions of Louis and some other French, American, and also a very small section of British Physicians. These authors maintain, that here are in England two essentially distinct diseases, confounded by writers on Medicine under one name; that there is a continued fever accompanied by a constant anatomical lesion, and attended, during life, by symptoms dependent on that lesion for their origin; but that this same fever presents certain other constant symptoms, not so far as can be proved in any way dependent on that lesion, and, therefore, having their origin in conjunction with that lesion in some common cause, which cause is really the condition of system generally to which the term Fever is applied; so that these writers, like the authors of the British school, are essentialists; they by no means locate the cause of the symptoms in the abdomen, although they maintain that a peculiar change in the struc-

(a) Dr. Elliotson's definition of fever.
(b) Dr. Christison, Art. Fever, Library of Medicine.
(c) Dr. Reid's Anatomical and Pathological Researches.

ture of Peyer's patches is an invariable accompaniment of the disease.

These writers further maintain that there is, in England, a continued fever absolutely distinct from the former, attended with symptoms by which it may with facility be distinguished from it; not simply by the absence of the symptoms peculiar to the first, but also by other and those positive characters; moreover, the most recent of them assert, that there are probably other continued fevers equally as distinct from the two former as those two are from each other.

This is not the place to enter into the arguments and weigh the facts adduced in support of either statement; our duty is but to make clear—we might almost say make known—a controversy which has excited so much and such keen interest on the Continents of Europe and America. Twice during the last ten years have works (one of which has passed through two editions) on the Identity or non-Identity of Typhus and Typhoid fevers been crowned with rewards by the Parisian Academy of Medicine, and sitting after sitting of that learned body has been occupied by the disputants on either side. Paper after paper has filled the periodicals, and all have agreed that the evidence of British writers on the subject was so vague that little weight could be assigned to their testimony in settling the question at issue.

With the views of popular British writers on fever our readers are all familiar; with those of Louis and others, of the Inductive school, they are, probably, less generally acquainted,—and it is with the intention of directing their attention to the opinions of these writers, that we have written the above, as well as to serve, in some measure, as an introduction to the promised Papers on Fever which we shall shortly lay before our readers.

TREATMENT OF CHOLERA.

The more simple a disease, the more uniform its duration and mortality, the more easy is it to appreciate the effects of treatment in shortening that duration, and in diminishing that mortality.

There are few diseases the morbid phenomena constituting which are so uncomplicated as cholera, and yet there is no disease for which there are so few remedies that have any weight of evidence in their favour. The saline treatment, as discovered by Dr. Stevens, forms, however, a remarkable exception; and the fearful ravages that cholera is now making, induce us briefly to refer to the subject, in the hopes of persuading our Professional brethren both at home and abroad, to give the method a trial, and that not in its adulterated and combined state, but as recommended and practised by Dr. Stevens himself.

To the fearful accounts of our Paris Correspondent, the *Times* newspaper of a late date adds, that "upwards of six hundred corpses are borne out day after day for burial. From the ruthless veteran to whom all France looked as to her sword in the day of danger from within or from without, down to the populace of the suburbs, afflicted by every plague of every sin —the unquiet mind, the idle hand, exhausted means, the raging pestilence—the scourge is everywhere." Well, indeed, may the hearts of men be low and panic-stricken. 'Tis true that the Gwydyr-house Board of Health has just issued a notification on the subject, full of dread for the future and anxiety for the present. But, alas! the practice recommended by that body, as a mode of treatment, has signally failed; and while we readily admit the value of the precautionary measures and sanitary reforms that are enjoined, and fully agree in the prudence of their prophylactic precautions, we cannot blind ourselves to the fact that their *modus medendi* is comparatively useless.

On the other hand we find, that in April and June of 1832, and in July 1833, Dr. Stevens's saline treatment was tried in Coldbath-fields Prison, where there were at that period no less than 526 well-marked cases of Asiatic Cholera. Of these, 514 were treated according to the mode introduced by Dr. Stevens, and the result was, that the deaths were only 32, or about 6 per cent. In the first 100 cases treated by Dr. Stevens, the deaths were only 3, leaving 97 per cent. of recoveries. It is also well worthy of remark, that of these first 100 cases, 25 of the patients were in the pulseless collapse-stage of the disease before they came under treatment.

The reader, unacquainted with the bitterness of spirit which actuates the doings of some men, and with the undying envy and consequent hatred of others, will scarcely believe, although it is evidenced in the records of the Coldbath-fields Prison beyond all dispute, that by Dr. Stevens's treatment the mortality in upwards of 500 cases was only 6 per cent., this method has not been publicly recommended and generally adopted. And well may he exclaim, "Can such things be!" if he further compares the above result with that given in the *Times* of February 13th, by which it appears, that in a few places of Scotland, from October, 1848, to February 11th, 1849, where the Board of Health's treatment was chiefly applied, in 9826 cases the deaths were 4285, or within a shade of 50 per cent.; and the recoveries there certified were only 3074, or about 30 per cent., the remaining 20 per cent. of the patients being still under treatment or unaccounted for.

We have only to add, we have obtained a verified copy of the records at Coldbath-fields Prison, relative to the Cholera of 1832 and 1833; and that a strict examination of this document has completely removed from our minds every shadow of doubt with respect to the truth of the statement originally made by Dr. Stevens, and more recently by Dr. Turley, namely, *that the saline treatment as recommended by Dr. Stevens is actually the most successful of any that has yet been suggested.*

MR. GUTHRIE AND THE COUNCIL OF THE NATIONAL INSTITUTE.

Any manifestation of opinion from the leading actors in the Medical Reform movement is at this moment of great value, as, whatever tends to throw new light upon the questions at issue, must either confirm or dissipate any doubts that may be felt relative to the propriety of the present arrangement. The Correspondence between the National Institute and Mr. Guthrie, which we publish in another column, deserves, therefore, a few words of comment, with the view of exhibiting the exact position taken up by the National Institute, and the hopes which the Profession may be justified in entertaining of enfranchisement in the College of Surgeons, under the auspices of Mr. Guthrie, the leader of the opposition in the Council of the College.

The National Institute states, that their demands would be satisfied with an amendment of the Charter of the College of Surgeons upon certain just and moderate terms, so that the College might become the home of the General Practitioners. It is clear, then, that the National Institute seek for a new College only because they believe the admission of the General Practitioners into the College of Surgeons upon the terms required to be impracticable.

As Mr. Guthrie has, however, vigorously opposed their scheme of establishing a new College, they now ask him whether he can hold out any hope of a reform in the College of Surgeons such as they indicate; or failing that, whether he can offer any other feasible plan that can satisfy the necessities of the General Practitioners.

It will be seen, that Mr. Guthrie has not answered these important questions, but has promised a reply in a commentary which he intends publishing upon the Bill of the Lord Advocate when it shall be in print. We cannot help thinking that Mr. Guthrie was perfectly competent to express his opinion upon the questions placed before him, in the absence of the Lord Advocate's Bill. Whatever that Bill may prove to be, these questions apply to the existing state of the Profession and its present policy, and we cannot but consider that Mr. Guthrie's letter is very unsatisfactory upon these essential points. We can wait, however, for the forthcoming manifesto.

In other respects, the Correspondence does not contain much worthy of note. The National Institute accuse Mr. Guthrie of a misapprehension of the precise demands they have made; and Mr. Guthrie retorts, that in that case, his misapprehension is participated in by the legal advisers of the College of Surgeons. Mr. Guthrie has, however, evaded, not answered the charge of the National Institute. These gentlemen say, that they have not called upon the College of Surgeons to resign the examination in Surgery; and the whole extent of the opinion of the legal advisers of the College can go no further than this, that the claims of the National Institute, if carried out, would have that effect. These are very different things. The one is a question of fact, the other of opinion.

It is interesting to observe, that whilst the opponents of the New College, outside the Council of the College of Surgeons, loudly assert that it must be an inferior Institution, some of the cleverest members within that body dread the power and influence the new College may be expected to exercise. The truth lies between the two extremes. These discordant opinions strike us as recommendatory of the judiciousness of the course of policy which the National Institute have chosen.

INSANITY.

If there were any reason to believe in the truth of the proverb,

"Quem Deus vult perdere, prius dementat,"

the psychologist and the philanthropist might alike abandon their mission, and hand over the Insane to the inevitable results of the decree of a Providence which cannot err, only caring, by prudent safeguards, to protect the sane, till the last act in the fearful tragedy shall have been performed. But we shall leave those who so read Providence, and so fanatically neglect the study of cause and effect, to the inhuman sloth which such a doctrine engenders, while we go forth, enchanted indeed with the beauty and harmony of God's perfect works, but contemplative, zealous students of those deformities which mar the picture, and interrupt the destiny of man. We may, indeed, admire with wonder and thankfulness those arrangements for repair and reproduction after injuries of which the human body is the subject,—all tending to the perfection and symmetry of a frame which has no compeer in all creation,—but, in proportion to our admiration thus drawn forth, must be our deep conviction, that the mind too, — that "better part"—before whose imaginings nations have stood in awe, tyrants have quailed, and by which a world has been blessed,—that it also was meant to pursue its way to perfection—troubled, it may be, but still unclouded; harassed, yet not destroyed.

It is with such feelings as these that we regard all statistics and remarks upon the subject of insanity, and while we applaud the industry which collects the facts, regret that the whole phenomena are yet very imperfectly recorded; in respect to which we deem it a fair subject of inquiry, whether our investigations have not been begun at the wrong end. Very *interesting*, no doubt it is, to the Professional man, to have detailed the *post-mortem* appearances in the brain of a fellow-creature who has passed through life in mental darkness: the colour of the eye, the form of the ear, the contour of the head, may all be legitimate matters for speculation; but yet there will be much left behind which should be studied, and many problems, of comparatively easy solution, which should be propounded. The colour of the cortical substance of the brain may be a fact worth recording in the annals of psychology; but to know the history of the man in whom such a phenomenon appeared, the influence to which he was exposed, or the one fell cause which resulted in that mental hallucination, would contribute more to the weal of mankind, and to the homage due to Nature, in whose handiworks no deformity appears without a cause.

We may illustrate our subject by one reference. It is very much the plan, in giving statistics as to Insanity, for the statistician to rest content with dividing the population into two great classes,—the agricultural and commercial,—or the rich and the poor. This, in our opinion, is too general a distinction to be of much service in the study of the malady, as may be readily seen from a few facts drawn from the last Census, in reference to the inmates of Asylums at the period when that Census was taken.

The following Table shows the proportion of Lunatics to Population, and their occupation or class:—

Occupation or Class.	Males.		Females.		Total of both Sexes and all ages. 1 Lunatic to
	20 Years and upwards. 1 Lunatic to	Under 20. 1 Lunatic to	20 Years and upwards. 1 Lunatic to	Under 20. 1 Lunatic to	
Persons engaged in Commerce, Trade, or Manufacture	1,001	24,683	861	20,023	1,179
Persons engaged in Agriculture	1,692	32,475	1,138	...	1,901
Labourers	1,006	17,067	2,325	...	1,169
Military and Naval	225	7,017	...	...	250
Professional persons	...	...	...	...	306
Educated persons, following Miscellaneous Pursuits	382	5,345	428	1,842	433
Persons engaged in Government Civil Service	559	...	...	...	591
Parochial, Town, and Church Officers, including Police and Law Officers	2,224	321	...	...	2,466
Domestic Servants	1,638	41,945	619	14,575	1,132
Persons returned as Independent	909	2,595	2,057	14,351	1,573
Almspeople, Pensioners, Paupers, and Prisoners	8,196	...	20,113	...	16,125
Residue of Population	185	38,424	776	21,070	1,718

Now, from this Table it will be seen, that while the difference between the Agricultural and Commercial class is as 1901 to 1179, that between the Military and Naval profession and Agricultural pursuits is as 250 to 1901; and by it other distinctions also may be drawn, which will give more insight still into the phenomena we are discussing. For example, we find that the highest proportion of Lunatics is in the Military and Naval profession. At first sight this may appear a startling fact; yet when we consider the nature of that occupation, some circumstances will present themselves to the mind sufficient to account for it. With the question of Peace or War—the sufficiency of the one or the turpitude of the other—we have nothing here to do; the point with us is, whether, war establishments being kept up as they now are, the occupation may not be rendered less mischievous to the parties engaged in it than it now is. Where, then, lies the mischief? Our readers need hardly be reminded of the class from which our forces are mainly, or very extensively, recruited. The vicious whom society will not tolerate, and the dissipated who cannot control themselves, are too often among the "awkward squad" found following in the wake of the recruiting sergeant,—the one to screen himself under a patriot's regimentals,—the other to be disciplined where there are no "tender mercies." Here is at once an abdication of manhood—the mind, which "makes the man," is no longer a requisite of his nature—horses, dogs, and parrots, obey the orders of their superiors by instinct, and so could he: what wonder that the mind ceases its functions when insulted by disuse, or acts tortuously when degraded by abuse? The severe and cramping discipline of the army is not the element for the outstretching, ever-grasping mind of man; and thus enervated, it flags and withholds its sway; or, with a life's unsatiated passions pent up within it, bursts forth like a volcano, and becomes extinct. Then, again, another element of mischief is, that many who enter this profession, and especially among officers, do so, not to seek a nation's weal or a world's advancement, but rather that around their own persons they may gather a halo of glory, and thus be the centre of admiration to others. This desire, of itself not the most healthful to a being marked out especially for social life, when crowned with partial successes, has often been found subversive of all that is benevolent, extinctive of all virtue, and has led to acts which, psychology for the jury, were the results of absolute insanity. Need we tell of Alexander the Great fancying himself a God, and requesting that his mother Olympia might be added to the Pantheon in which himself figured; of Cæsar, who gloried in his fancied descent from Venus; or of an Attila, a Gengis, or a Tamerlane?—the authors of acts at which humanity shudders, but upon whom the verdict of a Divine charity would have been—"They know not what they do." Such are among the reasons we would offer why, in the Military and Naval statistics, there appears one lunatic to every 250.

Next in point of liability to Insanity are Professional persons. It may excite surprise that the mind of man, which, in its researches after science, has penetrated the depths and scaled the heights of God's creation—which has dug up from the very bowels of earth volumes of chronology which no sceptic can gainsay; and measured the distances of heavenly bodies with a precision of which every revolving year attests the truth,—it may seem surprising that there yet appears to be a limit beyond which it may not be taxed with impunity, and at which line of demarcation Nature utters her irrevocable command, "Hitherto shalt thou go, but no further." To know that boundary line, is, perhaps, among the most difficult of the studies connected with the precept, "Know thyself,"—and to obey that command requires a degree of self-control from which innumerable objects for his contemplation are ever tempting him to stray. Still, that this danger exists, and that this line has been laid down, are facts which have been early recognised in our history. The Greeks seem well to have understood the evil effects of monotony, whether of study or of scene; and hence, while we find them carefully protecting the virtue of their women, by strict confinement and guardianship, as in Euripides—

"They're close kept up in their well-guarded lodgings;"

and again,—

"Women should keep within doors, and there talk;"

they yet habituated them, even the high-born, to works of industry, as a necessary relief to their seclusion. Thus Homer speaks of Andromache, as so engaged; and Pollux, enumerating their different apartments, speaks of those appropriated to the women, where they practised spinning, weaving, embroidery, and needlework. The early history of the Church also shows, that this principle was recognised. Monkish seclusion, or the study and labour of the *scriptorium*, was held to be inconsistent with a due maintenance of bodily or mental health; and hence Peter the Venerable, after exhorting to study, says:—"If, however, from

its injuring your sight, or from its wearisome sameness, you cannot, or will not be content, make a variety of other handiworks; make combs for combing and cleaning the heads of the brethren; with skilful hand, and well-instructed foot, turn needle-cases," &c. And so of their Nunneries: among the *ancillæ Dei*, manual labour was no less rigidly enforced. Benedict, the founder of monasticism, strictly enjoins the duty of manual labour, observing, "idleness is injurious to the mind;" and so it may be remarked in general, that, mind and body being fellow-workers to one end, in the due exercise of both is the vigour of each maintained. That the tendency of Professional pursuits is against the preservation of this equilibrium needs no argument,—the man who has adopted science as his "*chere amie*," knows it but too well, and hence we find, among every 306 Professional persons, one Lunatic.

There are other points in the Table that invite remark, but we prefer the general study of them by our readers. We may, however, recur to the subject. In proportion as the Medical Man pursues his vocation more as a preventive than as a curative art, so will he value these statistics; and it is to such a consummation, in reference to our Profession, that we aspire. To know how it was—under what circumstances, and exposed to what influences—that the man of brigbt intellect became a soulless clod,—to trace effect to its cause when a human being, who was once the pride of his home and the delighted in of all, becomes the subject of a darkness which the sane cannot appreciate; who sees fiends in those who love him, a murderess in the wife of his bosom, and poison even in his cup of nectar,—we say, the study of the causes producing these melancholy results is surely the business of every man, and much more so of those who, from the nature of their studies, must be well versed in the beautiful mechanism of our frame, and who can therefore better appreciate the blot which falls upon Creation when the great ornament thereof is damaged or destroyed. Then, indeed, when it shall have accomplished these objects, will our Profession have acquired a character for benevolence to which, notwithstanding all its good offices, it has never yet attained,—the inmates of many happy homes would rise up and call it blessed,—and the ermine of justice be no longer sullied by punishing an irresponsible being.

CORRESPONDENCE BETWEEN THE NATIONAL INSTITUTE AND G. J. GUTHRIE, ESQ.

[To the Editor of the Medical Times.]

Sir,—I am requested to transmit to you the enclosed Correspondence between the National Institute and G. J. Guthrie, Esq., and to beg the favour of its insertion in your Journal on the earliest opportunity.

I am, Sir, your most obedient Servant,
George Ross, Secretary.

THE NATIONAL INSTITUTE OF MEDICINE, SURGERY, AND MIDWIFERY.

4, Hanover-square, *June 5*, 1849.

Dear Sir,—The attention of the Council of the National Institute has been this day called to the report of a speech purporting to have been delivered by you on the 24th of May last, before the Westminster Medical Society, at the Thatched-house Tavern, in which speech the following passage occurs:—

"I know not what the medical politics of the present Company may be, and I care not; for, relying on that honesty and justice to which I have alluded as necessary for the governance of men, I have no hesitation in saying, that we are, perhaps, in a more peculiar situation at this moment than most public men, having supported the views of those gentlemen who, under the name of the National Institute, claimed redress for the grievances they sustained. We are now obliged to oppose the claims now advanced, because they cease to be claims for redress, but are demands for vengeance. We have with them also changed sides, and, instead of being their warmest friends, are their determined opponents, and simply because these demands are not, in our opinion, consistent with public principle, or the interests of the surgical profession. They call on us to resign the examinations and the direction of surgical education, to the persons they may appoint to preside over their body, but who, however honourable and learned they may be, are not the *élite* of the anatomists and surgeons of London, to whom only these examinations and such superintendence should be confided."

I am requested by the Council respectfully to inquire, whether your sentiments are correctly reported in the foregoing paragraph?

Assuming the Report to be substantially correct, the Council of the National Institute have no hesitation in stating, that you are completely in error as to your interpretation of the "principles" to which the National Institute has become a party, in the Conference Committee held at the Royal College of Physicians, and as respects the proposed medical legislation, the whole having been based, so far as surgery is concerned, with a view to sustain the honour and character of the Royal College of Surgeons, and the "Conference," having in no way called upon the College of Surgeons "to resign the examinations and the direction of surgical education."

As the paragraph in question is calculated to increase any misapprehension which at present may exist in the minds of some members of the Profession, and feeling assured that your object, like their own, is to promote a satisfactory settlement of this complicated question, the Council of the National Institute take the opportunity of directing your attention to the following extract from their Report, published in August, 1848, and of reminding you, that the sentiments therein expressed are those which have been entertained by the representatives of the General Practitioners from the commencement of the present agitation for Medical Reform, and, also, of stating that the present Council of the Institute have not the slightest desire to swerve from them, even at this—the eleventh hour.

"The Council have, furthermore, no hesitation in admitting, on the part of the General Practitioners of England, that if the object of the Petitioners could be obtained, viz., the concentration of the great body of the Profession in the College of Surgeons, with a ten years' franchise, the right of voting carrying the right of holding offices of honour and distinction in the College, under proper limitations, but with no distinction as to whether the individual practises as a surgeon, purely considered, or as a General Practitioner, by which modification of the constitution of the College of Surgeons, the General Practitioners would have an efficient control over their own affairs, and a direct influence over the examinations of their own class, that their demands would be satisfied."

The Council would, moreover, be happy to be informed, whether you can hold out to them any prospect whatever of a change, such as that suggested by the above paragraph, being effected in the constitution of the College, or of any feasible and practicable plan likely to prove generally satisfactory, by which the College of Surgeons can be opened to the great body of General Practitioners, so as to afford them those corporate rights and privileges which are essential to any substantial improvement in the Profession, either as respects education or practice.

The Council of the Institute cannot refrain from stating, that they are at a loss to understand how it happens that a Member of the Council of the College of Surgeons,—so ably and powerfully represented as that College is in the Conference Committee,—should publicly take exception to the acts of the Conference, a proceeding, in the opinion of the Council of the Institute, at all times subversive of the successful progress of public business.

It may, perhaps, be satisfactory to you to be made acquainted, that it is the intention of the Council to publish this communication, with any reply thereto that the Council may have the honour of receiving from you.

I have the honour to be, Dear Sir,
Your obedient servant,
James Stedman,
Vice-President, Guildford.

G. J. Guthrie, Esq.

4, Berkeley-street, June 9, 1849.

Dear Sir,—I have to acknowledge, not only the receipt of your letter of the 5th inst., but the correctness of the report of the speech to which you allude, on all essential points, and particularly on those which relate to the National Institute.

It is my intention, as soon as the Lord Advocate shall have laid his proposed Bill on Medical Reform (or by whatever name His Lordship may be pleased to call it, more applicable to its nature) on the table of the House of Commons, thus rendering it public property, to take a clear yet compendious view of the whole subject, as far as I may be able to do so, in a letter addressed to himself, and to the Members of the House of Commons who are to legislate upon it. I beg, therefore, that the Council of the National Institute will grant me permission to include my answer to their questions in this paper. With respect to that part of your letter which states, that I am completely in error in my interpretation of the principles to which the National Institute has become a party in the Conference Committee held at the Royal College of Physicians, I would submit to you, that, in this error of mine,—if it be hereafter proved to be an error,—all the Law-officers of the College now participate. At the same time, I assure you, if ever the results of the Conference Committee, as shown by the Lord Advocate's Bill, shall display the necessary proofs of the mistake into which these learned gentlemen, as well as myself, have fallen, I shall cheerfully acknowledge it. But you must forgive me if I express great doubts of the probability of such a result.

With regard to the last paragraph of your letter, in which you say, "The Council of the Institute cannot refrain from stating, that they are at a loss to understand how it happens that a member of the Council of the College of Surgeons, so ably and powerfully represented as that College is in the Conference Committee, should publicly take exception to the acts of the Conference,—a proceeding, in the opinion of the Council of the Institute, at all times subversive of the successful progress of public business." I must beg of you to state to the Council of the National Institute, that I am not only sensible of the force and justice of the observation they are desirous I should understand, and in which I concur, but of the candour with which they pay me the compliment to intimate, that the exceptions I have taken to their wishes or proceedings may be subversive to the successful progress of public business, which they approve, but from which I dissent.

You will also confer a great favour by explaining to the Council of the National Institute that I am not at this moment officially acquainted with the propositions or acts finally agreed upon by the Conference Committee sitting at the Royal College of Physicians. They have never been approved, nor even been discussed by the Council of the College of Surgeons, which body, it is admitted by the gentlemen who attend the Conference Committee, are at liberty to approve or disapprove of anything or everything which may be contained in the Lord Advocate's Bill when it shall be transmitted for their consideration, and which, it has been intimated, is to be done before it is presented to the House of Commons.

The observations contained in my speech are, therefore, only applicable to those propositions which the Council of the National Institute have themselves made public.

Permit me in conclusion to say, that I live on terms of friendship with many Members of the Council over which you so worthily preside, and I willingly acknowledge the great injustice with which they have been treated under the Charter granted to the College of Surgeons in 1843. And I should be inexpressibly grieved to give any one of that body the slightest annoyance or offence; indeed, I estimate so highly the admirable manner in which the whole of the public proceedings of the Institute have been conducted, that I should have been very happy to have been a participator in the talent displayed, were it not, that as a member of the Council of the Royal College of Surgeons, I have, on five different occasions, taken an oath to preserve and maintain the ancient rights and privileges of that body which appear to me to be for the advantage of the Profession, as well as of the public; and which the

propositions of the National Institute must, if they acquire the force of law, in my judgment undermine and ultimately destroy.

I have the honour to be, dear Sir,
Your obedient Servant,
G. J. GUTHRIE.

James Stedman, Esq.,
Vice-President of the National Institute.

DEATH BY DROWNING OF RICHARD CARMICHAEL, ESQ.

MEMBER OF THE ACADEMY OF PARIS, AND SURGEON TO THE RICHMOND HOSPITAL, DUBLIN.

Our readers will regret to hear, that the career of this distinguished surgeon has arrived at a melancholy termination. Although in his seventy-first year, he had latterly enjoyed excellent health and spirits, and had, during the last few weeks, been enjoying the summer sea-breeze in a villa near Howth. On Friday evening, the 8th instant, he rode out after dinner, unattended, and having proceeded further than he had at first intended, became desirous of seeking the shortest way back. Seeing a narrow arm of the sea, encroaching on a velvet strand between him and his home, he inquired of some fishermen whether he might safely cross it; they replied in the affirmative, and accordingly he rode down into the water. He proceeded for some distance, apparently secure, when suddenly the horse was perceived, by a boy upon the shore, struggling and splashing, and then seemingly swimming. Meantime, Mr. Carmichael rolled off on one side. The boy instantly gave the alarm, and some men went to Mr. Carmichael's assistance; the horse soon gained his footing, and was led on shore; but Mr. Carmichael could not be found; nor has his body, as far as the present (12th instant), been recovered. His riding whip was washed ashore on the 11th; and every exertion is being made by the coast guard in searching for his remains. Thus has suddenly perished the enlightened surgeon and accomplished gentleman. We need not in this place do more than allude to Mr. Carmichael's labours in the field of surgery. His bold revelations and unshrinking denunciation of the barbarous practices pursued some half-century ago in Hospitals devoted to the treatment of syphilitic diseases, produced a revolution in this department of surgery, and has been appreciated by the Profession throughout Europe. But we had rather speak of Mr. Carmichael as a man—good surgeons are common; but an honest man is a nobler effort of creation. As long as genuine liberality of mind, true patriotism, and open-handed generosity, claim respect, so long will the memory of men like Carmichael be cherished. His last appearance in public was at the meeting, held a few days before his death, of the Irish Benevolent Fund Association, to which he liberally contributed.

REVIEWS.

De L'Uretrotomie ou de quelques Procédés per Usités de Traiter les rétrécissements de l'uretre. Par le Docteur CIVIALE. 8vo, pp. 119. Baillière, Regent-street.

M. Civiale has entered upon a subject, in the work before us, which is of great practical interest to surgeons, not only in his own country, but to all those who are desirous of forwarding and simplifying their art.

In consequence of the great interest attached to the disease, and the bad effects which are so commonly its result, the pathology and treatment of stricture of the urethra has been specially studied and treated by many excellent surgeons, both in this country and abroad, and there can be no doubt, that very great improvement has taken place in this department.

There is, however, one important point connected with the subject, which is still open to controversy, and about which surgeons are divided in opinion,—and this is, as to the proceeding which should be adopted in certain forms of stricture which are incurable by the ordinary modes of treatment.

There have been various modes used; the application of caustics, nitrate of silver, potassa fusa, by some; whilst others prefer the use of a cutting instrument; and the latter proceeding is that which has now become the favourite with most surgeons, in those severe cases which admit of no cure by the ordinary plan of treatment. Surgeons differ as to the manner of operating for urethrotomy; some preferring the division of the stricture by an instrument introduced into the urethra; while others recommend and practise the division of the parts from without, through the perinæum.

M. Civiale has reviewed these two methods in the Work under notice, and, we must confess, he has done so in an able and impartial manner; although we perceive that he is tinctured with the vice of detracting from the merits of British surgeons who have originated and practised improvements in this matter. The Author makes the distinction of those cases in which the operation of urethrotomy is necessary.—

"Les cas dont je veux m' occuper forment deux catégories distinctes. Dans l'un, le canal est tellement dévié, déformé on obstrué, qu'il y a impossibilité absolue d' y faire pénétrer l'instrument le plus délié. Dans l'autre serre, l'uretre livre encore passage à l' urine et admet une stylit, une sonde, une bougie du plus petit volume; mais les parois du canal sont tellement indurées, roides, épaissiés, que les moyens ordinaires du dilatation sont insuffisants, on du moins le résultat qu'on parvient à obtenir difficilement, douloureusement, est incomplet: de plus la rétractibilité des tissus est si grande qu'on perd en quelques jours le peu d' amélioration qu'on avait obtenue." Page 1.

He first considers the operation of dividing the urethra through the perinæum, and dwells with some force upon the difficulties and dangers which are met with in this undertaking. M. Civiale himself does not appear to have had much personal experience of this method of operating. It is by no means a favourite with him, yet he considers that it is an operation which is adapted to certain cases of stricture:—

"Ainsi, dans l'état actuel de la science, en tenant compte des circonstances qui viennent d'être indiquiés, l'uretrotomie de detrois en dedans est une opération rationelle, dont le practicien doit s'occuper, pace qu'elle pent devenir une ressource préciense contré divers rétrécissements infranchissables de la courbure de l'urètre, et surtout dans certains las defausse route dont je me suis longuement occupé dans mon Traiti pratique, mais dont on n'apprécie pas assez généralement la gravité."—P. 30.

In the second and greater portion of the work, the Author enters into the history of, discusses the benefits and superiority of the plan of dividing the stricture from within, outwards, by means of concealed blades, and describes the instruments he uses, and the peculiar method of applying them. The instrument he chiefly uses is straight, the blade being pushed out from the very extremity, instead of the side of the sheath. The main difference in his mode of operating from other surgeons, consist in his making long and deep incisions into the strictured part of the urethra, and in not making mere scarifications. He does not give his cases at length, but he states, that during the last three years, he has met with twenty-two instances in which he has employed this mode of treatment. "Tous ces malades étaient gravement atteints; tous avaient des coarctations, inutilement traitées, même pleusieurs fois, par les autres moyens dont l'art dispose. Dans dixhuit cas j'ai obtenu, la guérison; dans trois il y'a eu seulement amelioration; le vingtdeuxième a succombé deux mois après l'operation, par suite d'accidents que j'ai fait connaitre et qui le rattachment plus ou moins à la manœuvre."—P. 117.

There can be no doubt that urethrotomy, or dividing a stricture, is not unfrequently absolutely needful for the welfare of the patient who suffers under impermeable, or old and indurated strictures, accompanied with perineal fistula; but we apprehend that surgeons sometimes fall into the error of operating when there is no actual necessity. It should be remembered, that *where an instrument, however small in size, will pass through a stricture, there the surgeon has reason to expect a cure by the process of dilatation*, and we suspect that M. Civiale may possibly have used his cutting instrument in cases where it was not absolutely necessary.

In giving our own opinion upon the merits of the two modes of proceeding here discussed, we must say, that we do not admire the plan of cutting through a stricture from within the urethra, although it is obvious, that in certain instances in which the stricture is not extensive, and is situated either at the meatus or in the spongy portion of the urethra, the instruments of M. Ciavile and others may be used with facility and even advantage. But we much question the applicability and propriety of such a proceeding in those cases, where the stricture is situated at the bend of the urethra, and where a large portion of the canal is involved in a tough and gristly mass of indurated texture, impermeable alike to the catheter or any instrument of less power than a sharp scalpel. It is in such cases that we consider that the operation of cutting from without into the urethra through the perinæum should be resorted to, and is so far superior to the other plan; for how is it possible to divide such a mass of altered texture as is sometimes met with in these severe cases by a concealed instrument? If it be effected, it can only be done by numerous and repeated operations, which, in the aggregate, would be as severe, or more so, than cutting down through the perinæum; and M. Civiale himself states, that it is necessary in his operation, to divide all the indurated tissues.

Our own experience has convinced us, that the operation of cutting through the stricture from the perinæum is one which, if carefully done, is attended with the greatest benefit to the patient, and that it is well suited to those cases where a cutting operation is really necessary. We believe, also, that this is the one resorted to by most British surgeons.

We have read this work of the distinguished French Surgeon with great care; we have received both pleasure and profit from its perusal, and, although we neither wish nor expect that the mode of operating he prefers will be much employed by our countrymen, at the same time we can advise such of those who are interested in this department of surgery to read this book, where are to be found some valuable hints and observations.

A Physician's Holiday; or, A Month in Switzerland in the Summer of 1848. By JOHN FORBES, M.D., F.R.S., With a Map and Illustrations. London: John Murray, John Churchill. 1849. 8vo. Pp. 520.

We are prepared to maintain, that, if a man of cultivated intellect, travelling in a beautiful country, would sit down every day, and make a faithful transcript of his impressions, this alone would enable him to write an interesting book. The general fault of tourists who chronicle their travels, appears to us to be a want of sincerity. Instead of describing what they actually saw or felt, they lose themselves in vague generalities, and dilate on feelings which, in fact, they never experienced; and thus they fail to excite that sympathy which is invariably produced by a truthful handling of a subject not beyond the reach of the natural or acquired powers of the reader's mind. Now, our readers need not be told, that the Author of the work of which the title appears at the head of this notice, is a man of cultivated intellect; and we do not apprehend that the fact of Switzerland being a beautiful country will be controverted even by the few who, in this age of locomotion, have not satisfied themselves by actual inspection that such is the case. Here, then, according to the opinion with which we started, are two of the elements of an interesting work, and it remains to inquire whether the faithful transcript of the traveller's impressions is wanting. We venture, without the slightest hesitation, to answer this question in the negative. Everything in the book, as with the Author's host at the village of St. Nicolas, is "natural, simple, and true," and the Author retains his

individuality throughout. And a very pleasant individuality it is. There is something delightful in the idea of a sexagenarian—and the *Physician* tells us that he is one—going out to enjoy his well-earned holiday, with all that freshness of feeling, and readiness to be pleased, which constitute one of the chief charms of boyhood. The most malignant critic will not be able to find an ill-natured sentence in the whole book, though it abounds in playful touches of humour, and indicates a keen observance of men and manners. The illustrations are pleasing, and free from exaggeration, and the book, independently of its other attractions, is an excellent guide to the scenes of which it treats. The pedestrian traveller, especially, will find many valuable hints; but we venture to dispute the propriety of the shoes having "very thick soles." For ordinary walking the sole ought not, in our opinion, to be so thick as to interfere in any degree with its flexibility; and on the glaciers the footing is far less secure when the thickness of the leather impedes the free play of the bones and muscles of the feet.

Dr. Forbes was singularly fortunate in having what he calls "model weather" for his tour, although we think that cloudless weather is by no means calculated to show off the Alpine scenery to advantage. When the clouds obstinately refuse to leave the summits of the mountains, they must be confessed sadly to mar the tourist's enjoyment; but when they rest about half-way up the ascent, or veil the glories of the topmost peaks occasionally only, they enhance, to an indescribable degree, the beauty and grandeur of the scene. This will readily be believed by the untravelled reader, after reading Dr. Forbes's excellent description of the "unveiling of the Schreckhorn;" but we think that the Author has erred in characterising the feelings called forth by such a scene as "tranquil, solemn, and almost melancholy," although we agree that these are the feelings when the spectator is placed within a glittering circle of snowy hills, without a cloud to vary their dazzling brightness. He is then, as it were, in another world, and there is something awful and almost oppressive in the changeless aspect of the forms of cold sublimity amidst which he stands. But when, *from* mountain or valley, we have had, through an occasional shifting of the intervening veil of cloud or mist, a momentary glimpse of some towering pyramid of snow-clad rock, revealing itself at a height so incredible that the brain almost refused to receive the impression which the eyes conveyed to it, our feelings have been neither tranquil nor melancholy, but in the highest degree exciting and exhilarating.

The work before us offers many tempting passages for transcription, but we must content ourselves with a short account of the Author's visit to the Cretin establishment of Dr. Guggenbühl, on the Abendberg, "one of the green barriers enclosing the plain of Interlachen." The establishment stands on a small terrace, remarkable for the beauty of its situation; and our traveller encountered, on the green slopes, "some twenty of the patients climbing the hill for air, exercise, and amusement, —all combined,—under the superintendence of a well-dressed young man and two of the Sisters of Charity who belong to the establishment. They were all children, from the age of twelve, or thereabouts, down to three or four: one was carried by a servant, being incapable of walking. They were running, and waddling, and tumbling on the grass, and playing in their own way with the servants, with one another, and with a fine good-natured dog, who made one of the party, and who was probably of nearly the same intellectual caliber as some of his poor biped companions."

Dr. Forbes inspected all the most interesting cases, and witnessed some of Dr. Guggenbühl's practical methods for developing both the physical and moral powers of the children, and he speaks in terms of eulogy of the principle on which the treatment of the poor Cretins is conducted. Some of his observations here are strikingly sound and philosophical. "Heroic doctors," he says, "in their ignorance of the way in which alone Nature works, may attempt to cure a chronic disease by a *coup de main*; and, by mistaking temporary relief for real cure, may themselves suppose, or be supposed by others to have done so; but every physiological Physician knows well, that a morbid condition, which may have been months or years in forming, can only be effectually and permanently removed by means which act slowly and for a length of time, not on one part only, but, more or less, on the whole system. And so it is, and still more certainly, in the cases now under consideration; in the cure or amelioration of which nothing is to be neglected that can help to waken up the dormant faculties, in that gentle and imperceptible, but uninterrupted mode in which Nature produces all her great and permanent changes in the organic world of life, and in the psychical no less than in the mere physical portion of her domains."

After remarking on the want of evidence to establish the connexion between gôitre and cretinism, Dr. Forbes expresses his belief, that they may very possibly have an essential connexion, "inasmuch as they may be both owing to the same cause, or a modification of the same cause." He says, "I make no attempt to investigate the precise nature of such cause, nor do I propound even a conjecture respecting it, as the result of any special or enlarged consideration of the subject; but my present impression is, that it is some form of that unknown local influence or thing, commonly recognised under the name of *miasma* or *malaria*, and which operates on the animal system as a poison, producing special modifications of function and special changes of structure, according to certain special conditions, which, however, are like itself, unknown. As the unknown thing, which we term malaria or miasm of marshes, under certain circumstances, gives rise, at one time, to simple ague, at another to a fatal remittent fever, &c., and produces at times a morbid enlargement of the spleen, at others, disease of the liver, &c., &c.; so I can imagine, that some other malaria or unknown thing or influence, of local origin, may be the cause of ordinary bronchocele, of the aggravated bronchocele, or gôitre of the Alps, and also of cretinism."

It is gratifying to learn that Dr. Forbes was assured by persons who had the best opportunity of knowing the fact, that the gradual diminution of cretinism in all the places where it was formerly most prevalent is now fully established, and that the belief of its final extinction, at no distant date, seems very general. This is very reasonably attributed to the change of habits and manners that has lately taken place. One of our author's informants said that "the persons of the people, as well as their houses, are much cleaner than they used to be, the rooms better aired, and that the children are sent much more out of the valley into the mountains, there being now many more Alpine chalets for summer residence than was the case formerly."

We have only one fault to find with the *Physician*. He is too fond of calling places and things by their foreign names, however well known their English names may be. We confess that we like "Cologne" better than "Köln," and we think "Lake of Lucerne" sounds better than "Vierwaldstädtersee." If Dr. Forbes should ever gratify us by writing a tour in Italy, we shall have him talking of Firenze, and Livorno, and Napoli, and here he will have euphony to plead in favour of the habit, which certainly cannot be admitted as an excuse for German names.

Our limits will not allow us to give an analysis of Dr. Forbes's route. We refer our readers to the book itself; and when they have seen how much enjoyment may be afforded by the judicious use of "A Month in Switzerland," we confidently predict that our Author's expressed wish, "to entice some among them to follow his footsteps," will not be disappointed.

CHOLERA AT DUMFRIES.

[To the Editor of the Medical Times.]

SIR,—In the *Medical Times* of last week, I observed, to my great surprise, a communication from Dr. Barker, impugning the accuracy of my statements regarding the cholera in the Dumfries Infirmary, contained in my paper, which you did me the favour to publish in your Journal of Saturday, 26th May. Dr. Barker states, that some time ago he told me that my statements were not correct. I was not, then, nor am I convinced now that my statements were incorrect, or in "direct opposition to the real facts." On the contrary, further inquiries have only tended to confirm their accuracy. My object in writing the report was neither to misrepresent facts, to suppress truth, nor to impute blame to any one connected with the management of the Infirmary, and I shall be sorry to find that I have done so, and be happy to correct any mis-statement I may have inadvertently committed. Further inquiries, then, have satisfied me that I am correct—1st, in regard to the number of patients in the Infirmary, when the first cases of cholera were admitted, none of which took the disease; 2ndly, I am correct in stating, that two of the patients at least, Hugh Geddes and Michael Gallocher, volunteered, and were permitted to attend on cholera patients; 3rdly, I am correct in stating, that of all the attendants on cholera in the Infirmary, one nurse only was seized with the malady. Mr. M'Lauchlan, one of the Surgeons, was reported as having died of cholera; but this does not affect my statement, as he had no official charge of cholera in the Infirmary. When I stated that no pains were taken to isolate the cholera patients, I meant that no precautions were had recourse to beyond those always in force in respect to typhus and other febrile diseases, as is proved by the fact, that the services of some of the attendants were not exclusively confined to cholera patients, but were extended to surgical patients as well, and that the restrictive measures were neither so complete nor so rigid as to afford any great security against cholera spreading amongst the other patients, supposing cholera to be contagious, which I believe it is not; indeed, our accommodation is too limited, and our appliances too scanty, to allow of effective isolation in such an exigency as epidemic cholera. Dr. Barker states, that the "greater part of my article" appeared in the *Edinburgh Monthly Journal*. This is, indeed, "directly opposed to the real fact;" but I have no desire to imitate the Doctor in his disregard of the courtesies of language, and take leave to refer him to my remarks in the *Edinburgh Journal*, and to compare them with my report as published in the *Medical Times*. He will there find that my observations were confined, with the exception of a few introductory remarks, exclusively to the consideration of the question of contagion, and that they bear a very small proportion, not even amounting to a third, to my observations in the *Medical Times*, which embrace a number of important points not previouly touched upon by me.

I remain, Sir, your obedient servant,

J. GRIEVE, M.D.

Buccleuch-street, Dumfries, June 11, 1849.

MR. SMITH ON MORBUS COXARIUS.

[To the Editor of the Medical Times.]

SIR,—My attention has been drawn to the long and interesting article of your Edinburgh Correspondent, respecting the discussion which has of late been carried on in London and Edinburgh, with the view of ascertaining the merits of the operation of excision of the head of the Femur; and of coming to some conclusion respecting the true meaning of the term Caries. I have taken so prominent a part in this discussion, and have already replied so frequently to the various objections which have been offered by those who have entered the lists, that I again venture to make some observations, which are called forth by the analytical and critical Article of your evidently watchful Correspondent.

That the question of the propriety or non-propriety of the operation is one of grave and increasing importance, is evident from the interest which is attached to it both here and, as your Correspondent tells, in Edinburgh also; and I cannot but feel happy in having been mainly the means of bringing this discussion before the Profession, although I am conscious that, as a young surgeon, I placed myself in a hazardous position, and exposed myself to the assaults of men who are grey in the Profession, and who are not willing to depart from their own dearly cherished and established doctrines. Hitherto, however, I have stood my ground, thanks to some good and able supporters; I have not yet been obliged to make any retreat; and I trust that I may succeed still further in convincing many of the propriety of those views which have lately been brought forward.

Your Correspondent has handled the subject in such a good spirit, that his contribution will, I am sure, be regarded with the attention it deserves, especially as, representing a section, at least, of the Surgeons in Edinburgh, he has made us acquainted with the opinions entertained by them upon this point. Yet, Sir, he has suggested a difficulty which I certainly did not expect; for he states, that, in Edinburgh, doubts are entertained as to whether those cases in which the head of the thigh bone has been already removed with success, were genuine cases of morbus coxarius. In order to solve these doubts, I can only refer to the history of the cases themselves, as reported by Mr. White and Mr. Fergusson. I am sure if they are attentively read by any well-informed Surgeon, he will not doubt under what class or condition of disease he would place them. We have the authority of the operators themselves, that they were "genuine cases of morbus coxarius, advanced to the stages of caries;" and surely it will be admitted that both the late Mr. White and Mr. Fergusson were able to judge correctly upon this point. I was certainly somewhat startled at your Correspondent's assertion, "that pathologists are not yet agreed as to what constitutes morbus coxarius," and more especially as he tells us further on, that the highest authority on surgery in London, Sir Benjamin Brodie, has distinctly divided the cases of this disease into two classes,—that in which there is ulceration of the cartilages, occurring chiefly after puberty; and that when scrofulous disease of the bones takes place, chiefly in persons under that age. I, perhaps, may be somewhat egotistical, but certainly I must confess, that I never have experienced any difficulty in understanding what constituted hip disease, and I am not aware that pathologists or practical Surgeons, in London, at least, entertain any doubts on this point; neither did I suspect, until I learned it from your Correspondent, that there was obscurity about the matter amongst the *alumni* of a school so renowned for its pathological fame as that of Edinburgh.

I do not think that it is so necessary, in order to come to a correct conclusion respecting this operation, to draw the distinction between these two forms of hip disease; for, although it may be found that the majority of cases to which this operation is applicable, belong to the latter, yet there is no reason why the proceeding should not succeed as well in the former, although I believe it will rarely be adapted to them. Some doubts are even thrown upon the genuineness of Mr. Fergusson's last successful case; but numerous surgeons in this metropolis had the opportunity of seeing the patient, and they could but form one opinion respecting it, namely, that it was a decided case of morbus coxarius advanced to the stage of caries.

We are also told, that it is considered in Edinburgh, that were Mr. Samuel Cooper alive "he would be surprised to find his particular account of Mr. White's case cited, to prove the expediency of excising the head of the thigh bone in morbus coxarius." But I apprehend that Mr. Cooper introduced the case into his Dictionary for the very purpose of showing that such operation might be done with success. The case has also been fully quoted in Mr. South's translation of "Chelius," for the same purpose; why, then, did not Mr. Cooper or Mr. South take these opportunities of repudiating the operation?

We are told, also, that Messrs. Fergusson and Smith will not succeed further than in showing, that amidst the multitude of cases of morbus coxarius daily falling under surgical treatment, there are some exceptional instances to which the operation of excision may be applicable. Truly not. Neither Mr. Fergusson nor myself have endeavoured to go further. Why, this is the very point which we have tried to show, *and no more than this*, and the successful cases hitherto published prove triumphantly that it has been gained. The writings both of the learned Professor (Fergusson), and my own observations, amply testify that the proceeding is not *the* treatment for hip disease, but that it will be applicable only to some few cases which may every now and then occur.

And with respect to the diagnosis of certain cases, I have always admitted that there is great difficulty attending it, but yet facts speak more powerfully than anything else. In both Mr. Fergusson's patients, that gentleman, before the respective operations, gave it as his opinion that the disease was limited to the head of the femur, and he was right. In the case of Mr. French, which that gentleman did me the honour to submit to me for examination, I offered the same opinion, and it was found to be correct. With regard to my own case, I will willingly admit that more disease was found than I had anticipated; yet I never entertained the opinion that the acetabulum was entirely free; but this was an instance of peculiar difficulty; the patient was an adult, and the destruction of the soft parts was so little that I had not such correct indications of the amount of disease as were present in the cases of Mr. Fergusson and Mr. French. Moreover, I am now of opinion, which I was not then, when my experience of hip disease was much more limited than it is at this time, that the operation will rarely, if ever, be found applicable to the adult patient, although I may be wrong on this point.

Your Correspondent also states that it is the general opinion in Edinburgh, that we have not expressed ourselves sufficiently clearly respecting the cases in which the operation should be attempted, and that thus it might be put in force in many instances when it was totally unnecessary. If our observations have been read with attention, it will be found we have not been wanting in this respect. As regards myself, I have been most careful respecting this very point, and my late letters to the *Lancet* sufficiently prove it. Mr. Norman, who made somewhat the same observation in a late letter, afterwards handsomely acknowledged that he had misapprehended me, and that I had been cautious in drawing the distinction between the cases in which the operation should not be, and those where it should be attempted.

One very important point, moreover, has been, besides, overlooked in the discussion, and it is one which I take some credit to myself for having prominently brought forward, viz., that when the head of the thigh bone has become dislocated for some time from the acetabulum, that cavity, although it *may have been* in a similar state with the femur, namely, in a state of *carious ulceration*, will become obliterated or repaired by a deposit of new bone, and this is a most essential *fact* in connexion with this proceeding; and I do not hesitate to affirm that it has been entirely overlooked by those who have opposed it in this operation; and that it is a fact is sufficiently demonstrated by the cases of White, Fergusson, and French. In all of them this cavity was either obliterated or repaired by osseous deposit, and it only remained for the surgeon to take away the carious head of the femur, which was acting essentially, and nothing more nor less, than as a foreign body, to effect the cure which took place. Your Correspondent tells us, that the question is one of great interest in Edinburgh; and the reason is obvious, that the head Surgeon in that city has so decidedly opposed this operation. Yet, however, I doubt not that the Edinburgh Surgeons will think and investigate for themselves, and not be entirely influenced by the opinion of Professor Syme, however high that gentleman may stand in their estimation. Professor Syme's opinion on this subject would be entitled to much more weight, if, in his opposition, he had given us some good and forcible reasons for it; but he has not so done. I have already disproved the assertion he has made, that both sides of the joint are *always equally diseased*; and Professor Fergusson has ably shown that it is not necessary that the patient *must* die, who has a carious hip joint. Mr. Syme is the only one who has yet completely rejected the idea of the operation altogether; he has certainly made a bold stroke, and one fatal to his own doctrine, because he has done so in the face of well-recorded facts. How can this operation be "without exception, wholly unnecessary, utterly useless, and dangerous in the extreme," when patients have by it regained their health, and the use of their limb, who had been before lying for months or years crippled in their beds, or were slowly and surely wasting away under the effects of their disease. Facts are facts; they cannot be denied, and they are amply sufficient, putting argument aside, to overturn the opinions of any one, however high a position he may deservedly hold.

In conclusion, I feel that, in having again referred to this subject, I may lay myself open to the imputation of repeating merely what I have so often said before; but I only do so in the present instance to remove some misconceptions on the subject, which exist not only in Edinburgh but elsewhere.

I am, yours obediently,

HENRY SMITH.

13, Caroline-street, Bedford-row.

THE PATHOLOGY OF CHOLERA.

[To the Editor of the Medical Times.]

SIR,—Any suggestion calculated to throw light upon the pathology of cholera, cannot, at the present moment, be altogether devoid of interest to your readers.

It is the opinion of several authorities of considerable weight, (arrived at from observed perturbations in the magnetic needle, &c.,) that the *remote* cause of cholera is in some way dependent upon an abnormal condition of terrestrial electricity.

That the *proximate* cause of the phenomena manifested during cholera is a *suspension* of the function of the ganglionic nerves, (or a defective or abnormal discharge of that function,) is the prevailing impression with those who have most observed and most reflected on that disease.

To connect the *remote* with the *proximate* cause of a disease cannot be regarded as a consideration wholly devoid of moment to the recognition of its true pathology.

Elsewhere I have recently attempted to establish the following two propositions, (arrived at altogether unconnectedly with any reflections upon the pathology of cholera,) namely:—

First,—That hæmatosin is the specific stimulus of the ganglionic nerves, independently of which it is impossible that those nerves could discharge their physiological function. And

Secondly,—That hæmatosin is brought into contact with the peripheral extremities of the ganglionic nerves through the agency of the magnetic properties of the iron contained in that substance.

Your obedient Servant,

HENRY FREKE.

Dublin, 28, Holles-street, June 9, 1849.

OPIUM AND MORPHIA IN DELIRIUM TREMENS.

[To the Editor of the Medical Times.]

SIR,—My attention has been called to the remarks of your Correspondent, in last week's *Times*, on the above subject, and as I have just had a case of delirium tremens under my care, it may not be amiss to state, that I tried opium, in two and four grain doses, without producing any effect. The patient had been, in the early part of his life, a marine, but for the last twenty years he has been a grocer. His age is about 45 years, and this was his first attack. On the fourth day after his attack, Mr. Chalmers, my assistant, visited him, and prescribed for him a draught, containing ʒij. of the solution of morphia,—a preparation which I keep, containing gr. i. to the drachm; consequently, this dose was equal to 8 grs. of opium. I certainly feared that the dose was too strong; but, next day, on visiting the patient, I was agreeably disappointed, as I found that he had had a good night's rest, and was altogether better. Sleep had forsaken him for the four days and nights previously, notwithstanding all the opium which he had taken. Having had considerable opportunities of seeing this disease, both in Ireland and England, I have been forcibly struck at observing the relative effects of opium and morphia in the treatment of the disease.

In Ireland, this disease is generally, if not always, produced by ardent spirits,—viz., whiskey, and I always found that opium, in the *solid state*, in two or three grain doses, was preferable to either laudanum or morphia. In England, I have found it just the reverse, as morphia has proved the "sheet-anchor." Now, it is a notorious fact, that, in England, the disease among the artisans and tradespeople is mostly produced by drinking *beer* immoderately at all hours, and it certainly has occurred to me that there is a great dissimilarity in the disease produced by these agents. A few years' "dram-drinking," as it is called in Ireland, will produce the disease; but it requires a series of years in the practice of pothouse potations before the disease will manifest itself. In the delirium tremens produced by whiskey, there is far more general excitement in the system; the countenance assumes a peculiarly wild aspect, the tongue brown and parched, the pulse is wiry, the bowels confined, the muscles rigid, and there is generally froth at the mouth. In that produced by *beer*, the tongue is generally moist and white, the pulse full and quick, the muscles flabby, the bowels relaxed, and the excitement is not near so great.

These anomalies in the disease I attribute to the different nature of the drinks. Irish whiskey is known to be a powerful stimulant, and, when freely indulged in, dries up all the secretions, producing loss of appetite, thirst, and emaciation of the body, with induration of the liver. It does not contain a single grain of nutriment. On the other hand, it is well known that beer, moderately taken, will nourish the body; witness the coalwhippers and London draymen, whose corpulence is proverbial: and even when immoderately taken, does not produce that lack of appetite, emaciation, and debility consequent upon

whiskey potations. The latter produces *an active* disease, the former a *chronic*. No doubt, that the action of beer upon the mucous membrane of the stomach is much modified by the tonic and narcotic properties of the *hop*, and, no doubt, that the action of the spirit in the beer upon the nervous system is also subdued by the same agent, which, in my opinion, accounts for the difference observable in the disease as above-stated; and it appears to me, that the *rationale* of the *opium* agreeing with the whiskey *tremens*, and the morphia suiting the beer *tremens*, is simply this: that the system being accustomed, in the former, to a direct and powerful stimulant, finds this in the opium in combination with its sedative property; whereas in the latter, the nervous system having been for a long time accustomed to a stimulant and narcotic, in combination, now demands solely the latter to produce that equilibrium of nervous energy which it has lost. It is my firm belief that, if hyoscyamus, or poppy, were substituted for hops in beer-brewing, and sufficient gentian, or ginger, added to make the beer keep, and give it a bitter flavour, (although it might not, *at first*, be so palatable,) we should see less of those delirious maladies which render the lives of thousands miserable, and hold in prospective the tormenting train of gout and dropsies.

I am, Sir, yours respectfully,

H. HASTINGS.

Stokenchurch, 5th June, 1849.

POOR-LAW MEDICAL RELIEF.

[To the Editor of the Medical Times.]

SIR,—If the following remarks upon the subject of Medical Relief should be thought worthy of your pages, I shall be obliged by your giving them insertion.

I am a great sufferer from the tyrannical system now in force. When I took my district five years ago, my salary was, relative to the number of cases I attended, nearly double what it is now. In consequence of railway works, a new village has sprung up close by me, and is inhabited by a large number of poor people, most of whom find no difficulty in getting orders when they are ill, and my pauper practice is thus greatly increased, my salary remaining at the same time the same. I complain to the guardians; the answer is, "if it does not pay you, why do not you give it up?" But I can't do this Sir; for if I should, I immediately establish another Practitioner in the centre of my private practice, and although he, no more than myself, could make any profit by the Union, yet the position he would take up, and the introduction he would receive, would in the end infallibly cut into my practice. I must hold on then in self-defence. Justice to my family demands that I should fret and fume, labour and sweat from morning to night, in order, not to do good for myself, but to avoid an injury. It is a disgraceful thing for any constituted authorities to take such an illiberal advantage of our hard necessities.

I hope that the Deputation succeeded in impressing the President of the Poor-law Board with a correct idea of our numerous grievances. I read the report with a great deal of pleasure; but I am afraid that the proposal to place our salaries to the account of the Consolidated Fund will hardly be successful in these trimming times.

Mr. Ross said very truly, that medical relief and general relief ought to be separated, as they were distinct matters, and in this opinion I perfectly agree; but there was another idea thrown out by Mr. Ross, which I must confess was new to me, but which I do not clearly see the justice of as a uniform plan. Mr. Ross proposes that a uniform rate per cent. should be levied on the gross rates for the payment of medical service. Now, Sir, this plan would press very heavily upon rural Unions, for supposing that 5 per cent., for example, would compensate a medical officer in a town district, in the country he ought to be paid twice or three times as much, as a remuneration for the area he would traverse. If this extra per centage should be required to be paid by poor agricultural Unions, they would consider it to be most unfair.

These observations occurred to me in reading Mr. Ross's able speech, and I think that that gentleman will see the truth of them if he turns them over in his mind. A very simple plan will not apply to all cases.

I am, Sir,

Your obedient servant,

June, 4th, 1849. LECTOR.

A LIBERAL BOARD OF GUARDIANS.

[To the Editor of the Medical Times.]

SIR,—As it may perhaps be of use to form some idea of the extras allowed by Guardians in extraordinary surgical cases, I beg to state that I have been allowed 5*l.* by the Guardians of the Yeovil Union, for attendance on a pauper called Raindell. She lived two miles from my house, and I attended her two years continually, during which time I performed the operation of paracentesis abdominis twenty-five times, and at several of these I had the assistance of another surgeon. I also visited her about 220 times, besides giving her a great deal of medicine, &c. Although, therefore, the remuneration was not large, yet from the readiness which the Board showed to grant it—*spero meliora*—and trust that in any future case other Boards may be as liberal.

I am, Sir, your obedient servant,

G. F. WILLS.

Crewkerne, May 22, 1849.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, 7th June, 1849:—Frederick William Dix, Long Buckley, Northampton; Thomas Sutton Ludlow, Leire, Leicestershire; James Gilbert Martyn, Camelford, Cornwall; George Evans, Northover, Somersetshire; Charles Christopher Hayman, Axminster, Devon; Thomas Carlyle Beatty, Easington, Durham; Samuel Standedge Shackles, Hull, Yorkshire.

ROYAL SOCIETY.—ELECTION OF FELLOWS.—The annual election of Fellows at the Royal Society took place on Thursday last:—The Earl of Rosse, President, being in the chair. His Lordship delivered an address; after which several Fellows spoke for and against the new statutes relating to the mode of election. Two scrutators were appointed; and the votes of the Fellows present having been collected, the following gentlemen were declared duly elected:—J. C. Adams, Esq.; T. Andrews, M.D.; R. A. C. Austen, Esq.; C. Barry, Esq.; B. C. Brodie, Esq.; J. Dalrymple, Esq.; J. Glaisher, Esq.; Sir R. Kane, M.D.; W. Lassell, Esq.; H. B. Leeson, M.D.; A. C. Ramsay, Esq.; J. S. Russell, Esq.; F. Sibson, M.D.; R. Stephenson, Esq., and Lieut.-Col. P. Yorke.

UNIVERSITY INTELLIGENCE.—CAMBRIDGE.—Waller Augustus Lewis, B.A., Caius' College, of 20, Edwards-street, Portman-square, Lecturer on Botany at the Hunterian School of Medicine, took the degree of M.B. on Monday, June 11th.

MEDICAL REFORM.—A Deputation, consisting of Mr. Stanley, President of the College of Surgeons, and Messrs. Green and Arnott, Vice-Presidents, had an interview with Sir George Grey, on Saturday, at the Home Office.

MIDDLESEX HOSPITAL SCHOOL OF MEDICINE.—Distribution of Prizes, May 31st, 1849—His Grace the Duke of Northumberland, President of the Hospital, in the chair:—Medicine—Mervyn Crawford, M.D., and Seth Thompson, M.D.—Prize, Mr. Horatio Nelson. Surgery—Alexander Shaw—Prize, Mr. George William Bridgeman. Physiology—Campbell de Morgan—Prize, Mr. John Freeman Wright; Certificate, Mr. Charles Thomas Paske. Anatomy—H. M. Rowdon and C. H. Moore—Prize, Mr. William A. G. James; Certificate, Mr. Charles Thomas Paske. Practical Anatomy—T. W. Nunn—Prize, Mr. Charles Thomas Paske. Midwifery—C. M. Babington—Prize, Mr. Augustus Davies; Certificate, Mr. George William Bridgeman. Materia Medica—R. G. Latham, M.D., F.R.S., and A. P. Stewart, M.D.—Prize, Mr. Augustus Davies; Certificate, Mr. John Dale. Chemistry—Edmund Ronalds, Ph. D.—Prize, Mr. John Freeman Wright; Certificate, Mr. John Biddle. Honorary certificates for regular attendance and general good conduct:—Mr. John Biddle. Mr. George William Bridgeman, Mr. H. F. Coley, Mr. John Dale, Mr. Augustus Davies, Mr. James Henry Hunt, Mr. Anthony Matthew Isaacson, Mr. L. H. T. Hayne, Mr. William A. G. James, Mr. Robert Lucas, Mr. William Hatfield Martin, Mr. Horatio Nelson, Mr. Charles Thomas Paske, Mr. Augustus Charles Shout, Mr. F. Freeman Wright.

WAR OFFICE, June 8th.—59th Foot—Lieutenant Thomas William John Lloyd to be Adjutant, vice Peebles, who resigns the Adjutancy only; Acting Assistant-Surgeon John Gorrings, M.D., to be Assist.-Surgeon.

OBITUARY.—On the 10th instant, at Norland-square, Notting-hill, deeply lamented by his family, Donald Mackinnon, Esq., M.D. On Tuesday week, aged 34, Mr. Thomas Brandreth, surgeon, Oxford-street, Liverpool. At Penshurst, Kent, aged 50, John Pickance, Esq., surgeon.

DEATH OF DR. BEILBY.—It is with sincere regret that we record the death of Dr. William Beilby of Edinburgh, which took place at his house in Northumberland-street, on the 30th ult. Dr. Beilby stood high in his Profession, having lately held the office of President of the Royal College of Physicians. As a public-spirited citizen he was much respected, and as a Christian gentleman he was still more regarded.

FARRINGDON DISPENSARY.—On Tuesday the annual dinner of this charity took place at the London Tavern, Mr. Alderman Salomons, Chairman, who carefully and ably advocated the claims of the Dispensary. The Report states, that during the past year relief has been given to 4,331 patients.

A DEPUTATION of the Health of Towns Association, consisting of Dr. Hector Gavin, Dr. C. J. B. Aldis, Mr. J. H. Tottie, Dr. Adolphus Barnett, Mr. John Liddle, Mr. R. B. Grantham, and Mr. C. F. J. Lord, accompanied by Mr. R. A. Slaney, M.P., Mr. W. A. Mackinnon, M.P., and also by Mr. Austin, Honorary Secretary, had an interview with the Earl of Carlisle yesterday at the office of Her Majesty's Commissioners of Woods and Forests, in Whitehall-place.

HEALTH OF LONDON DURING THE WEEK.—The present return of 971 deaths exhibits an increase of nearly 80 on each of the two preceding weeks, and also a small increase of 8 on the average of five springs. The mortality from diseases of the respiratory organs continues to decrease, for the numbers in this class in the last three weeks were successively 139, 127, and 102, while the average is 131. The increase is principally in the zymotic or epidemic class of diseases; for, whereas the average is 198, the deaths in this groupe in the same three weeks were successively 233, 209, and 251. The deaths in the last week from diarrhœa and dysentery were 25, or 11 above the average, but are not more numerous than in the same week of 1848; those from cholera in two preceding weeks were respectively 5 and 9, but in last week were 22, though the weekly average in former years was only one. Whooping-cough shows an excess on the average of 22, the number in this return being 58. The deaths from scarlatina were 40, or 8 more than the average. Those from typhus 38, or 4 less than the average. In the West London Union Workhouse a man of 36 years died of "low fever, accompanied with diarrhœa, apparently produced by extreme destitution." Another man, of the same age, died of "delirium tremens, brought on by excessive drinking." In University College Hospital the death of a juggler, 22 years of age, occurred, according to the return, from "tremendous pericarditis, caused by passing an iron sword down the œsophagus and thence to the pericardium, after exhibition." Inquests were held on the above three cases. The mean reading of the barometer was above 30 inches on Sunday and Wednesday; the mean reading of the week was 29·908. The temperature was high in the early part of the week, especially on Tuesday, when the mean was 68°6, and higher than the average of the same day in seven previous years by 9°1. The mean of the week was 59°7.—*Registrar-General's Return.*

MEETING OF PHARMACEUTICAL CHEMISTS AT LIVERPOOL.—On Monday week a meeting of chemists was held at the Queen's Hotel, Lime-street, convened by Mr. Jacob Bell, of London, whose object was "To give some account of the proceedings of the Pharmaceutical Society,—the recent attempts which have been made to interfere with the legitimate business of chemists and druggists,

by prosecutions in the County Court, and other matters in which the interests of that body are concerned." The meeting was numerously attended. Mr. Evans presided. Mr. Bell laid before the meeting the claims of the Pharmaceutical Society to their cordial support. He enumerated many instances of the benefit resulting to the body at large, through the watchful interference of the Council, on all occasions where their interests were concerned, and which were especially marked in the case just adverted to. Mr. Bell gave an encouraging sketch of the progress of the Society, and its rapid success, the high esteem in which it is held in other countries, the increasing number of candidates for instruction and examination, and the success of the branch institutions at Birmingham, Bristol, Bath, Norwich, &c. He regretted that Liverpool, second only to London in most points, should be behind in energy and union on this subject. Some remarks having been made on the subject of medical botany, Mr. Rowland suggested the propriety of memorializing the authorities of this town to apportion a part of the Botanical Gardens for the express cultivation of medicinal plants, and thus afford the students of medical botany in Liverpool those advantages which the members in London find so beneficial in the Regent's-park. The meeting was then resolved into Committee to carry out this and other objects of the meeting in co-operation with the Pharmaceutical Society.

PROGNOSTICATIONS OF THE WEATHER.—Many of our readers will be pleased to see the following table from Mr. Lowe's work, showing, of many registered observations, how many went each way:

	No. of Observations.	Followed in 24 h. by Fine.	Rain.
Solar halos	204	133	71
Lunar halos	102	51	51
Mock suns	45	19	16
Mock moons	9	7	2
White stratus in the valley	229	201	28
Distance clear	102	61	41
Distant sounds as if near at hand	45	25	20
Aurora borealis	76	49	27
Lunar butr	64	47	17
Coloured clouds at sunset	35	26	9
Black stratus	6	3	3
Burr round Venus	6	4	2
Whirlwind	4	4	0
Dew profuse	241	198	43
Dew from 1st April to 30th Sept.	185	161	24
Dew from 1st October to 30th March	56	37	19
White frost	73	59	14
Falling stars abundant	85	65	20
Stars bright	83	64	19
Stars dim	54	32	22
Sun pale and sparkling	51	27	24
Smoke rising perpendicularly	6	5	1
Moon shining dimly	18	12	6
Sun red and shorn of rays	34	31	3
Stars scintillated	14	12	2
Moon rose of a red colour	8	7	1
Sun shone through thin cirrostrati	13	6	7
Bats flying about in the evening	61	45	16
Many toads in the evening	17	12	5
Many snails about	29	15	4
Fish rise much in the lake	15	9	6
Bees busy	29	19	10
Many locusts	8	4	4
Cattle restless	24	12	12
Landrails clamorous	14	13	1
Flies troublesome	22	12	10
Gnats troublesome	28	15	13
Many insects	24	13	11
Crows congregate and are clamorous	34	18	16
Spiders webs thickly woven on the grass	13	9	4
Spiders hanging on their webs in the evening	8	5	3
Ducks and geese clamorous	10	7	3
Cabbages and turnips lowering	25	5	20

In the above Table it will be seen that fine weather predominates even in the prognostications for rain. That there are a greater number of fine days than there would be if we were to register the day rainy, if followed by a slight shower, is owing, in a slight degree, to the day being called fine, unless sufficient rain has fallen to allow of its being measured by the rain gauge. If half the weather-wise could and would become impartial observers for five years, meteorology would begin to be a science.

BEDFORD GENERAL INFIRMARY. — At the meeting of Governors on the 4th inst., a communication was read from His Grace the Duke of Bedford, announcing the annual contribution among his servants to the funds of the Institution, and also expressing a hope that the practice might become more general in other private establishments. The governors present were unanimous in their opinion as to the desirability of a plan which would confer great benefit upon the institution; the annual expenditure of which is now necessarily increasing by the additional demand made upon its funds, and resolved—"That the thanks of the meeting be given to the contributors for their kind subscription;" and they desired to take the opportunity of expressing their hope that so good an example might be followed in other gentlemen's establishments in the county.

ST. MARY'S HOSPITAL.—On Wednesday, a public dinner was held at the London Tavern for the purpose of getting the sum completed which is required to finish the Hospital of St. Mary's, Paddington, and to open it for the reception of patients. In the absence of His Royal Highness the Duke of Cambridge, Earl Manvers filled the chair, and nearly 200 gentlemen sat down to dinner. The total amount of subscriptions announced during the evening was 2,600*l.*, in addition to which was a legacy of 300*l.* from the late Mr. King, of Marylebone-street.

SUSSEX COUNTY HOSPITAL.—Dr. Alexander Brown, of Brighton, has been elected Physician to this Institution, in the place of Dr. Hall, resigned.

MORTALITY TABLE.

For the Week ending Saturday, June 9, 1849.

CAUSES OF DEATH.	Total.	Average of Five Springs.
ALL CAUSES	971	963
SPECIFIED CAUSES	966	959
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	251	198
SPORADIC DISEASES:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	34	48
Tubercular Diseases	188	200
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	120	123
Diseases of the Heart and Blood-vessels	43	34
Diseases of the Lungs, and of the other Organs of Respiration	102	131
Diseases of the Stomach, Liver, and other Organs of Digestion	60	62
Diseases of the Kidneys, &c.	14	11
Childbirth, Diseases of the Uterus, &c.	5	8
Rheumatism, Diseases of the Bones, Joints, &c.	13	8
Diseases of the Skin, Cellular Tissue, &c.	..	1
Malformations	3	3
Premature Birth and Debility	22	21
Atrophy	24	17
Age	34	50
Sudden	9	11
Violence, Privation, Cold, and Intemperance	49	33
Causes not Specified	5	4

TO CORRESPONDENTS.

A Correspondent, who styles himself "Nemo," informs us, that he has lately been called to a patient affected with chronic rheumatism, and who, for three months, had been under the care of a homœopathic doctor, without experiencing any benefit from his treatment. "Nemo" states, that he had two powders analyzed by a skilful chemist, and which were found to be nothing more than coloured sugar. The patient said he had been taking this kind of medicine for six weeks.

"B."—To secure the effect of the apparatus, it is necessary that the surfaces of the two metallic plates be perfectly smooth and clean, and that each be closely applied upon a part of the body denuded of cuticle.

"M.B."—Yes: the case was published in an American Medical Journal by Dr. B. Jones, of Missouri. He states that stramonium is a real emmenagogue, and the only one we have. We have not found it certain in its effects.

"Rusticus."—The operation was performed by Sir Astley Cooper, at Guy's Hospital.

"Juvenis, Gosport."—The double qualification is necessary.

"A Constant Reader, Camberwell."—The examination is conducted by means of printed papers; but the examiners are not precluded from putting *viva voce* questions to the candidates when their written answers appear to require explanation.

"An Old Subscribet" wishes us to inform him what Medical Institutions are connected with the University of London. Our space will not permit us to do so; but our Correspondent may obtain the information he requires by consulting the University Calendar.

"M. A."—The fee for a surgical operation can be recovered in a court of law, as for work and labour done.

"A Member."—The old Corporation of Surgeons forfeited its charter for neglecting to perform a certain duty. The present College was subsequently founded.

"Obstetrician."—It is usually caused by a diseased state of the kidneys, appears frequently at an early period, and is accompanied by albuminuria.

"Medico-Chirurgus."—The Acetum Lyttæ is not so dangerous an application to infants as the Emplastrum Canth.

"Pharmacien."—The Pharmaceutical Society has no power to compel a retail druggist to pass an examination.

"A General Practitioner."—The induction of premature labour is certainly to be preferred to the Cæsarian section, in cases of distortion of the pelvis.

"Gulielmus."—Iodized oil is prepared by dissolving iodine in oil of almonds, in the proportion of one part to fifteen. The minimum dose is one grain.

"Provincial."—As a surgeon, Yes; as an apothecary, No.

"Anglican."—1. The University of St. Andrew's does not confer degrees without examination. 2. The certificates will be received.

"Mr. Bland."—We cannot offer an opinion on the subject.

"Erinensis."—It is at present undecided.

"An Old Correspondent" informs us that in several cases of hæmorrhage from leech-bites, he successfully employed the powdered Ergot of Rye, where pressure long continued had failed to arrest the bleeding. He recommends the ergot to be thickly laid on the orifices, and pressure to be made for a short time, either with the fingers or a bandage.

"Mr. Thornton."—The papers have been received, and are under consideration.

"J. B." proposes, as the best means of settling the long-agitated question of Medical Reform, to incorporate all General Practitioners in the College of Surgeons, and to do away with the examination at Apothecaries Hall. Also, that the College Court of Examiners should be composed of gentlemen capable of examining candidates for the diploma in all the sciences connected with the healing art, and that the Governors of the College should be elected by a majority of the members. We fear that "J. B.'s" proposal will never be realized.

"A Patient."—We do not prescribe through our columns, but would advise our Correspondent immediately to consult a respectable medical practitioner.

"Lector."—Chelius's Surgery, translated by Mr. South.

"Experientia docet."—The publication of the letter would answer no good end.

"M. J. J., Kensington."—A Tisane is a form of medicine much used in France, generally consisting of an aqueous infusion or decoction of substances of no great activity, which is drunk in considerable quantity. A common tisane is composed of a decoction of barley and couch grass, sweetened with liquorice root.

"James B."—The best tests for morphia are nitric acid, sesquichloride of iron, iodic acid, sulphuric acid, and chromate of potash.

"M. D., a Constant Reader."—It would be impossible for us to state, without seeing the body, whether the infant was born alive or dead; congestion of the face and head, however, of a new-born child, is not a proof of death from strangulation.

"An Old Medical Practitioner."—We think the College of Physicians will admit to an examination. A letter should be addressed to the Secretary.

"Chiron."—The medical officers of the army are assistant-surgeon, regimental-surgeon, staff-surgeon of the second class, staff-surgeon, deputy-inspector-general of hospitals, inspector-general of hospitals.

"Dr. Jefferson."—The demand is legal.

"An Assistant."—We know of no eligible place in the neighbourhood of the metropolis for commencing practice. With the capital our correspondent says he has, we would recommend him to seek a partnership with some old-established surgeon, who contemplates retiring from the active engagements of his profession.

"A."—Unless an examination be instituted within twelve or fifteen days after delivery, no satisfactory evidence of the fact can in general be obtained.

"O. P. Q."—Tannate of Quinine is formed by adding solution of Tannic Acid or Infusion of Galls to any salts of Quinine. A white precipitate appears, which is usually insoluble in water, but dissolves in acetic and muriatic acids.

"University College."—It is a valuable work, and has reached the third edition.

"P. G., Birmingham."—The ulcer does not assume the phagedenic form in the first instance.

"Opifer."—It contains Strychnia.

"Mr. Nelson."—A private communication has been sent.

"Mr. R. Price Roberts, Ruthin."—A private note shall be forwarded.

"An Inquirer after Truth."—Received.

"Dr. Tuthill Massy."—The delay has been unavoidable.

"J. W."—We know of no Work on the subject which we can recommend.

Mr. Smith's paper is in type.

ORIGINAL LECTURES.

HUNTERIAN LECTURES.

ON THE

GENERATION AND DEVELOPMENT OF THE INVERTEBRATED ANIMALS.

By RICHARD OWEN, F.R.S.,
Hunterian Professor and Curator of Museum of Royal College of Surgeons, Corresponding Member of the Institute of France, &c.

[Reported expressly for the "Medical Times," and revised by the Lecturer.]

LECTURE VIII.

GENERATION OF ENTOZOA.—Generation of the Entozoa Cystica: Gemmation of Cœnurus and Echinococcus: alleged ovarian appendages of Cysticercus.—No true ova in the Cystica.—Generation of the Cestoidea.—Gemmation of generative joints; their extreme multiplication and individualization by transverse fission.—Disposition of the ovaria, testes, and genital outlets in the species infesting Man.—The uncinated embryo of Tape-worms.

In commencing, at the previous lecture, our survey of the generative apparatus and economy of the great Articulate Series of the animal kingdom, we were led by following, in descending, the steps of affinity from the typical forms of that series down to its root, and to the recognition there of individualised and self-subsistent organisms lower in the scale, inferior in complexity of structure, to any of the monads with which we begun the study of the Radiated Series. We were conducted, in fact, to an organism without organs, if the seeming contradiction in terms may be allowed, to a being with a tegumentary tunic, and with fluid and granular contents, including a central body or nucleus, but without a mouth, or stomach, or vibratile cilia, or pulsatile sacs;—in short, to a mere animated organic cell, with the cell-wall, cell contents, and the clear centre of assimilative force. The *Gregarina* was a single-celled organism, referable to the animal division by the contractility of its tunic or cell-wall, and by its solubility in acetic acid. The observed phenomena in its mode of propagation were spontaneous fission, the initiative being taken by the nucleus, which, self-repellent, established two centres of assimilative force; and, if the navicellar capsules are, as seems most probable, gregarina, we saw, also, that the granular contents resolved themselves into numerous centres of assimilative and developmental force, arranging the intervening organic matter into individualized forms, like those which, when free and with a shell, are called "Navicellæ." Here, therefore, we have an indication, that some of the simplest forms of Infusoria, respecting the animality or vegetality of which microscopical authorities still differ, obey the law of alternate generation, and pass one phase of their existence as parasites, in the interior of higher organisms than themselves.

The alternate propagation by buds and free germ-cells was more clearly traceable in the case of the unequivocally Entozoal genus *Cœnurus*; only the gemmation being incomplete, a compound animal was the result of the parthenogenetic phase of the multiplication of the individuals.

In the cystic genus *Echinococcus*, to which I now proceed, it would appear, that gemmation was complete, and that this genus further differed from *Cœnurus*, by developing the buds from the central surface, instead of the peripheral surface of the parent cyst. The minute individuals with hooks and suckers being cast off from the inner surface, and accordingly found swimming in the fluid filling the cavity of the parent cyst. This mode of origin of the vermiculi to which the application of the name *Echinococcus* is restricted by some entozoologists, is suggested rather by the analogy of the *Cœnurus*, than by direct observation. Of this, however, I can speak positively, that the acephalocystoid-closed bag, containing the fluid with the vermiculi of the Echinococcus, is not a mere adventitious cyst formed through the stimulus of the irritation of such vermiculi, but is a self-subsistent cell, similar in structure to the globular parent-sac of the *Cœnurus*; whether it be in like manner the parent-sac of the free vermiculi, remains to be proved by direct observation.

In the animalcule or vermicule of the *Echinococcus Veterinorum*, the species which infests the common domestic animals, the oral spines, when retracted, offer a close resemblance to the cylinder of teeth which characterises the genus *Nassula*, and many other Polygastria. The body of this *Echinococcus* likewise presents a number of clear globules resembling hyaline, and very similar to the so-called stomachs of the Polygastria. In an acephalocyst, from the abdomen of a recently-killed hog, I observed these little creatures moving in the fluid, apparently by the action of superficial vibratile cilia, thus adding a remarkable feature to their resemblance to the Polygastria. The *Echinococci*, from a small musk-deer, lately dissected at the College, closely resemble those of the hog, which I have described in the Article *Entozoa*, communicated to the "Cyclopædia of Anatomy," in 1836. The animalcules being dead, the ciliated structure could not be detected. Each tooth or spine presents an elongated triangular form, a small process extending from the middle of its outer margin, probably for the attachment of the protractor fibres.

The *Echinococci* of the human subject, which have been accurately described by Professor Müller, in a case where they were developed in the urinary bladder, and which have been carefully figured by Mr. Quekett in a case observed by Mr. Curling, where they were developed in the liver, were, in both cases, inhabitants of a cyst,—rather the parasites of an acephalocyst than of the human body. These *Echinococci* differ from those of the hog in having suctorious cavities, external to the circle of teeth, and thus closely resembling the head of a Tænia, appended to a small cyst.

The genus *Cysticercus* is characterized by having only a single uncinated and suctorial head, connected by a neck or body, sometimes annulated, and of greater or less length, with the terminal cyst. Of this genus one species, *Cysticercus Cellulosæ*, is occasionally developed in the human subject. It has been met with in the eye, the brain, the substance of the heart, and the voluntary muscles of the body. The peculiar inflammation which it excites, leads to the formation of a condensed bag of cellular tissue around it. The cysts are oval, and generally about half an inch in length. It would be interesting to know whether any case of this parasite had been met with in a Jew. The *Cysticercus Cellulosæ* is occasionally developed in vast numbers in the intermuscular cellular tissue and other parts of the common domestic hog. Its presence occasions that diseased state of the meat called "measly pork." The most common hydatid of the present genus is that which most infests the ox, sheep, and other Ruminantia, and which is called the *Cysticercus Tenuicollis*. This species is usually larger than the *Cysticercus Cellulosæ*, and has been known to attain to considerable dimensions, weighing 25 drachms, and containing three ounces of fluid in the terminal sac.

The organisation of this species has been well worked out by one of our Fellows, Mr. Rose, of Swaffham, who has communicated his observations to the Royal Medical and Chirurgical Society, in a late volume (the 13th) of their "Transactions," and has corrected the error in the 6th Volume of the same "Transactions," relative to the supposed ova of the Cysticercus. From Mr. Rose's paper, it appears that the tunic of this Cysticercus consists of two layers, the first, or outer one, of a fibrous character, with decussating fibres. The second, or lining membrane, is of a fine granular and subtransparent structure. This is albuminous, with some calcareous particles incorporated with it, and an abundance of clear, oil-like globules. After lining the fibrous tunic it is reflected across the base of the head and neck, and upon an appendage developed therefrom, and particularly described by Mr. Rose, under the name of "Gemmarium." The fluid of the bag consists of water 96·5, albumen 2·9, and salts, chiefly chloride of sodium, 0·6. In this specimen (showing 224) the inner layer has become, by partial decomposition, separated from the fibrous layer, and has fallen, like a deposit, to the bottom of the outer cyst. The slender elongated part, terminating anteriorly in the uncinated and suctorial head, is called sometimes the neck, sometimes the body, of the Cysticercus; it is thickly beset by granular corpuscles with a calcareous coat, accurately described by Klencke, and supposed by Mr. Gulliver to be the "ova" of the Cysticercus: it would seem from the analogy of the calcareous shell of the hen's egg to be ova, but which have no analogy to it. Mr. Busk and Mr. Rose have sufficiently refuted this mistake.

1st. It is clear that the cyst precedes the developement of the best organised part. The circle of hooks includes a double row, alternately long and short, each having, like those of the *Echinococcus*, a short basal process. I have observed that the part of the inner surface of the adventitious cyst opposite to or in contact with the proboscis, is more vascular than the rest, and have concluded, therefore, in the Article before cited, that the use of these hooks may be to irritate and excite the secretion of the adventitious cyst.

Special rounded bodies have been described as ova, at the base of each alternate hook; but I have never met with such, or any bodies answering to them, except occasionally some of the ordinary subcalcareous oval corpuscles, in an unusually advanced position. Mr. Rose has been equally unsuccessful in the discovery of the ova described by Dr. Knox, as in that of the ova described by Mr. Gulliver.

Mr. Rose has, however, called attention to a part of the Cysticercus, very variable as to size and shape, but which is commonly found in large specimens, extending from the slender body or neck into the terminal bladder, in which it either floats freely, after carrying down into it a duplicature of the delicate lining membrane of the sac, or is sometimes attached by slender filaments to the parietes of the sac.

It consists of an elastic delicate tissue, showing fine longitudinal fibres, with minute granular and oil-like corpuscles: these, however, being confined to the reflected layer of the inner tunic, and not to the proper substance of the appendage.

Mr. Rose has observed, in some cases, cysts, or vesicles, of different sizes, singly or in clusters, developed from the appendage. He calls these cysts, "young Cysticerca," and gives to the appendage the name of "Gemmarium." I have never succeeded in observing the characteristic organization of the *Cysticercus*, neither does Mr. Rose describe it in any of these appended vesicles. The hypothesis, therefore, that they are the young of the *Cysticercus tenuicollis* requires confirmation. Had they been proved to be such, they would have been due to the process of gemmation from the appendage, and the term "gemmarium" would not have been inappropriate. But the gemmation would, doubtless, have been complete; and we should expect, were this the normal mode of propagation of the *Cysticercus*, to find occasionally the young *Cysticerci* free in the terminal vesicle of the parent, like the pill-box hydatid. But no such instance has ever been met with. Giving full credit to Mr. Rose for the interesting and valuable additions which his original and independent researches have contributed to the natural history and anatomy of the *Cysticerci*, I feel bound to state my belief that the term "gemmarium," which he has applied to the internal appendage, and that of "young Cysticercus," to the vesicles occasionally developed from it, are premature, if not erroneous.

Much observation is still needed to establish the true doctrine of the generation of the Cystic Entozoa, and I proceed next to the order *Cestoidea*, to which the transition is made by the *Cysticercus fasciolaris*, from the liver of the rat, in which the terminal vesicle is extremely small in proportion to the long, slender, subarticulate body supporting the uncinated and suctorial head.

The true *Cestoidea* have no terminal vesicle; their entire body is elongated, flattened, or ribbond-shaped, whence the technical name of the order, and its common English equivalent, "tape-worms." In some species the divisions of the body are but feebly indicated, as in the *Lingula*, which you perceive nearly filling the abdominal cavity of the fish in which it has been developed; in the typical

genera of the order the body is distinctly divided into segments, which are, however, essentially due to a reiterated process of incomplete gemmation from a reproductive locality close behind the head. The head is the essential and first developed part of the tape-worm; it is originally provided with both suctorial cavities and hooklets, the embryo resembling in figure and armature the vermicule of the *Echinococcus*. After its attachment to the mucous membrane of the intestine which it infests, the body begins to be developed, and the hooklets disappear in some species, but they are retained in others, which *Rudolphi* accordingly termed "Tæniæ armatæ." The true generative organs are successively developed in each successive segment, an independed androgynous system of organs existing in and for each segment, which to that extent may be regarded as an individualized organism. The general condition of the multiplication of the *Cestoidea* may be therefore defined as manifesting, first, a succession of incomplete gemmations, producing a compound organism, alternating with the development and fecundation of true ova in each bud or individual segment; these also being usually completely detached when their generative organs have arrived at maturity.

My time compels me to limit the illustrations of these organs and their function to the two species of tape-worm that infest the human body. That which is most likely to fall under the notice of the British Medical Practitioner is the *Tænia solium*. In this species the head is hemispherical, or subspherical, with an anterior central rostellum, which is surrounded by a double circle of small recurved hooks; behind these are four suctorial cavities, by which the head adheres to the mucous membrane. The fore-part of the body is narrower than the head, with the segments at first indicated by feeble transverse rugæ; then follow better-marked segments, broader than they are long, but becoming subquadrate, then sensibly longer than they are broad, and as they lengthen they become narrower anteriorly, thicker and broader at the posterior margin, which slightly overlaps the succeeding joint. The last series of segments are sometimes twice or three times as long as they are broad, proportions which are never observed in the *Tænia lata*. But the chief distinction between this tapeworm, now called *Bothriocephalus latus*, and the *Tænia solium*, is in the position of the generative orifices, which, in the *Tænia solium*, are placed near the middle of one of the margins of each joint, and are generally alternate; whilst in the *Tænia lata* the generative pores are near the middle of the flattened surface of each joint.

The integument of the Tænia is soft, like a mucous membrane; beneath it is a layer of delicate transverse muscular fibres, and a more easily recognisable stratum of longitudinal fibres.

There is a close correspondence in the condition of the digestive system with that of many of the Trematoda. The alimentary tube, commencing at the minute central mouth, soon bifurcates; and each division is continued as a slender unvarying canal throughout the whole length of the worm, near the margin of the segments: the two longitudinal canals are connected together by transverse canals, one of which is situated at the posterior margin of each segment. The longitudinal nutrient canals have no communication with the marginal pores: they equally exist in those *Cestoidea* which have no marginal pores.

The tissue of the Tæniæ in which the alimentary canals are imbedded, is beset with numerous minute nucleated cells. These doubtless take an important share by their assimilative and reproductive powers in the general nutrition of the body.

The Tæniæ are androgynous, and each joint contains a complicated male and female apparatus equal to the production of thousands of impregnated ova. The ova are developed in the *Tænia solium* in a large, branched ovarium, occupying almost the whole space included by the nutrient canals, at least in the posterior segments, where it is very conspicuous from the amber colour of the more mature ova. The oviduct is continued from near the middle of the dendritic ovary to the marginal papilla, where it terminates by a small orifice posterior to that of the male organs. The parts of the male apparatus which have at present been recognised, consist of a small pyriform vesicle situated near the middle of the posterior margin of the segment; this, however, is most probably only a seminal vesicle, and not the testis. The vas deferens is continued from the vesicle with slight undulations, to the middle of the segment, where it bends upon itself at a right angle, and terminates at the generative pore, from which the *lemniscus*, or rudimental penis, projects. The ova may be fecundated by intromission of the lemniscus into the vulva before they escape.

The segments containing the mature ova are most commonly detached and separately expelled. The development and metamorphoses of the embryo of the *Tænia solium* have not yet been traced out. In the *Tænia serrata* and other species in which the embryo has been observed, the head is first formed, and is provided with six hooks; it rotates in the ovum, doubtless by means of superficial vibratile cilia.

In this species, which infests the dog, as soon as the ovum with its proper membranes are formed, the development of embryo commences. The contents of the innermost tunic of the ovum loses its granular character, recedes from the tunic, and assumes a distinct and sharp outline. The form of the embryo accords with that of the egg-envelopes, and is either round, or more or less full oval; the pellucid, non-nucleated corpuscles permit neither a head, neck, nor joints to be seen, nor any other structure, than six small hooklets, which are not wanting in any of the embryos of the numerous species of *Bothriocephalus* and *Tænia* in which they have hitherto been examined. On the less mature joints the ovum consists of a thin and transparent yolk membrane, germinal vesicle, and spot. In other species, the ovum is provided with a chorion, and is elliptical, the two poles being separated from the yolk, and a non granular fluid intervening between. Only in a few of these ova of the riper segments was a germinal vesicle discernible. They had probably been impregnated. Development is first indicated by a clear place in the centre, becoming more and more clear, larger, and nearer the surface of yolk. It consists of first one, then two and four cells, which divides the more opaque yolk into two parts. The germ-cells become progressively smaller and more numerous, and the germ-yolk becomes in the same ratio decreased, until it is wholly absorbed and assimilated by the germ-cells, and the egg finally contains only the germ-mass so constituted, that is, consisting of the progeny of the primary germ-cell, developed and multiplied at the expense of the yolk, which is, therefore, exclusively a germ-yolk in the *Tæniæ*. In a liver-abscess of the rabbit, Professor Kolliker found ova closely corresponding with those of a *Tænia* or *Bothriocephalus*, showing embryonal cells: and he believes these to have been detected in the same place by Dr. Hake, and to be the bodies which he has described as peculiar elements of pus.

For a knowledge of the minute anatomy of the generative system of the *Bothriocephalus latus* we are indebted to the admirable skill and patience of Professor Eschricht, of Copenhagen, whose work(a) on the subject has received the prize of the Academy of Sciences, at Berlin. His observations were made on a specimen of the worm which, after various remedies, was dislodged from one of his patients.

In Denmark, as in Holland, the *Tænia solium* is the common tape-worm; but the case in question occurred in a female aged twenty-three, born at St. Petersburg, of Russian parents; who had spent almost all her childhood and youth at Copenhagen, with, however, occasional sojourns of three or four months' duration in Russia. The usual symptoms of tapeworm, with occasional ejection of fragments, occurred in 1834. She had also distorted spine and other indications of a weakly constitution. Thrice in that year, oil of turpentine with castor oil, and once some strong drastic pills and pomegranate rind, were administered; and, with the exception of the last medicine, which produced no effect, each time from twelve to twenty feet of the worm were expelled, but without the head. In the spring of 1835 she was induced to try a remedy called "Schmidt's cure," which consists of strong coffee, and salt herring; and it was followed by the expulsion of a piece of the worm measuring ten yards, still without the head. She then paid a visit to Petersburg, and there parted with four or five pieces of the tapeworm, measuring from two to four feet in length. She returned to Copenhagen in the winter of 1835, still suffering from her pertinacious parasite. Castor oil and turpentine were again administered on the 3rd of December, and procured the ejection of two pieces of the tapeworm, measuring together twelve feet in length, but without the head. Eighteen days after Nouffer's remedy, which consists of the preparation of fern seed, was resorted to, whereupon the remaining part of the worm, twenty feet in length, with the neck and head, came away, and all the symptoms of the malady disappeared, and had not returned in 1838, when this instructive case was described.

The head and neck of this specimen were represented in an enlarged diagram. You will see (the Professor went on to state) that it closely resembles the figure which Bremser first gave of this important and characteristic part of the broad tapeworm. Instead of the coronet of hooks and circle of suckers which characterise the head of the *Tænia solium*, it forms a simple, elongated, sub compressed, enlargement, with an anterior obtuse prominence, probably perforated by the mouth (which, however, has not been distinctly observed), and having two lateral sub-transparent parts separated by a middle opaque tract. According to Bremser, the sides are slightly depressed, forming what are termed the *Bothria* or pits, whence the generic name of this tape-worm (*Bothriocephalus*). There was no trace of joints within two inches and a half of the head. These are at first feebly marked: then the segments expand posteriorly, and slightly overlap the succeeding ones: their length nearly equals their breadth. At sixteen inches from the head a slight prominence at the middle line, and near the anterior part of the ventral surface of the segment, indicates the genital apertures. These become conspicuous in the posterior segments, and are two in number, situated pretty close together on the same prominence.

The tegumentary and muscular systems appear to resemble closely those in the *Tænia solium*. Dr. Eschricht could not discern any trace of nerves. Of the nutrient system, he obtained evidence only of the two submarginal longitudinal canals: by placing the recent segments in dilute acetic acid, he coagulated the contents of these canals, which were then manifest by their opacity and whiteness. They were doubtless filled with the chyle of the unfortunate sufferer. How the chyle is absorbed by the *Bothriocephalus* Eschricht was unable to discern: he supposes, analogically, by an anterior suctorious mouth, leading to a gullet, which bifurcates in the neck to form the two longitudinal canals. Eschricht could not detect the transverse anastomosing canals. We shall be justified, perhaps, by the analogy of this species of *Bothriocephalus* from the Python (showing specimen No. 846 A) in which I succeeded in injecting with quicksilver both the longitudinal and transverse canals, in concluding that the anastomosing channels are present at the posterior margins of the segments in the *Bothriocephalus* in the human species.

Innumerable and very minute nucleated cells are apparently disseminated through the tissue of the *Bothriocephalus*. Eschricht points out their analogy to the blood-cells in the lower animals, but could not perceive any ramified system of blood-vessels.

At the deepest part of each segment there is a stratum of whitish granules or glands, composed of a cluster of minute blind sacculi, filled with opaque fluid, each groupe or gland being suspended in a separate cell, the pedicle of which is without doubt the duct of the sacculated gland which Eschricht regards as a testis, and estimates at 400 in number at each joint. Their ducts unite to form a network, having the capsules of the gland in the interspaces.

(a) Anatomisch. Physiologische Untersuchungen über die Bothryocephalen. 4to. 840.

The vas deferens is best seen on the dorsal aspect of the joint, along the middle of which it runs in close transverse folds, progressively increasing in breadth, until it terminates in a pyriform seminal receptacle or "bursa penis." From this bursa a small lemniscus is protruded through the anterior of the two generative pores, situated upon the eminence near the middle of the anterior part of the ventral surface of the segment.

The ovaria are situated near the posterior margin of the segment. They consist of two large transversely oblong lobes, and a smaller median annular portion. They are composed of tubes in which the small germinal and vitelline rudiments of the ova are arranged in rows. The oviducts terminate in a long tubular uterus. This is considerably wider than the vas deferens, and advances forwards, making many transverse convolutions, the two last being wider than the rest, and extending on *each side* of the bursa penis. The ducts of a very complicated series of glands communicate with the uterus before its final termination at the vulva or pore, which is behind the male opening. The glands just alluded to form a stratum just beneath the skin at the sides of the joints. Eschricht calculates that there are 1,200 of these glands in each joint. In the joints furthest from the head, containing the mature ova, these glands become filled with a thick yellow matter which they pour into a system of ramified ducts, which unite to discharge themselves in the dilated part of the uterus. Their office seems to be to cement together the ova in hard cylindrical masses by forming a crust around them, in which state they are found in the detached joints. This is the first example which we arrived at of nidamental glands, which we shall subsequently find a conspicuous part of the generative organs in many oviparous invertebrata. From this description it will be seen that the proportions and almost the forms of the ovarium and testis, are reversed in the *Bothriocephalus* and Tænia: the positions of the sexual outlets are unquestionably very different in the two genera. Both, however, agree in presenting the most extensive development and preponderance of the generative system that is known in the animal kingdom. In fact, there is scarcely space left in the hinder joints of the tape-worms for the organs of any of the other systems.

The natural rate of life of a tape-worm, the consequences of the repeated detachment of the ovigerous segments to the remaining adherent part, the extent to which they are detached and subsequently renewed, have not yet been, nor are likely ever to be, the subjects of direct observation in these internal parasites of man.

Some highly interesting observations have, however, been made by the same Professor to whom we are indebted for a knowledge of the anatomy of the *Bothriocephalus latus*, on another species of *Bothriocephalus* which is extremely common in the small sea-fish, called *Cottus scorpius*.

During midsummer, these tape-worms are fully developed, and their segments are laden with ova. They adhere by the fore part of the head to the mucous surfaces of the appendices pyloricæ, and cast off the ovigerous segments, sometimes in their whole length; so that headless tape-worms are found in the lower part of the intestine, whilst a number of heads without bodies may be observed adhering to the pyloric appendages between other tape-worms of very different lengths. The heads thus left behind generate a new series of perfect joints in the following way:—

This joint next the head is divided by a transverse fissure into two, each of which repeats the same process as soon as it is somewhat grown. Whilst the joints multiply in this way, they continue to increase in size, so and become removed from the head; but, at a certain distance from the head, this mode of sub-dividing ceases, and the whole nutritive power is applied to the development of the organs of generation. During the winter, the *Bothriocephalus punctatus*, still adhering firmly to the mucous surface of the pyloric appendages, grows to its full length, and the generative organs are formed; but no ova can be seen. These begin to appear at the commencement of spring in the posterior joints, and by degrees fill the uteri of all the joints, until they occupy those which are close to the head, when the separation from the head before described ensues, and this last-named member is left to repeat the important process.

No single joint of a tape-worm can develope a head, and form a new individual; the transverse fission relates only to the dissemination of the fertile ova, from which alone new tenise are developed.

The hypothesis of equivocal generation has been deemed to apply more strongly to the appearance of internal parasites in animal bodies than to the origin of animalcules in infusions.

But if a tape-worm might be organized from a fortuitous concourse of organic particles, or by the metamorphoses of an organic cell in the animal it infests, why that immense complication and extent of the organs for the production of normal fertile ova?

"The division of the body into joints is intended," Professor Eschricht observes, "to produce a corresponding number of bunches of ova, just as the repeated ramification of plants is destined to provide space for the production of new bunches of seeds." The individualized segments of the tape-worm answer to the "phytons" or type-plant individuals, modified as "leaves," "petals," "sepals," &c. The head of the tape-worm is fixed to the mucous surface, and from it derives the nutritive juices required for the whole organism; in the same manner as the root procures the nourishment of the plant from the soil. The ova having reached maturity, the joints rupture to liberate them, or the whole joint will be thrown off in the same way as the seeds of plants are freed, sometimes one by one, sometimes in masses, according to the particular manner of life assigned to every species of plant. "And is there any one," asks Dr. Eschricht, "who, upon the contemplation of this wonderful apparatus, and the extraordinary results of its agency, can, for a moment, imagine that it is without an object or an end?"

The geographical distribution of the human Cestoida is, likewise, opposed to the doctrine of their spontaneous origin. The organic particles, or alimentary mucus of a Swiss and Dutchman, are not so distinct in their nature as to account for the difference in their tape-worms.

Yet, as a general rule, the *Bothriocephalus latus* alone is developed in the intestines of a Swiss and Russian, whilst the *Tænia solium* is as exclusively found in those of a native of Holland, Germany, and England. A native of any of these countries may, indeed, be infested by the tape-worm peculiar to another region, if he sojourn there, just as the English sailor may be attacked by the Guinea worm, if he visits the tropical regions where that entozoon is common.

The great anatomist, Soemmering, suffered from a *Bothriocephalus latus*. Now, he was a German; but it was ascertained that he paid occasional visits to a friend in Switzerland. There, doubtless, the germ of the parasitic worm was introduced into his body. The countless ova of the tænia, with their hard crusts or shells, and tenacity of latent life, are, doubtless, widely dispersed, and need only the accidental introduction into an appropriate nidus for ulterior development.

I have lately examined the very extensive collection of intestinal worms accumulated during the practice of three successive generations of the well-known Worm Doctor, whose shop window in Long-acre is filled by these specimens.

Out of several hundred tape-worms, I found only three specimens of the *Bothriocephalus latus*; all the rest were the common English *Tænia solium*. A systematic care seemed to have governed the registration of each specimen in this collection; for the most part, the name or initials of the patient, with the age and sex, are marked on a card, appended to a bottle, and this card corresponds with a journal-book, in which the particulars of the case are entered. All the specimens were from natives of Great Britain, save one, described as from a Russian gentleman. I was informed that he belonged to the Russian Embassy, and was about thirty years of age. The tape-worm from this individual was one of the three specimens of *Bothriocephalus latus*. The second example was labelled, "From Mrs. P., Southampton, 1845." On asking for other particulars, the first which was recounted was, that she had travelled in Switzerland, and had become attacked by the symptoms of the parasite malady within a year after her return to England. The third case of *Bothriocephalus* was from an English servant-girl called Solly, aged eighteen, who, so far as the Doctor knew, had never been out of England. Should this be actually an exception to the geographical distribution of the human Cestoidea, it is a solitary one, and, with the enormous proportion of the evidence in accordance with the rule, serves to prove and illustrate it.

The essential anatomical character of the third order of Entozoa in the classification of Rudolphi may be represented by combining the head of an unarmed Tænia, with one of its joints, containing the fully developed androgynous organs. The digestive system would then be represented by a simple bifurcating canal, each fork ending in a cul de sac.

The *Trematoda* may be characterized as having a soft, rounded, or flattened body, with an indistinct head, provided with a suctorious foramen, and having generally one or more sucking cups for adhesion, in different parts of the body; the organs of both sexes are in the same individual.

The great entozoologist Rudolphi, a pupil and ardent admirer of Linnæus, adopted external and easily recognisable characters for the generic subdivisions of the Trematode order, the species of which were distributed according to the number and positions of the suctorious orifices and cavities. When there is a single one, it constitutes the genus *Monostoma;* when there are two, which are terminal, or at opposite ends of the body, you have the character of the genus *Amphistoma;* when the posterior of the two suckers is not terminal, but on the inferior surface of the body, this constitutes the genus *Distoma;* three suctorious cavities characterize the genus *Tristoma;* five, the genus *Pentastoma;* and a greater number that called *Polystoma*. Subsequent anatomical investigations have led to the formation of other genera of *Tremotoda*, and have likewise shown, that those species which were grouped together by the external and artificial characters of the Rudolphian system, manifest differences of organisation, indicating, at least, the generic distinction of such species; nay, most of the *Pentastomata* of Rudolphi appertain to the Cœlelminthic class of Entozoa.

The species of true *Trematoda* that have been met with in the human body have been found exclusively in the gall-bladder and gall-ducts,—they are the *Distoma hepaticum* and *Distoma lanceolatum*. Both are peculiar to the biliary-ducts and gall-bladder, but may pass thence into the intestine. Both, likewise, are more commonly found in the ordinary domestic animals, as the sheep and ox, than in the human subject.

A full-grown *Distoma hepaticum* is of a flattened, ovate, or oblong-ovate form, broader and rounded anteriorly, attenuated posteriorly; from ten to sixteen lines in length, from four to seven in width: the broad end sends forward a sort of conical neck or head. One of the suctorial pores is at the extremity of this process, and is the true mouth; the other is at the base of the neck, is imperforate, and serves merely as an organ of adhesion. The generative pore is between the two suctorial cavities characteristic of the genus.

The male organs of the *Distoma hepaticum* consist of the secerning seminal tubes, a vesicula seminalis, a penis, and its bursa: the convoluted tubuli testis equal the smallest branches of the alimentary canal in size; they occupy a great extent of the middle part of the body, are inextricably interwoven, are recognisable by their opaque white colour, and terminate by two trunks in a common canal, which ends at the base of the receptaculum penis. This appendage is spirally disposed when flaccid, is tubular, and distinctly perforated at the apex.

The ovaria occupy the whole margin of the body for a line in breadth: they consist of minute, branched tubes, in which the ova are developed, as in ac

The oviducts are close to the ventral integument, and terminate in a single large uterine canal, which is disposed in many convolutions between the subventral acetabulum and the bursa penis; it terminates by a vulva, or distinct pore, immediately behind the male bursa. The ovarian ova are colourless and pellucid, but become opaque as they approach the oviduct; having entered this tube they acquire a white glistening tunic, and afterwards a yellow colour, which becomes deeper as they approach the vulva.

The *Distoma lanceolatum* has been regarded as the young of the *Distoma hepaticum;* but it is of a different form, has a different anatomical structure, particularly as regards the alimentary canal, sufficient for a generic separation; but its title to rank, at least, as a distinct species, is sufficiently vindicated by its power of developing fertile ova without changing its characteristic shape or increasing in size. It rarely equals five lines in length, but is more commonly three lines long; flat, lanceolate, more attenuated anteriorly, and with an obtuse caudal apex.

The suctorial pores are relatively larger than in the *Distoma hepaticum*. The anterior globose sucker looks downwards, and is perforated in the centre by the mouth; the genital pores are half way between this and the hinder sucker. The transparency of the integument allows the internal parts to be readily discerned. The alimentary canal, commencing by a kind of pharynx, is continued as a very slender tube to the bursa penis, where it bifurcates, each division being continued without further ramification along the right and left sides of the body to the hinder end, near which they terminate in a blind end. In the interspace of the two digestive tubes the testes are placed, three or four in number, each of which transmits from its anterior margin a very minute duct, which, advancing forwards, unite in a common vas deferens, terminating in a small vesicle at the base of the penis, which is provided with its proper bursa. The ovaria are two in number, of a milk-white colour, situated at the margins of the middle third of the body, exterior to the alimentary tube. They present a dendritic form, small branches being given off chiefly from their outer side. The oviducts receive the ducts of special glands, which seem to add the yolk to the germinal vesicle, or essential basis of the ovum. The common ovidual or uterine tube is long and tortuous, occupying all the posterior part of the interspace of the alimentary forks, thence continued forwards with decreasing convolutions, and terminating at the vulva.

Some of the members of the Trematode order are so extraordinary, that they demand a notice here, although they do not infest the human species.

Dr. Nordmann, who has contributed to Comparative Anatomy many excellent illustrations of the vascular system of the *Trematoda*, was the discoverer of the most extraordinary form in the present class of animals, represented by the species which he has called *Diplozoon paradoxum*. This animal consists, in fact, of two bodies precisely resembling each other, and united, like the Siamese youths, by a narrow communicating band, through which, however, the digestive system of one body freely communicates with that of the other. This digestive system presents the dendritic type of that of the *Distoma hepaticum*. Each body has its own organs of generation. These agree, essentially, with those of the simple Trematoda. The penis is remarkable for its length, and is spirally disposed when retracted. This truly paradoxical species is about three lines in length, and may be found attached to the gills of the bream.

The development and singular metamorphoses and metageneses of the Trematode worms will be detailed in the following Lecture.

A DISPENSARY has been established at Nattore, for the purpose of affording gratuitous medical aid to the sick poor of that town and the neighbourhood.

UNIVERSITY COLLEGE HOSPITAL.—Her Majesty has graciously given 100*l.* from her privy purse in aid of this charity.

LECTURES

ON THE

PROCESSES OF REPAIR AND REPRODUCTION AFTER INJURIES.

DELIVERED AT THE

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

By JAMES PAGET, F.R.C.S.

Professor of Anatomy and Surgery to the College.

[Reported for the "Medical Times."]

LECTURE I.

The phenomena of repair and reproduction are manifestations of the exercise of the same power as that by which the body was developed from the impregnated germ. Probability that the same power operates in the maintenance of the body by nutrition. Characteristics of the power of the impregnated germ. Evidence of the operation of the same germ-power in common nutrition, and in all normal organisation: insufficiency of the accepted explanations of maintenance by assimilation and by succession of germs of tissues. Operation of the same power in repair and reproduction. Phenomena of reproduction of parts in the Hydra and other polypi; in species that can propagate by spontaneous fission and gemmation; in those whose development is with less or more apparent metamorphosis. Imperfection of nearly all reparative processes in the highest Vertebrata. Considerations on the purpose and analogies of the various processes for the recovery of lost perfection.

MR. PRESIDENT AND GENTLEMEN,—There are many considerations which would have led me to choose that which has been announced as the subject of these lectures; but the chief of them was, that the preparations in our Museum which illustrate these processes are next in order to those that suggested the subjects of two former courses; while another reason was, the advantages which might result from such a course, as supplemental to those of my colleague, Professor Owen. My mind would gladly stop for a moment in contemplation of those perfect works of nature of which he has discoursed, and with reluctance turn from them to the consideration of the losses to which they are subject, and to processes of repair which they undergo. Yet, in considering the power here exerted, we shall find that it is the same which is seen in bringing to perfection the impregnated germ. For we cannot form a just conception of the nature of these processes, unless we admit that in each perfect organism some measure of that power is exerted which operated to produce the germ. I shall, therefore, ask your permission to occupy the time of this first Lecture chiefly with the consideration of this principle. It is not a new doctrine, for the theory of *vires formativæ* of Blumenbach, and that of Müller, might be expressed again in nearly the same words as I have used; and yet some excuse seems to be necessary for arguing now that such a doctrine should be received. For the general tone of modern physiology is opposed to it, and of late years, especially, the cell-theory of Schleiden and Schwann, and the seeming accuracy which the progress of organic chemistry has given to our notions concerning assimilation, appear to have satisfied most physiologists that we have, in these, sufficiently good hypotheses for the explanation of the maintenance of the body by nutrition. If it were so, we might need no other hypothesis for the explanation of repair and reproduction; but I think, that both in these, and in the processes of common nutrition, a power is in exercise which is not admitted by the cell-theory, or by organic chemistry,—a power continuous with that manifested in the germ, and acting in all essential things like it.

The characteristic property of an impregnated germ is, that when placed in favourable circumstances, all the materials of which it first consists, and all that it appropriates, are developed according to the same method as was observed in the development of its progenitors. Among all the marvels of the laws of development that my colleague has detailed, none, I think, appeared more marvellous than the seeming tenacity of purpose with which each germ passes on to the perfection of its specific form. However vast its power of multiplication and increase,—however various its metamorphoses,—however near some may approach the perfect characters of another species,—or, however much alike all germs may be in their first stage,—yet, through all these things, each germ, self-impelled, passes on to the formation of a being like the parent.

The constancy of this result justifies the expression, that every impregnated germ has, in itself, the power to develope itself into the perfection of an appropriate specific form from the materials of which it consists, and this we may call the "power of the germ," or "germ-power."

Now, there are certain characters marking the mode in which the germ developes itself; and by these we may determine the difference between the operations of the germ power, and that of any other process in the living being.

The first characteristic is the limits it has to observe. As surely as the germ tends always to the attainment of perfection, so it is strictly limited to certain rules of time, and space, and mode of progress. The germ rarely falls short of its designed form, but it never goes beyond it,—no creature is known to attain by development a higher specific form than its parents had; and the differences of size, to which by growth the different individuals of a species may attain, are circumscribed in narrow limits. So, too, are the length of life, and, in narrower limits still, the periods and methods of development. Perfection, whether in the whole body, or in any of its parts or tissues, seems to be attainable only through certain forms appropriate to each species; and from which, if it deviates, it never attains that specific form. Wherever, then, this obtains, we may suppose a power is in operation like that of the germ power.

Secondly, it seems to be characteristic of the power of the impregnated germ, that it has the capability of subordinating to one design a number of concurrent but different processes. It is only in few and trivial instances that we can regard the development of one part as the consequence of the development of another. They are independent agencies. Thus, the primordial heart and blood-vessels of the embryo together, proceed in regular progress, but quite independent. There is also a concurrence in the development of each of the several parts of a limb; yet each limb, and each part is developed independently. And, again, when a new roof of blood-vessels is to be effected, it is manifest that there must be concurrent development of both, in order that they may exactly meet and coalesce; but the development of the one is in no sense a consequence of the development of the other. The process of combining material thus is so characteristic of the power of the germ, that wherever it is manifested, we may use it as a test of the germ power.

The third characteristic is, that it is developed in all its parts without the presence of any model. And here the power of the germ is different from that seen in the processes of assimilation; for here all the materials are formed after the pattern of the part in which it is inserted; it is supposed, that the plasma around it or near it takes the same form. Now, in the germ, the several parts may exist; but, none of them as a rudiment or model, and no single part is formed in precise imitation to the one already present. If, then, in subsequent life, we find instances in which parts are developed into definite forms, but still distinct parts, we may assume that it is so by the same power that was exerted on the impregnated germ. Here we come to the common doctrine of the maintenance of the body by nutrition. The physiological doctrine seems to be, that each structure in the body has the power of taking from the blood certain appropriate materials, and of assimilating themselves to it; or else, that it produces cytoblasts or germinal centres. Thus:—1st. That each part of the body has the power of abstracting materials from the blood, of assimilating themselves to it, and incorporating themselves into its structure—the power of giving life to that part which is amorphous. 2nd. That each part gives off that which may serve for the development of another part like it, and which may fill its office. Doubtless, both these may be proved to be in operation; for example, we may prove assimilation by this,—that any change which has

passed from the blood may be maintained in that blood, although all the parts may be renovated. Thus, the poison of small-pox being inserted into the blood, poisons the whole of it; and yet the blood is not as it was before; for now it is no longer amenable to that which before disturbed it. Here we have a proof of the assimilative force in the blood; for there is no other mode of explaining this fact, which shows that a part attacked by disease is no longer what it was before, except by admitting that the blood has the sole power of assimilating all new particles which are formed after such disease; all the blood is formed according to the altered model. And so we explain the force exerted in the succession of developments of tissue-germs, as in the case of the teeth. As the first tooth is developed, we recognise in the capsule all the material necessary for the development of the second; and so of the hair,—each hair pulp, and capsule gives off another germ which serves for the development of its successor; and it is clear that this same power is exerted in the living body;—so that there can be no question that in the living body there is constantly exercised a power of assimilation, so that the new material may take the characteristics of that into which it is to be inserted.

Still I think such forces are not sufficient for the maintenance of the body in its perfection; and that, even where they do tend towards that end, they act in subordination to that power which we recognise as determining the impregnated germ in its development. For, in the first place, there are many instances in which new structures are formed for the maintenance of the body, where there is no model according to which the new matter may shape itself, nor any parent-cell from which a re-producing germ may spring. Such are all the instances of formation for which, in a former course of lectures, I suggested the term of "nutritive repetition," to distinguish them from the examples of nutritive reproduction such as I have just mentioned. I then took, as an example, the different modes in which sets of teeth may succeed each other, the human second tooth being formed by materials given off from the capsule of the first; but in such jaws as the shark's, in which we see row after row of teeth succeeding each other, the row behind is not formed of germs derived from the row before, but the front row is repeated in the second, the second in the third, and so on. And again, in another class of cases the new blood-corpuscles, that are being constantly formed for the renovation of the blood, are not developed from germs given off from the old ones; neither are they formed by any assimilative force exercised by the old ones. The development of each is an independent repetition of the process by which the first was formed. And so with the successive developments of ova and epithelial cells, and many others,—each is developed independent of the rest, and each repeats the changes through which its predecessor passed. These are only examples of a large class of cases; and, numerous as they are, the theory of nutrition by assimilation, or by the development of successive cytoblasts, is inapplicable to them all. But even in instances in which we are quite sure of the operation of an assimilative force, or the existence of cytoblasts or tissue germs, we must also admit that these are controlled by the same power derived from the embryo germ. I will adduce but two examples. I have mentioned the persistence of alterations once produced by disease in the blood or any tissue; but we know that after a time these alterations are often obliterated, and the blood may so return to its perfect state as to be again amenable to the influence of poison. By what power? Certainly not by that of assimilation. It must produce the same image. By what power, then, is the natural state restored? Surely it must be by the operation of the germ power, which was for a time subjugated, but which now again brings the diseased part to the same condition as it would have been in, had no morbid change been effected in it. Again, we speak of the germs of tissues as enough to explain the formation, or reproduction, of the second tooth, and the successive generations of hairs, of muscular fibres, and some other tissues. But, to take the second tooth for an example of this class of cases; it is not like the first, from whose formative organs it derived its germ, but like the corresponding second tooth of the parent. What, then, determines the difference? Not, surely, the independent power of the germ or gemmule derived from the sac of the first tooth, for it is the essential character of germs to imitate those forms from which they sprang. On the whole, then, since we see that the continual mutation of particles for the growth and maintenance of the living body by nutrition manifests, in all essential things, the peculiar features that characterised the first formation of the same body from the germ, we seem justified in holding that it is one and the same power which, being maintained continuously from the germ to the latest period of normal life, determines all organic formation.

If what has been said appear sufficient to prove the operation of the germ-power in the ordinary maintenance of the body, absorbed or cast off at the term of their natural life, then more than sufficient evidence for the same opinion will appear in the phenomena of repair and reproduction after injuries. These, occupying, as it were, a middle place between the phenomena of embryonic development and those of ordinary nutrition, have of late been alternately, or in different instances, referred to one or the other of the different powers by which these phenomena are supposed to be governed. But, probably, the likeness of the phenomena of reproduction to those of both nutrition and embryonic development should have suggested that the three are accompanied by manifestations of one and the same power. That they are so, will be evident, I think, in what I shall have to describe in the following lectures, namely, that repair and reproduction cannot be in any case explained as the result of assimilation or by the succession of tissue-germs. And, secondly, if we watch the manner in which the recovery is achieved, we shall discern in it all those characters which mark the operations of the power of the germ; that in this re-formation there is an independent, though concurrent, development of many parts; and that the whole process is limited by the same restrictions of time, and space, and exact method, as those observed in the original development of the parts.

The capacity of repairing damages sustained by injury, and to reproduce lost parts, appears to belong, in some measure, to all bodies that have definite form and construction. It is not an exclusive property of living beings; for even crystals will repair themselves when, after pieces have been broken from them, they are placed in the same conditions in which they were first formed. I know not what amount of mutual illustration, if any, the repair of crystals and living bodies may afford; but, in any case, we may trace here something like an universal property of bodies that are naturally and orderly constructed; all, in favourable circumstances, can repair at least some of the damages to which they are liable from the violence of external forces. The power of reproduction is distributed in various degrees through the animal kingdom. The general statement sometimes made, that the reparative power in each species bears an inverse ratio to its position in the scale of animal life, is certainly not proved; and many instances are contrary to it, such as the great reparative power possessed by the lizards, and the apparently complete absence of it in the perfect insects. That which is generally true is, that the reparative power bears an inverse proportion to the amount of germ-power consumed in the development and growth of the individual, and in its maintenance in the perfect state. There are facts enough to prove that the power which can issue from the mysterious properties of a germ is limited; that it is not ever communicated to an indefinite quantity of matter; and there are enough to justify the hypothesis, that the germ-power, thus limited, is in some measure consumed in the development of every new structure, and, in a less measure, in the growth and maintenance of those already formed.

First, then, it appears constantly true, that the reparative power is greater in all parts of the young than of the older individuals of all species. Even when we compare individuals that have all attained their highest development and growth, this rule seems to be true. We know it from general observations of the results of similar injuries and diseases in persons of different ages: numerous as the exceptions may be, the general rule seems true. And it is yet more evidently proved in the case of some lower animals. It seems certain that the capacity for the repair or reproduction of injured parts is much more diminished by development than by growth or maintenance of the body; in other words, to improve a part requires much more, and more perfect, formative power, than to increase it does.

If we may thus interpret the facts, they will be collateral evidence for the belief, that, in different species of animals, the reparative power will bear an inverse ratio to the amount of development already passed through; so that, for each species, in its perfect state, the reparative power might be measured by the degree of likeness between the embryonic and the perfect form, structure, and composition. The greater the sum of dissimilarities in all these respects between the embryo and the perfect animal, the less seems to be the reparative power in the latter. It is consistent with this that the highest amount of reparative power exists in those lowest polypes, in which the materials of the germ-mass yet remain, not transformed, but multiplied, and, as it were, grouped into the shape of their bodies. In the fresh-water Hydra, the power of the germ appears communicated without loss to all the cells that descend by multiplication from the original germ-cells, provided only the cells are not developed into higher forms or into subserviency to special functions. In the Hydra viridis and Hydra fusca it seems literally true that any minute cluster of cells, derived by mere multiplication from those of the germ-mass, may, after being separated from the perfect body, reproduce the perfect form. This is the result of the numerous experiments performed on Hydræ by Trembley. He cut an Hydra into four pieces: each became a perfect Hydra; and while they were growing, he cut each of these four into two or three. These fractions of the quarters being on their way to become perfect, he again divided these, and thus he went on, till from the one hydra he obtained fifty. All these became perfect; he kept many of them for more than two years, and they multiplied by their natural gemmation just as much as others that had never been divided. So that a division by fifty did not perceptibly diminish the power of the germ present in the polype that was thus subdivided. Again, he cut similar polypes longitudinally, and in an hour or less each half had rolled itself up, and seamed up its cut edges, so as to be a perfect Hydra. He split them into four,—he quartered them,—he cut them into as many pieces as he could, and nearly every piece became a perfect Hydra. He slit one into seven pieces, leaving them all connected by the tail, and the Hydra became seven-headed, and he saw all the heads eating at the same time. He cut off the seven heads, and, hydra-like, they sprang forth again. But the heads of Lernæan Hydræ perished after excision: the heads of this Hydra grew for themselves bodies, and multiplied with as much vigour as their parent trunk. So in the Actiniæ, which, after bisection, form two perfect individuals,—and the Holothuriæ, which, as Sir J. G. Dalyell has observed, when touched will sometimes eject all their viscera, and yet in three or four months will have all their viscera reproduced. And so of the Annellata, the young Nereids, and species of Nais, on which Spalanzani and others made their experiments. I need not say how consistent all this is with the doctrine of parthenogenesis which my colleague has been explaining, where creatures are produced without previous impregnation of the parent. But I shall now notice some experiments made by Sir J. G. Dalyell, which carry us further in illustration,—facts which seem to show in those lower animals such a gradual approach to perfection as appears in the higher. In the reproduction of the Hydra Tuba he has found, that when cut in halves, each half may regain the perfect form; but this perfect

form is regained only very slowly, and, as it were, by a gradual improvement of parts that are, at first, ill-formed.

Again, in the Tubularia indivisa, a specimen was cut near its root, and, after the natural fall of its head, the summit of its stem was cloven. An imperfect head was first produced, at right angles to the stem, from one portion of the cleft; after its fall, another and more nearly perfect one was regenerated, and, as it grew, improved yet more. A third appeared, and then a fourth, which was yet more nearly perfect, though the stem was thick, and the tentacula imperfect. The cleft was almost healed; and now a fifth head was formed quite perfect; and after it, as perfectly, a sixth and seventh head.

The lower half of this specimen had been cut off four months after the separation of the stem. Its upper end bore—first, an abortive head; then, secondly, one which advanced further in development; a third, much better; and then, in succession, other four, which were all well formed.

The upper portion of this lower half of the stem now showing signs of decay, a portion was cut from its lowest part, and further manifested the reproductive power of the stem; for three heads were produced from the upper end of the piece cut off, and four from the lower end of the upper piece which had seemed to be decaying. In 550 days this specimen had grown 22 heads.

Now, I cannot but think, that we have here the very type of what we have to watch in various diseases of the human frame, in which each of the replacing parts becomes more and more near to the character of the perfect individual.

The power of reconstructing a whole and perfect body, by the development of a fragment, is probably limited to the species that can propagate by spontaneous fission or gemmation, or that increase their size, as some of the Anellata do, by the successive addition of rings that are developed after the manner of gemmules from those that precede them. Where this power is not possessed, there, whatever be the position of the species in the animal scale, the reparative power appears to be limited to the reproduction of lost members,—as legs, claws, a part of the body, the head, an eye, the tail, and the like; yet, within this limit, the rule seems again to hold good,—that the amount of reparative power is in an inverse ratio to that of the development through which the animal has passed in its way to the attainment of perfection. The experiments of Mr. Newport show, that, among the insects, the reparative power, in the complete state, is limited to the orders in which that state is attained by a comparatively simple and direct course of development, as the Myriapoda and Phasmidæ, and some of the Orthoptera. These can re-produce their antennæ, and their legs, after removal or mutilation; but their power of re-production diminishes as their development increases, as in the Myriapoda, where such reparative power apparently ceases, when, after the last casting of their integuments, their development is completed.

In the higher hexapod insects, such an amount of reproductive power has been seen in only the larval state,—none of them, in its perfect state, can reproduce an antenna, or any other member. This is the more remarkable, when the higher insects are compared with the Arachnida; and yet stronger when we compare the higher insects and the several species of salamander, in which so profuse a reproduction of the limbs has been observed. Many other instances appear to support the rule, that the reparative power in each perfect species is in an inverse proportion to the amount of change through which it has passed in its development from the embryonic to the perfect state, and that the power is the same by which perfection is first achieved, and by which, when lost, it is recovered.

This is, again, generally confirmed in the Vertebrata; but as I shall have to speak of this in future lectures, I will now only say that, in the highest Vertebrata, and in man, a true reproduction after loss or injury seems limited to three classes of parts:—

1. To those which are formed entirely by nutritive repetition.

2. To those which are of lowest organisation, and of lowest chemical character.

3. To those which are inserted in other tissues as accessories, as connecting or incorporating them with the other structures of vegetative or animal life.

With these exceptions, injuries or losses in the human body are capable of no more than repair, in its more limited sense.

There are certain considerations which may excuse these references to facts in physiology in which, as surgeons, we may feel but little interest. If ever we are to escape from the obscurities and uncertainties of our art, it must be through the study of those highest laws of our science, which are expressed in the simplest terms in the lives of the lowest orders of creation. It was in the search after the mysteries of generation, that the first glance was gained of the largest truth in physiology—the truth of the development of ova through partition and multiplication of the embryo-cells. So may the study of the repair of injuries sustained by the lowest polypes lead us to the clearer knowledge of that law, in reliance upon which alone we dare to practise our Profession. Already we seem to have had the foreshadowings of the law through which the discovery may be made; and in watching these processes we only see the progress of the yet larger law which expresses our Maker's will for the recovery of all lost perfection. To this train of thought we are guided by the remembrance, that the healing of the body was ever chosen as the fittest emblem of His work whose true mission was to raise man's fallen spirit and repair the injuries it had sustained; and that once, the healing power was exerted in a manner purposely so confined as to advance, like that which we can trace, by progressive stages, to the complete cure. For there was one, upon whom, when the light of Heaven first fell, so imperfect was his vision, that he saw, confusedly, "men, as trees walking;" and then, by a second touch of the Divine hand, was "restored, and saw every man clearly." Thus guided by the brighter light of revelation, it may be our privilege, while we study the things of which I have been speaking, to gain, by the illustrations of analogy, a clearer insight into the oneness of the plan by which things spiritual and corporeal are directed. Even now, we may trace some analogy between the acts of the body and those of man's intellectual and moral nature. As in the development of the germ, so in the history of the human spirit, we may discern a striving after perfection,—after a perfection, not viewed in any present model (for the human model was marred almost as soon as it was formed), but manifested to the enlightened reason in the "express image" of the "Father of Spirits." And so, whenever, through human frailty, amid the violences of the world, and the remaining infection of our nature, the spirit loses aught of the perfection to which it was once admitted, still its implanted power is ever urgent to repair the loss. The same power, derived and still renewed from the same Parent, working by the same appointed means, and to the same end, restores the fallen spirit to nearly the same perfection that it had before. Then, not unscarred, yet living—the spirit still feels its capacity for a higher life, and presses to its immortal destiny. Here the analogy ceases. We may watch the germ-power developing the body into all its marvellous perfection and exact fitness for the purpose of its existence in the world; but this purpose accomplished, it passes its meridian, and then we trace it through the gradual decay of life and death. But, for the human spirit that has passed the ordeal of the world, there is no such end. Emerging from its imprisonment in the body, it soars into the element of its higher life: there, in unchanging youth, its powers expand, as the vision of the Infinite unfolds before it; there, in the very presence of its Model, its Parent, and the Source of all its power, it is "like Him, for it sees Him as He is."

ORIGINAL CONTRIBUTIONS.

A CASE OF ACUTE INFLAMMATION OF THE PROSTATE GLAND, OCCURRING AFTER THE USE OF NITRATE OF SILVER INJECTION.

By HENRY SMITH, Esq.

Michael C——, aged 28, applied to me on Tuesday, April 3; he was suffering from great irritability of the bladder, being obliged to pass water constantly; this was done with extreme pain, and only a few drops were passed at once. About three weeks since he caught gonorrhœa, for which he had advice, and was recommended to use an injection of nitrate of silver. The effect of this remedy was to stop the discharge, cause great pain, and bloody urine. Notwithstanding these symptoms, no change was made in the treatment, and he became much worse. He then came under my care. It was about a week since his present symptoms commenced. Conceiving that he had merely irritation at the neck of the bladder,—a condition I had, on previous occasions, met with, when nitrate of silver injections had been employed, I prescribed the same measures which I found so beneficial before, namely, hot fomentations to perinæum; calomel, gr. v.; with opium, gr. ½; and the following dose every four hours:—℞. Balsam copaiba, tinct. hyoscy. à ♏ xx.; liquor. potassæ, ♏ x.

Next morning he was no better,—if anything, rather worse; he had been up all night, in constant pain, the calls to pass urine being most frequent, and this act was followed by severe pain in the urethra and the neck of the bladder. Tongue was furred; pulse rapid; bowels open. Suspecting further mischief than I had yet discovered, I examined per rectum, and, somewhat to my astonishment, felt the prostate gland enormously enlarged,—almost closing, by compression, the cavity of the rectum; it was very tense, and, on making pressure upon it, excessive pain was experienced. There was no tumor in the perinæum. I immediately sent the patient home to bed, with directions to put six leeches on the perinæum; to take calomel, gr. v.; p. opii., gr. j.; statim, and the following every four hours:—Sp. æth. nit., ʒss.; tinct. hyoscy., ♏ xx.; liq. potassæ, ♏ x.; mist. camph., ʒj.; to foment the perinæum well, and to drink freely of diluents.

April 5.—No better; leeches had only given temporary relief; he had been in misery the whole night, without any sleep; he had experienced a severe rigor. I was now, for the first time, enabled to see some of his urine, and I found it very turbid from copious deposits of lithates and mucus, and very acid. On passing the finger up the rectum, the prostate was found to be still larger, and exquisitely tender; it was very tense, but I could not discover fluctuation, although from the symptoms and the history of the case, I suspected that matter had formed. The bowels have not been opened to-day; the tongue is furred; the pulse full and bounding; and the countenance is beginning to be anxious. In order to be quite sure of my diagnosis, and not mistake a loaded bladder for the prostate, I introduced a moderate-sized catheter; it went into the bladder with only a slight impediment, but there was hardly any urine to come away. As the instrument was passing through the prostatic portion of the urethra, the poor fellow roared out in his agony. I now began to consider about the propriety of puncturing the prostate, as the symptoms indicated the presence of suppuration, and no remedies appeared to have the least effect, and the patient was in a dreadful condition. I was, however, by no means certain about the presence of pus, and I, therefore, ordered a full dose of castor oil directly, and, when the bowels had been well cleared out, the introduction of ten grains of pil. opii within the rectum. Calomel, gr. v.; pul. Doveri, gr. x., at night; and the following every four hours:—

℞. Tartar emetic, gr. ½; pol. nit. gr. v.; tinc. hyoscyc., ♏ xx.; aquæ, ʒ j.; and to drink freely of tea, and linseed tea.

6th.—This poor fellow has had wonderful relief; his bowels were well opened by the castor oil, and

the suppository was attended with a subsidence of nearly all the symptoms. He slept during the night, and was only obliged to get up to make water twice, —urine much less turbid. On examination per rectum, prostate is felt to be smaller in size, and the patient does not experience anything like the pain he before suffered, when the finger touched the inflamed gland; the tongue is much less furred, pulse tranquil; to continue the remedies.

7th.—Patient is very comfortable; hardly any irritability of the bladder; urine clear; pulse quiet; appetite returning; bowels not open since yesterday morning; to repeat the mixture and castor oil, and to take pulv. Doveri gr. x. at bed time.

8th.—The patient is up to day and free from pain, with the exception of some uneasiness after passing his water, which he is obliged to do more frequently than natural yet; the urine is more turbid to-day, depositing mucus and lithates, very acid. He is to continue the same medicine, and, in addition, to drink freely of a solution of carbonate of soda.

9th.—For the first time the patient has been quite free from irritability of the bladder, during the night, not having been obliged to get up once. He was able to walk up to my residence to-day. I examined him per rectum, and found the prostate much diminished in size, but still larger than natural; pressure with the finger gives hardly any pain. Urine is much clearer, and is manifestly alkaline. I ordered the patient to rub the following ointment into the perinæum twice daily. ℞ Ung. hyd. for., ʒi.; pulv. opii., ʒ ss.

April 12.—He has returned to his employment for the last two days; he feels quite well, with the exception of an inclination to pass urine more frequently than natural being present. He had been drinking large quantities of soda in solution; and as the urine had become very alkalescent, I thought this might be the cause of this symptom; I, therefore, desired him to omit it, and to take the following three times daily:—℞ Tinct. ferri. muriates, ♏ xx.; pulv. hioscyami, ♏ xx.; aquæ, ʒi.

This is a clear and faithful account of a case of acute inflammation of the prostate gland,—a disease which is of rare occurrence. For more than five years I have been, without intermission, in the habit of seeing hundreds of Hospital and Dispensary patients weekly, and I have attended a vast number of venereal cases; but I do not recollect ever meeting with a clear case of acute inflammation of the prostate. Of course I have seen cases of chronic inflammation and abscess of this part; but these affections are totally different, both as regards their causes and progress.

The chief interest in the preceding case consists in the peculiarity of its exciting causes. There can be no doubt that the attack was produced by the use of a solution of nitrate of silver, employed for the cure of gonorrhœa, as it was followed by bloody urine, and sudden stoppage of the discharge,—the usual effects of this agent when injected up the urethra in too strong solution, or at too frequent intervals. This was soon followed by the symptoms of inflammation of the bladder, and had they, at that time, been combated by the proper remedies, in all probability this patient would have been prevented the dreadful suffering which followed.

This is now the third or fourth case I have had under my care within the last twelve months, in which the use of an injection of nitrate of silver has produced the most unpleasant and severe results. From the beginning of the last year, I was induced, by one or two cases which I had in private practice, and had used nitrate of silver very successfully, to try its effects in a great number of instances, and I suppose that since that period I have employed it in not less than fifty or sixty patients. The conclusion I have now arrived at is, that a solution of nitrate of silver, of moderate strength, lays the foundation of a rapid and permanent cure of most obstinate cases of gonorrhœa, but that it is liable (unless most carefully employed, and its effects most assiduously watched) to produce most distressing symptoms,—symptoms, indeed, much more severe than follow from mere gonorrhœa. The first case in which untoward symptoms resulted from this treatment, was in a soldier, one of the heroes of Sobraon, who had lost his leg there, but nevertheless managed to get a gonorrhœa. I employed the injection of nitrate of silver, three grains to the ounce of water; but it produced terrible irritability of the bladder, and retention of urine, that it was impossible to go on with it.

Shortly after this another patient, in whom I used it, was seized with the most insuperable retention of urine, which made him miserable for two days. In one or two other instances I have seen temporary retention of urine, and swelled testicle produced by the same remedy. This was the first time, however, that I had seen so serious a consequence as inflammation of the prostate gland, a circumstance which confirms the conviction I had before arrived at, that the nitrate of silver injection is an uncertain remedy, and that it ought not to be employed unless it can be carefully watched. It is the fact of such occurrences as these I have mentioned taking place from the use of nitrate of silver, which has induced some surgeons to repudiate the use of this remedy, and truly not without reason; but yet I do not think that a case is sufficiently made out against this most invaluable agent, for if we come to inquire carefully into those instances in which such unpleasant or serious results have taken place, we shall find that the remedy has either been used too strong, or that the patient has not been sufficiently watched. In all the cases I have met with, with the exception of one, the patients have been attending at some public Institution, where they have either not been able to attend more than once or twice weekly, or when, perhaps, they have not been sufficiently cautioned in the use of the remedy. The consequence is, that if there be a liability to inflammation or irritation of the bladder, it will come on and be aggravated, either by the patient continuing his injection, (not knowing the cause of his symptoms,) or by the surgeon not seeing and combating the first symptoms.

For this reason, therefore, I should think that, in Hospital or Dispensary patients, the nitrate of silver injection should be laid aside for some other less potent remedy; but in private practice, where it is possible to see the patient day by day, the surgeon may prescribe it with safety; for if any unpleasant effects arise from its use, they will be met and obviated in the outset. I have used it in several instances in private patients, and have cured the disease in a surprisingly short time, and have gained great credit by it; but I always tell the patient beforehand that severe symptoms will follow its use, and I request them to visit me every day, or every other day, in order that I may watch with accuracy the progress of the case. The consequence has been, that only in one instance (in private practice) have I met with retention of urine, and this was immediately checked by a temporary suspension of the injection.

The treatment pursued in the case narrated was that which the ordinary rules of surgery would indicate; but it will be seen by the report, that no decided relief was given until opium, in the form of a suppository, had been applied. I dare say I shall be blamed by some for having passed the catheter into the bladder when the prostate gland was acutely inflamed, and thus have put the patient to a great deal of pain. I will admit that it is bad practice to use any instrument at all, when the urethra or prostate are in an inflamed or irritable condition, unless there be some necessity for so doing. I should not have done so in this instance, had not the symptoms been such as to lead me to suppose that there might be a considerable quantity of urine in the bladder, and that what I took for an enlarged prostate might possibly be that viscus distended. It was in order to clear up these doubts that I passed the catheter, and I believe I was perfectly justified in doing so. At one time I was afraid that suppuration had taken place, and I had good reasons for supposing so; and had no relief been given by the measures followed, I should have been much inclined to puncture the prostate by the rectum. I do not know whether this would have been good surgery, even had abscess existed; but it would appear to me to be preferable to resort to this measure, rather than allow the matter to evacuate itself by the gut, the consequence of which might, in all probability, be a fistulous opening, which would prove very troublesome at the least.

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RECOLLECTIONS, PRACTICAL AND PATHOLOGICAL, OF EPIDEMIC SCARLATINA.

By ROBERT ANNAN, Esq., M.R.C.S.E., Kinross.

Having, during the last twenty-eight years, repeatedly seen epidemic scarlatina complicated with a local affection of a most intractable nature, I am induced to send this brief narrative; not that I have anything new to communicate, but for the purpose of still further directing the attention of the Profession to points which still seem to be *desiderata* in the pathology and treatment of this feature of the disease. Previous to 1841, although I had read much regarding scarlatina, I had seen nothing satisfactory on these points, till a paper, entitled "Some Account of the Scarlet Fever, lately Epidemic in Liverpool," by J. R. W. Vose, M.D., appeared in the *Edinburgh Monthly Journal*, which was afterwards inserted in the *Medical Times*, of June 19, 1841.

In that instructive and well-written narrative, Dr. Vose remarks, that "very few diseases appear to have engrossed more of the attention of Medical Men, or to have received ampler illustration at their hands, during the long time which has now elapsed since it was first accurately described, than the one which heads this communication. Indeed, when we direct a glance at the literature of scarlet fever, we are astonished by its copiousness as well as by the eminence of those who have written upon the subject. From this circumstance we might suppose, that every form of complication of the disease had been thoroughly studied and announced; yet, when practical men turn to the records of observation, for a solution of the difficulties by which all are liable to be confronted, they are too often disappointed by finding that, in common with most other diseases, many important features of this are unnoticed, or if mentioned, are set forth in terms too meagre and equivocal to relieve their perplexities."

Dr. Vose then proceeds further to remark, that, by those who have seen much of this disease, it must have been observed, that, in addition to the affection of the internal fauces, in most cases of scarlatina, the exterior of the neck is occasionally the seat of swellings, varying in size, in figure, and consistence, which do not appear to have attracted more than a most superficial attention, while very opposite opinions have been entertained of their nature and seat, Drs. Sims and Willan placing them in the parotid and submaxillary glands; Dr. Armstrong speaking of them as painful induration of the glands of the neck, without specifying whether the salivary or lymphatic order of these structures; while Dr. Tweedie refers them to a tumefaction of the cellular tissue and absorbents.

Near to the conclusion of the paper, Dr. Vose adds that, "As regards treatment, I have nothing very satisfactory or conclusive to offer. In those cases which terminated favourably, recovery took place under the use of very opposite means, as when antiphlogistic, mercurial, and stimulating remedies were employed;" and concluded with recommending a combination of tepid aspersion, warm poultices to the neck, and gentle mercurial laxatives, with the cautious use of wine, and other means of support, as soon as ever the violence of the febrile symptoms was broken.

An epidemic scarlatina, during the autumn of 1823, first gave me opportunity of making similar observations, and of since confirming the accuracy of Dr. Vose's details, for which the reader will look in vain into the works of systematic authors. Subsequent epidemic scarlatina, in 1827, and 1838, 1840, and 1841, and more especially during the first two and last three months of 1848, and since the commencement of the present year to the period when these lines are penned,

have still more confirmed their accuracy. To those who have perused Dr. Vose's paper these notes will present nothing new; but even to such, it is hoped, they will not be altogether without use, as affording corroboration of the symptoms and appearances presented; while the practical importance of the subject, and the necessity for still further following out our inquiries, are reasons sufficient for thus presenting this abstract, however imperfect, of an individual experience.

The epidemic of 1823 was chiefly confined to Kinross or the immediate neighbourhood. It commenced, after a sultry summer, about the beginning of August. Several families lost one or more children, from the local affection of the neck referred to, and to which, I may remark, it is my intention principally to direct the notice of the reader. In one family, residing close on the banks of Lochleven, in a low and damp situation, with a water-course immediately behind the house, *four* children, from seven to fourteen years of age, died in succession within less than five weeks. In the whole four, after much suffering from the general induration and swelling, gangrene took place, followed by extensive sloughing, and the dead skin and cellular membrane, with a large portion of the *platysma myoides* muscle, were thrown off, exposing the deeper seated muscles and blood-vessels on one side of the neck, and in two of the children, where blisters had been applied, the greater part of the trachea and larynx, as completely as when they are displayed by the scalpel. I have adverted to *blisters* being applied; and, in a practical point of view the matter is deserving of serious attention. Being necessarily from home, the blisters had been recommended by an *amateur* practitioner of no practical experience; and, having previously witnessed, in epidemic measles, in the severe winter of 1807 and 1808 (a) when assistant at the Public Dispensary of Edinburgh, and since the frequent occurrence of gangrene from the use of blisters, I have not been able to divest my mind of the impression, that, in the two worst cases where the trachea and larynx were laid bare, the gangrene and sloughing were more rapidly induced, and rendered much more extensive by their use. In this opinion, I am supported by Burns, of Glasgow. "Blisters have also been applied to the throat, but I really cannot say that they do good, and decidedly they add greatly to the irritation of the child. In bad cases, *there is risk of their being followed by mortification of the part.*" (b)

In this epidemic, various other cases of sloughing occurred, though not to such an extent, but all tending distinctly to demonstrate that, while the cellular tissue covering the salivary glands were often included in the tumefaction and induration, the parts affected chiefly were, the cellular membrane, the muscular fibre, and the absorbent glands; "being involved in the inverse ratio of their vital endowments and complexity of structure."—(Dr. Vose, *et supra*, p. 399.) While, in this epidemic, death uniformly followed the gangrene and sloughing, in other cases this event ensued so early as the seventh or eighth day; the patients being worn out by the severe pain and sense of suffocation from the general tumefaction and induration of the neck,—a member of my own family, narrowly escaping, but suppuration having taken place, left a discharge of matter from one ear, which, during eighteen years afterwards, occasionally returned.

In this epidemic, the early application of leeches, laxatives of calomel regularly repeated, and emollient poultices, with proper nourishment, and cordials in the latter stages, were found most useful; but, wherever the induration and tumefaction, with *diffuse inflammation*, so prominent a feature in this disease, had made much progress, these means had little, if any, influence, in arresting the progress of the swelling to gangrene and sloughing.

Of the number of cases that terminated either by resolution or suppuration, I took no note; but, as in the town of Kinross alone fully *eighty* cases occurred, the number must have been considerable.

In the epidemics of 1827 and 1838, the former of which was preceded by deep snow-storms so late as 20th March and the end of April, (both rendering the roads impassable till cleared, the snow not having disappeared till towards the middle of May,) where the patients were not cut off early by the affection of the internal fauces, the tumors had a greater tendency to suppuration, and, in several, this was accompanied by infiltration of bloody serosity into the cellular membrane, thus occasionally proving fatal, or otherwise rendering the healing of the abscesses tedious and painful.

The epidemic of 1840, commencing in July, and terminating in March, 1841, had been preceded by very hot weather in the end of April and beginning of May, followed, towards the middle of that month, by a sinking of the thermometer from 65 to 70 of Fahrenheit to below 40, and a fall of snow. Shortly afterwards, an "*epidemic biliary*" fever, having a decidedly *gastric* tendency, set in, and numbering, ere it ceased in September, about 70 cases in Kinross alone; the surrounding neighbourhood entirely escaping. (a) Previous to this, the scarlatina and hooping cough had appeared. This scarlatina was general over Kinross-shire; and I only mention this as in striking contrast to the epidemic of 1848, and three past months of the present year, where the disease, up to the end of March, with trifling exception, to be afterwards adverted to, has stubbornly confined itself to certain localities, the nearest being three or more miles distant from Kinross.

The meteorological character of 1848, as compared with the previous year, consisted in a lower mean temperature, an excess of atmospheric moisture, and a much greater fall of rain; a greatly-increased prevalence of easterly and of southerly winds, and a marked diminution of northerly winds. (b)

An excess of moisture, with frequent high winds, principally from the east, south-east, and south-west, with mild, dryish weather, in the end of January, and during the greater part of February, and changeable weather in March, have characterised what has passed of the present year, with almost the entire absence of snow during the whole of the winter months.

In 1848, the first cases of scarlatina appeared early in January, in localities four miles to the westward, and distant fully two miles from each other. The number did not exceed a dozen; of these, *two* were fatal from the internal affection of the fauces; another, a girl of 16, who conveyed the contagion from the more southerly locality, where the disease first appeared, to two brothers, after having a comparatively mild scarlatina, died from supervening *enteritis*. Of the two brothers, respectively 11 and 13 years of age, one died from gangrene and extensive sloughing; the other with difficulty recovered. For the benefit of those who may not have perused Dr. Vose's Paper, I here give them; the striking similarity of these to case 4, will not fail to strike the reader.

Case 1.—T. M., aged 13, was first seized with scarlatina on the 24th January, 1848. On the third day of the disease there was tumefaction on both sides of the neck, but more particularly on the right side, the tumefaction occupying the whole of that side of the neck to near the clavicle. The constitutional disturbance was high.—28th. The swelling on the left side rather abated, while the tumor on the other side, which had a dark red colour, was hard and unyielding to the touch. On the 29th, a spot of a yellowish, and latterly livid colour, appeared near the centre of the tumor, rapidly increasing to the size of a crown-piece, when a line of separation formed, and the whole of the dead skin and cellular membrane, as in the cases of 1823, were thrown off, laying bear the muscles and blood-vessels at the upper region of the neck, as if for the purpose of anatomical demonstration. In three days the boy sunk, notwithstanding the use of wine and such nourishment as he was able to swallow, and he finally expired on the fourteenth day from the attack of the disease.

Case 2.—A. M., brother of the preceding boy, aged eleven years, was seized with scarlatina on 1st February, the first symptoms of which were severe. On the end of the fourth day, the eruption was distinct but did not long continue, and he complained much of his throat. Both tonsils were affected, and one somewhat ulcerated, to the extent of a quarter of an inch in diameter.

Feb. 4.—Close under the angle of the left jaw a tumor was observed. Warm emollient poultices, tepid sponging, with laxatives of calomel, and a gargle for the throat, were ordered. On the 8th February, the swelling occupied the whole of the left side of the neck, to close on the clavicle. On the 9th day a livid spot appeared near to the centre of the tumor, which had now become softer. The livid spot increased, and, finally, a line of separation was observed, and the whole of the dead skin and cellular membrane were thrown off, leaving the subjacent muscles completely bare, though not to so large an extent as in case 1. Poultices were continued for some days, and a weak solution of chloride of lime employed as a wash. Granulations gradually formed, and, wine and proper nourishment being freely employed, the boy gradually recovered, though fully six weeks had elapsed ere the sore finally closed. This was the only recovery that came under my notice where gangrene and sloughing had taken place.

From the situation of this family, I was obliged to confine my inspection of case 1 to an external examination of the parts; but, so far as my observation went, the disease was confined to the cellular membrane, the muscular fibre, and the absorbent glands; the denuded state of the parts, indeed, so far as the principal local affection was concerned, rendering any further examination unnecessary.

During the summer months, the disease, save in one or two sporadic instances, did not make its appearance. About the middle of November, one fatal case, to be hereafter noticed, occurred three miles to the southward, and shortly afterwards appeared in two scattered hamlets, five and six miles to the westward, distant nearly two miles from each other. In the smallest and most northerly of the two, hamlets, numbering about 140 persons, there were 36 cases of measles and scarlatina; in the majority of instances the one disease rapidly succeeding the other. In the other hamlet, numbering from 200 to 250, there were nearly *fifty* cases. Of these, in all, *ten* died, of scarlatina, two with renal symptoms and general dropsy; several when apparently convalescent, suddenly sunk, and expired ere they were seen by myself or by my friend, Mr. Young, a surgeon residing close by.

Case 3.—In another of the fatal cases, half a mile to the eastward of the lesser hamlet, in a boy of four years, leeches were applied on the fifth day. When I first saw him, the whole of one side of the neck, the structure anterior to the trachea, and greater part of the other side, being swollen and indurated to the top of the sternum. Some relief was obtained, with, however, no alteration on the induration. Poultices were employed, and a boggy softness was induced; the leech-bites, which had never healed, discharging a bloody serosity from the *interior* of the swelling. Finally, a livid spot, larger than a shilling, immediately above the top of the sternum, appeared; the features assumed a wild and anxious appearance, and the child expired in less than twenty-four hours, ere the slough had separated, and on the fifteenth day of the disease. An aunt, under twenty years, who had assisted as nurse, became unwell, and was conveyed to another abode, where I did not see her; but I learned that she expired about the end of the third day, with symptoms of strong determination to the brain. The throat, too, had been early affected.

In three of the other fatal cases, there were swellings and induration, with infiltration of bloody serosity into the cellular membrane; death ensuing ere a separation of the slough could be effected.

(a) The "Edinburgh Medical and Surgical Journal," July 1809, p. 266.

(b) "Principles of Midwifery," &c., by John Burns, p. 696, sixth edition, section—Scarlatina.

(a) See *Medical Times* of July 4, 1840, and July 16, 1842.

(b) See Dr. Stark's Report.

In one case, which I did not see, I was credibly informed, gangrene ensued very soon after the application of a blister. The boy, eight years old soon after expired.

In a case of recovery, in a boy under eight years, where scarlatina had supervened on measles, the rare disease pompholyx occurred, the *bullæ* which were, for at least six weeks, general over the trunk and limbs, closely answering to the description of Bateman; (a) and, even at the end of eight weeks, appearing on the face and feet.

In two small localities on the confines of Kinrossshire, five miles to the southward, in a population of 300 or more, there were *thirteen* deaths, and in one, gangrene and sloughing. In two others, with incipient gangrene, the patients dying about the eighth or ninth day, ere the sloughs were thrown off. I feel, however, that it is unnecessary to extend these details, and I have only given the above abstract to prove that this formidable, and generally intractable, local affection has been, in this and former epidemics, of not unfrequent occurrence. To show, in addition, the general extent of the epidemical disease, in another of the localities, four miles south and west from Kinross, I now give an extract from a communication, most readily sent at my request, by my friend, Mr. Peter Craig, parochial teacher of Cleish, embracing a population (exclusive of the *east* end of the parish of from 400 to 450 persons; and which, I may remark, may be regarded as an *official* contribution to the statistics of scarlatina and measles:—

"Cleish, March 28, 1849.

"Out of *ninety* pupils, (of whom about a dozen are from the southern confines of Kinross parish,) *fifty* have been ill. Indeed, all except those who have previously had scarlatina or measles are ill, and have suffered with one or other, and many of them had both measles and scarlatina, the measles being the most numerous. So far as I can judge, the disease appeared to traverse from the west. A scholar died at Barns of scarlatina, (the case formerly adverted to,) on the 19th November, 1848. None of the other members of the family then took it; but the remainder, *four* in number, are now ill, I think with measles, but I am not quite sure whether they have had both diseases."

To the fifty cases I believe I may now add *ten* more, from the adjoining district, and this exclusive of the *eastern* part of the parish, where there is another school, supported by Admiral Sir Charles Adam, of Blairadam, with from 50 to 60 pupils. In this locality, fully two months ago, *one* death occurred from scarlatina.

To give a brief summary of the whole:—Since the middle of January, 1848, there have been, in round numbers, fully 200 cases of measles and scarlatina, the majority of whom have had both diseases in succession, the measles generally preceding the scarlatina. Out of this number, there have been *twenty-six* deaths, or more than an *eighth* part of the whole; of these, fully *twelve*, or more, had either gangrene and sloughing of the external parts of the neck, or infiltration of bloody serosity, with incipient gangrene of the cellular membrane; and, in conjunction with this, ill-conditioned pus diffused through the substance of the absorbent glands.

As a general result, wherever a healthy suppuration took place, the patient invariably recovered; while one recovery only, (Case 2,) occurred where there were gangrene and sloughing. In several of the fatal cases death occurred while it was still doubtful whether resolution or suppuration might ensue, and this generally before the end of the ninth day. In accordance with what is generally observed of epidemic diseases, the severest cases occurred early, the larger number of deaths, when the disease had first become general, occurring in December and January. The oldest person seized with scarlatina,—and this a solitary exception,—was the nurse, who suddenly died, after waiting on Case 3, being close on twenty years of age. The great majority were from three years to puberty.

The quotation formerly given, regarding the treatment, so nearly accords with my own experience, as to render few remarks on this point necessary. Wherever induration and tumefaction had made much progress, with accompanying *diffuse inflammation*, the worst feature in this disease, leeches were of little or no use, and *sinapisms* even, so far as I observed, were uniformly injurious. In case 6, of Dr. Vose, it will be observed, where leeches, followed by a sinapism, and afterwards by a strong ammoniacal liniment, extensive vesication took place, with a purulent discharge from the denuded surface, and continuing for *nearly three weeks*; at what risk to the patient it is, perhaps, not now easy to determine. I have above referred to the effect of *blisters*; and the junior practitioner, I take leave to add, will not find it unprofitable to keep in mind the effects of the blisters in the epidemic of 1823, wherever there may be induration and tumefaction, with an approach, even, to diffuse inflammation. In case 3, where leeches were not used till towards the close of the *fifth* day, and where the induration and tumefaction were great, their application, I am now convinced, might have been advantageously dispensed with; and I have since, in similar cases, trusted almost exclusively to warm emollient poultices *very frequently renewed*, and to the *more early* and more liberal use of wine, with decided advantage.

The detail of the *four* cases of 1823, and of the *three* cases of 1848 and 1849, supersedes the necessity of any further remark here, on the structures involved; the gangrene and sloughing having but too faithfully performed the office of the anatomical demonstrator. And in the other cases, whether fatal or otherwise, as a whole they seemed pretty clearly to illustrate the observations and dissections of Dr. Vose, to whose interesting paper I beg leave to refer the reader.

In regard to the diffusion of the epidemic of 1848 and 1849, I have previously observed, that it had "stubbornly confined itself to certain localities;" and it is deserving of notice that, with the exception of *two* sporadic cases (one fatal), about ten weeks ago, Kinross, up to the beginning of March, entirely escaped, a solitary case, with swelling of the neck, having appeared. And in Milnathort, with 2,000 inhabitants, about a mile to the northward, scarlatina and measles have not been seen. The same holds of Portmoak district, commencing about three miles to the eastward, and embracing a population of 1,650. As if to balance matters, in Kinross smallpox, in a mild and modified form, have prevailed for several weeks.

Kinross, 8th April, 1849.

Since the above was penned I have seen, in the "Retrospect" of the *Edinburgh Monthly Journal* for April, an abstract of "A description of an Epidemic Scarlatina," by Dr. Mœller, from the *Gazette Medicale de Paris*, December 2, 1848. In that abstract it is stated that, "the lymphatic glands of the neck and lower jaw were more frequently affected," often followed by the formation of abscesses, &c. And it is also stated that, "the affection of the *parotid* ended in resolution, suppuration, or gangrene." In its treatment the Author employed ointment of cantharides for children, and blisters for adults. In *two* cases, on account of erosion of the arterial tunics, deligation of the common carotid was required. One of these died, the other recovered. Of 203 cases treated by the Author, *forty-six* died.

(a) "Practical Synopsis," Second Edition, page 141.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

[From our own Correspondent.]

One of the greatest difficulties to be overcome in the Science of Medicine is that of tracing up effects to their *real* causes,—in a word, to avoid the error of confounding the *post hoc* and the *propter hoc* together.

In my last letter, I mentioned the violent thunder-storm, accompanied by incessant discharges of electric fluid, during six hours, which passed over the metropolis on Friday, t[illegible]; and at the same time, rather by anticipation than from actual returns, I announced, that the change of condition in the atmosphere was followed by a corresponding change in the progress of the cholera. Such has been the case; and the fact remains, whether we interpret it by the fall in temperature, as the journals here do, or attribute the result to a modification of the electrical state,—an explanation which scientific men on your side the Channel will more probably be inclined to adopt. But, whatever be the theory selected, the fact itself is worthy of record and serious consideration. The following returns require hardly any comment. The storm, as I observed, took place on the evening of the 8th, and the *official* mortality of that day was 667. Since then we have, for the

	Deaths in City.	In Hospitals.	Total.
9th	464	148	612
10th	477	163	640
11th	382	155	537
12th	268	131	399
13th	264	126	390
14th	220	135	355
			3,600

The above Table indicates a gradual fall of mortality from 667 to 355; and, within the last two days, the improvement has been still more marked. The disease, at the same time, has lost a great portion of its virulence, and the premonitory symptoms have assumed a dysenteric character; which, at length, begins to yield before the resources of our art. A combination of opium with nitrate of bismuth is now much employed, and with effect, to combat this new phase of the disease.

With reference to the question of electricity, the following observations will be found interesting. They were presented by M. Andraud, at the last meeting of the Academy of Sciences; and are intended "to illustrate the influence of atmospheric electricity on the progress of epidemic cholera."

The experiments of M. Andraud were continued, without intermission, since the appearance of the disease. The electrical machine employed gives, under ordinary circumstances, and after two or three circumvolutions of the wheel, electrical sparks of five or six centimetres. (a)

Since the appearance of the epidemic, it has been impossible to produce the ordinary effects from this machine. During the months of April and May, the sparks never exceeded two to three centimetres. When the heat was excessive, on the 4th, 5th, and 6th of the present month, the machine gave a slight crepitating sound, but no sparks. On the 8th, (the day of the storm,) some feeble sparks were obtained; and on the 9th, the action of the machine was normal. During the whole course of his experiments, M. Andraud observed a constant relation between the intensity of the electric sparks furnished and the progress of the disease.

If I mistake not, observations of a similar kind have been already made at St. Petersburgh. They do not clearly demonstrate a co-relation of cause and effect, but are of sufficient importance to stimulate further investigation. The 12th arrondissement of Paris was, I may observe, the quarter in which the disease raged with greatest virulence, and there the coincidence between a change of atmospheric electricity and the progress of the disease was most marked. In one of the temporary medical posts of this arrondissement, 360 cholera patients were received within twenty-four hours, on the 7th. On the 9th and 10th, the admissions fell to 56. In another part of the same locality, where 65 patients had been received on the 8th, not a single case presented itself on the 9th.

With a mortality from cholera, during the past week, little short of 4,000, we have, of course, to deplore, as usual, the loss of many distinguished persons. Our own Profession has paid no small tribute to the number. Dr. Bourgery, so well known as the author of the splendid lithographic plates which he published in conjunction with Jacob, died in the early part of the week. He was

(a) The centimetre is equal to ·39 of the English inch.

soon followed by Drs. Petit and Boudet, members of the Academy of Medicine, and by Dr. Lebienvenu, Surgeon to the 1st Legion of National Guard. Lastly, Professor Mojon, of Geneva, who for many years formed the centre of a distinguished circle here, was cut off, after a brief struggle, and his wife followed her husband within half an hour, a victim of the same disease. Generals Gozon and Bachelu, both relicts of the "old army," may also be mentioned amongst those who passed away.

But the cholera is not the only evil which afflicts this unfortunate land. The "sweating sickness"—*la suette miliare*—that strange plague of the middle ages, has appeared with frightful intensity in several departments. At Montaterre, in the department of Oise, one-third of the population has been visited by this new affliction. At Peronne, in the department of Somme, 3,000 persons have been attacked, and from 600 to 1,000, it is said, have already perished. Government immediately sent down a number of medical men and sisters of charity to the latter place, but an apothecary was forgotten; not a single vendor of drugs exists in the locality. Yet, when the friends of humanity here venture to hint at the propriety of a "poor-law," or medical relief for the poor, they are hunted down as "Socialists," "Communists," and "Enemies of property." The present system, however, cannot last. Two loaves of bread per month, and something equivalent to a farthing per day, is the pittance furnished to the poor for food and raiment—for the necessaries of life. No wonder that death finds a ripe harvest. But enough of these melancholy reflections.

On Saturday we had a kind of parody of "the plague at Jaffa." Louis Napoleon, the "Prince President," as the *Times* (not *Medical*) calls him, visited the cholera hospitals. He was accompanied by two Ministers, MM. Falloux and Lacrosse. At the Hôtel-Dieu he was received by the medical staff and the sisters of the order of St. Augustin. He visited all the cholera wards, and, on retiring, expressed his great satisfaction at the admirable manner in which the medical men and the "sisters of charity" had fulfilled the onerous duties which had devolved on them.

At Salpetriere, where more than 1,000 persons have already fallen victims to this terrible visitation, the President paid a special visit to the "head sister," who now labours under the malady. From Salpetriere Louis Napoleon directed his steps to Val-de-Grace, the principal military hospital of Paris. Here he decorated with his own hand a soldier patient, who had been wounded on the 13th, in the Rue St. Martin. He also conferred the same honour on one of the infirmary attendants, named Boffard, whose zeal during the epidemic well deserved the recompense; and raised to the rank of officer of the Legion of Honour Dr. Zevy, the head physician of the hospital.

M. Jobert, surgeon-in-chief of the hospital of St. Louis, has been made commander of the legion. These rewards, I repeat, are but a small portion of what is due to the medical profession here, whose zeal and labours are taxed to the very utmost. The hospitals are nearly all without *internes* (or house-surgeons), the latter having been despatched to the aid of the medical practitioners around Paris and in the provinces.

As for the medical students, they are few in number, and, moreover, subject to various little inconveniences arising from the political condition of the country. Thus all the members of the "Democratic Committee" were arrested in the Rue de l'Ecole de Medicin on the 14th, and several of the medical pupils at Val-de-Grace are likewise incarcerated. The pupils of the Veterinary School at Alfort have all been dismissed, and that fine establishment is now closed. The decree does not state the motives of this severe measure, but I understand that it has been occasioned by a supposed intervention on the part of some of the pupils in the insurrection of the 13th. In fact, no one is safe just now, and many an honest man is within "the four walls," merely, it would appear, to keep him out of harm's way.

SCOTLAND.

[From our Edinburgh Correspondent.]

OXALIC DIATHESIS.

At the meeting of our Medico-Chirurgical Society, on the 6th current, Dr. Begbie read an interesting communication, including an account of four cases of the Oxalic Diathesis. These cases showed, in an impressive light, how imperative it is on the Medical Practitioner to examine the state of the urine in every instance of obscure disease, particularly when accompanied with dyspeptic or hypochondriac symptoms. In three of these cases the nature of the disease had been discovered at an early period, and recovery had followed the use of nitro-muriatic acid. In the fourth, unfortunately, the disease had commenced many years before the intimate connexion of deranged health with the oxalic acid diathesis was made known, in its full extent, to the Profession; and hence the true source of the patient's sufferings was not suspected till a comparatively short period before death; so that, though the symptoms were much mitigated by the appropriate treatment when the suspicion of the presence of that diathesis at last arose, yet the constitution had been subjected too long to continual irritation, and had been too much disturbed by the subsequent development of organic changes to permit recovery. This patient had placed himself, in succession, under many practitioners, and his complaints had received in turn many a name such as the copious vocabulary of medicine so easily supplies for the obscurities of chronic ill health. He had sought relief from Hydropathists and Homœopathists, and even from those whose easy virtue permits them to adopt the use of infinitesimal doses, when convenient, without altogether forsaking the precepts of regular practice; but all in vain, till Dr. Begbie, whose patient he had long ceased to be, suggested, through a friend, that Dr. Prout should be consulted, when the real source of his disease became apparent, and, as already said, much relief was afforded.

The account given by Dr. Begbie of the sufferings of the patient in this case, is that of no small number of persons who, passing for *malades imaginaires*, and hardly with reason reproached with the continual change of their physician, drag out a miserable existence, often for many years, with very little pity from their friends and neighbours. What proportion of the cases falling under the vague term of hypochondriac disease is really dependent on oxaluria, does not yet very clearly appear. But, in the little more than four year's that have elapsed since the publication of Dr. Golding Bird's book on urinary deposits, in which the great frequency of the oxalic diathesis was first pointed out, enough has been observed to show that a great amount of suffering might have been saved to mankind, had the use of the microscope for the examination of the urine in obscure diseases been adopted at an earlier period. Every day's experience proves that it is no longer to be deemed a mere piece of apparatus for the scientific inquirer's study, but an instrument so necessary for the practice of medicine, not much less requisite, indeed, for daily use, than the stethoscope.

Dr. Bird suggests the advantage of investigating the oxalic diathesis in different localities, and Dr. Begbie's example, it is to be hoped, will call forth new particulars as regards the prevalence of this malady in Scotland, and the circumstances under which it originates. There are still many points of this subject which require to be cleared up. Why is the presence of oxalate of lime in the urine attended with so much misery to some, while it may exist in the urine of others with no sign of ill-health? Is it the oxalate of lime itself, by its insolubility, and the sharp corners of its crystals, which is the immediate source of so much irritation; or is the formation of oxalic acid within the body merely the sign or index of the rise of some still unknown morbid condition in the function of assimilation, or of some failure in the appointed process for the disintegration of the solids? To what extent is the disease at times connected with the habitual use of certain kinds of food, and, in particular, of articles containing oxalate of lime, soluble oxalates, or free oxalic acid, such as rhubarb-stalks, sorrel, the chick pea, and even spinach. Some of these topics were touched on in the short discussion which followed the reading of Dr. Begbie's paper. As Dr. Golding Bird had already shown, in many instances, the abundance of urea in two at least of Dr. Begbie's cases, was at variance with the idea thrown out by Liebig, that the formation of oxalic acid in the living system is connected with a supply of oxygen for the disintegration of the solids, below what is required for the production of urea. Dr. Christison, who was in the chair, mentioned one or two interesting particulars of the case of a gentleman resident in the north of Scotland, who had been completely cured, some time ago, by the usual treatment for oxaluria. This gentleman, after spending a few weeks in London, this spring, in good health, was attacked anew as he passed through Edinburgh on his way home, and Dr. Christison found, on inquiry, that in London he had been freely indulging, at dinner, in rhubarb tarts, of which he said he was very fond.

In connexion with this subject, it may be worth while to mention a recent observation in the Infirmary, which is talked of in our medical circles. Rhubarb tart was one day, lately, a dish at the clerks' table; the next day the urine of all who had partaken of it was examined, and crystals of oxalate of lime did not fail to appear, with only one exception; in that instance, cystic oxide was detected, to which the urine of the gentleman concerned is habitually liable.

CHOLERA.

A Paper on the *post-mortem* appearances in cholera, by Dr. William Gairdner, was read at the same meeting; but the conclusions to be drawn from these dissections were postponed to the next meeting.

POISONED PASTRY.

Professor Christison exhibited a green powder, purchased at a confectioner's in Edinburgh, designed to colour jellies, blancmanges, &c., which he had found, by a process which he described, to consist of sugar mixed with verdigris and arsenite of copper. His attention had been drawn to it a few days before by the severe illness of two maid-servants, in consequence of having eaten some jelly coloured with this compound. Thus the fatal occurrence at Northampton, last year, from the use of the so-called emerald green, for a similar purpose, has not yet put a stop to the monstrous practice of selling a deadly poison to ornament food. It is to be hoped Dr. Christison will put this poison into the hands of the public prosecutor.

MORBUS COXARIUS.

The readers of the *Medical Times* may expect something to be said in answer to Mr. H. Smith's remarks on a late communication from Edinburgh, relative to excision of the head of the thigh-bone. There are but one or two points in this letter that require notice, for his remarks leave the real difficulties of the question very much in the same position as before, and, it must be confessed, we have made no further progress towards entering into his views. He complains that we are not satisfied with the evidence afforded of the alleged successful cases having been genuine instances of morbus coxarius advanced to the third stage. To refuse us satisfactory evidence on this head is to beg the question. We are asked to credit things out of the ancient faith, and, by all the rules of belief, we are entitled to claim confirmations strong in proportion to the amount of old convictions we are desired to cast aside. We question no man's veracity; but we insist on being satisfied that imagination has not had a hand in the reported observations as well as sense. Mr. Smith thinks he has convicted us in Edinburgh of doubts where doubts do not exist elsewhere. He will perhaps discover, on further inquiry, that pathologists are not quite agreed as to the strict pathology of morbus coxarius. But the passage running, "No doubt it may be found that pathologists are not yet agreed as to what constitutes morbus coxarius," in the communication in question, had no reference to

Edinburgh pathologists, but to Messrs. Fergusson and Smith, who had nowhere exactly stated with what latitude they employed the term hip-joint disease, and who seemed to speak as if it was immaterial to their purpose what the nature of the disease present was, provided it were made to appear that, in a morbid condition of the head of the thigh bone, it was possible to remove it successfully. By this last communication we now distinctly understand, that what Messrs. Fergusson and Smith contend for is, that, amidst the multitude of cases of morbus coxarius, in the stage of caries, daily falling under surgical treatment, there are some exceptional instances, to which the operation of excision may be applicable—it being distinctly understood that morbus coxarius includes nothing but the two kinds of cases falling, according to Brodie, under hip-joint disease, and, at the same time, that there are forms of disease affecting the head of the thigh bone in which excision may be successfully performed, which cannot, by any latitude of terms be brought under morbus coxarius.

We must still doubt if Mr. Samuel Cooper designed his account of Mr. Anthony White's case to be a warrant for the excision of the head of the thigh bone; first, because that case was originally the result of an injury; secondly, because in the Dictionary it is put under the head of Bone, and not of Joint; and, thirdly, because, in the same edition, under the article "Joints," which must have been printed subsequently, he left the remarkable sentence quoted in the *Medical Times* for June 9; but the force of which the printer impaired by misplacing the inverted commas. It runs as follows:—"The bones of the pelvis in that disease are always more diseased than the thigh bone, a fact which displays the absurdity of ever thinking of amputation in those cases."

As for Mr. Syme, he is nothing shaken by all that has been said; his last words on the subject (June 9) are,—"Which (the excision in question) I believe to be, without exception, wholly unnecessary, utterly useless, and dangerous in the extreme."

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THE MEDICAL TIMES.

SATURDAY, JUNE 23, 1849.

THE Commissioners in Lunacy have a difficult and very responsible duty to perform. They are the administrators of a law which aims at preventing persons from being unjustly confined as lunatics, and which empowers them to visit periodically public and private Lunatic Asylums, for the purpose of satisfying the public mind that these establishments are properly and humanely conducted. Before the passing of the present Act, [8th and 9th VICTORIA, cap. c.,] under which they hold their commission, several Bills, having the same important objects in contemplation, had been in operation; but, as all Acts of Parliament may be regarded as social theories until their efficiency or their inefficiency has been tested by their practical application, so it is not surprising to find that many sections of the present Act are defective, and that the powers of the Commissioners themselves are frequently very vaguely defined, and, in some points, much too restricted. What are the powers of the Commissioners? How far does their jurisdiction really extend? The proprietors and superintendents of licensed houses are frequently summoned before their Board, and brought into collision with them; some from misinterpretation of certain Clauses in the Act, as well as from incidental oversights in complying with the forms prescribed. Others again have been convicted of laxity and neglect of duty, in not providing their unhappy patients with a sufficiency of food, clothing, and winter bedding, and their licenses have very properly been suspended.

There can be no subject of greater public interest than that of the administration of the Law of Lunacy; personal liberty and the disposition of an enormous amount of property are alike involved; and, in reference to the former consideration,—the liberty of the subject,—it is notorious that, in the very bosom of private families, the most heartrending and cruel iniquities have been practised; and we maintain that in all such cases, where the ties of natural affection appear to have been sundered, and every sense of moral obligation perverted, it is the duty of the Legislature to become the public guardian of the unfortunate person who is placed in so helpless a predicament. The privacy of families, we admit, should be esteemed sacred, and their private affairs not wantonly exposed to the curious eye of the public; but, at the same time, the possibility of unduly secreting, or shutting up in confinement, a wife or a daughter, a brother or a sister, ought to be stringently guarded against. Upon this principle, which we hold to be a sound one, and in consonance with the best feelings of humanity, the Commissioners in Lunacy, lately, applied for a writ of *habeas corpus* to bring up the body of a young lady, the daughter of a baronet. It appeared that the young lady had been insane, and in confinement at the house of Dr. Sutherland. After being there some time, Dr. Sutherland prevailed on the mother of the young lady to remove her, as she had recovered, and was quite well. The young lady was removed; but it appeared, that, instead of being taken home, she was placed in the house of a person of the name of Bostock, who had formerly held some office in Hanwell Asylum. She was, therefore, still kept under restraint, not allowed to go out alone, nor treated as became her station in life. When the Commissioners visited her, she told them she wished to return home; that she desired society, and to communicate with her friends. She also stated that Bostock took liberties, and had kissed her in the absence of his wife. The Commissioners examined Bostock, who, after some hesitation, admitted he had kissed the young lady, who was thirty years of age. The Commissioners then communicated with the young lady's mother, by whom she was removed. "The Commissioners then wrote to the mother, requiring to know to what place the young lady had been taken; but the mother refused to give them any information, stating, that as her daughter was not insane, she did not know what right the Commissioners had to inquire into her private affairs. The Commissioners therefore asked that this writ might go, in order that the young lady might be asked by the Court whether she was willing to remain where she was."

Now, before proceeding further, we cannot comprehend why the mother of this young lady, knowing the official position of the Commissioners in Lunacy, should refuse to satisfy them that she was fairly disposed of. The answer, that she "did not consider that they had any right to inquire into her private affairs," is by no means satisfactory; they were not prying into what might domestically be considered private affairs, although they might have sought to penetrate into the "secrets of the prison-house;" her daughter had been a certified lunatic; she might be convalescent, but was liable to relapse; and, if the Commissioners had reason to suspect—which we must presume, from their making this application to the Court, they had—that this poor lady was placed under any manner of restraint or mal-treatment, it was their duty—whether she were of sound or unsound mind—to inquire into her case, and take proper measures for her relief.

The application, however, of the Commissioners was refused by Mr. Justice Coleridge, who observed, that "it was impossible to doubt but that the Commissioners were actuated by the most proper and honourable motives; but he did not think there was sufficient ground for the application. The young lady had been insane, but the Commissioners admitted that she was not so at the present time. Nobody could doubt that she was no longer under the charge of the Lunacy Commissioners."

Here, however, we would remark, that the jurisdiction of the Commissioners ought not to be so restricted: thus, if a person of sound mind be confined in any house under the pretext of insanity, it is clearly the duty of the Commissioners to insist upon that person being set at liberty; and, if an insane person be kept under restraint in any unlicensed house, it is their duty to adopt such measures as will bring the patient under their jurisdiction. The circumstance, therefore, of this young lady being no longer under the charge of the Lunacy Commissioners, ought not, we submit, to except her from their protection. The learned Judge further proceeded:—"When the mother heard Bostock had behaved ill, she removed her. It was said she had not been taken home; but courts of justice would become a nuisance in the land, if they were to interfere in the affairs of domestic life, when it was supposed that a child was not treated with propriety or liberality, and if parents were to be brought into a court of justice, and the secret dealings of the family were to be ripped open. Another ground was, that the mother had refused to state where the daughter now was. He agreed that that, coupled with other circumstances, might be a ground for a Court to interfere, if there had been proof of any ill-treatment, or of her having been improperly put under restraint; but that foundation was wanted, and the mother declined to give the

information because, she said, the Commissioners had no authority to ask the question.—Rule refused."

But here, again, we must remark, that the Court was not called upon to interfere with the "affairs of domestic life," or to determine "the propriety or liberality" of the lady's treatment; neither had there been any attempt on the part of the Commissioners to "rip open the secret dealings of the family;" they simply wished to be informed where the late lunatic lady was placed, in order that they might be satisfied that there was no unfair dealing in the matter; and we certainly are of opinion, that, considering the important duties which the Commissioners in Lunacy have to perform, they were entitled to an answer. The pretext for not giving one, upon the ground that it would have been exposing private family affairs, is, we conceive, a palpable evasion; for it is well known that there is no public exposition whatever made of the cases under the charge of the Commissioners in Lunacy, excepting when unusual circumstances, which are not under their control, bring parties into a Court of law. They are, indeed, by the 8th and 9th Vict. sec. 6, cap. c., bound by oath in executing the several trusts and powers committed to them, to "keep secret all such matters as shall come to their knowledge in the execution of their office, except when required to divulge the same by legal authority." We have no doubt, in point of law, that the decision of Mr. Justice Coleridge may have been correct; but we do not see how persons—sane or insane—are to be released from confinement and protected from maltreatment in private houses, if the powers of the Commissioners are to be so restricted!

A few days after the above case was disposed of, the Lord Chancellor was applied to for a writ of *habeas corpus* to be directed to the proprietor of a private Asylum in the neighbourhood of London, to bring up the body of a man who, it was alleged, had been taken to the Asylum in a state of intoxication. A Solicitor and a Medical Practitioner each made an affidavit, to the effect, that they had visited the party in the Asylum, and that he was, in their belief, in a sane state of mind. The Lord Chancellor, as a matter of course, ordered that the writ should be issued, and the alleged lunatic brought next day into Court. Now, to us it is perfectly clear, that the friends ought, in this case, to have applied, in the first instance, to the Commissioners in Lunacy, and not to the Lord Chancellor; for, supposing the person brought into Court, how could his Lordship adjudicate upon his mental state? Then, again: the affidavits of a Solicitor and a Medical Practitioner, that a man was sane, who, a few days previously, had been certified by a Physician and a Surgeon to be insane, appear to us of as little value as the affidavits of the six Physicians in the case of Dyce Sombre, which his Lordship had previously commented upon, and so unceremoniously rejected. Under whatever circumstances this person was received into this Asylum, and whatever may be his present state,—which matters have been under the consideration of the Commissioners,—the real question affecting the public interest resolves itself into this,—whether the present Act of Parliament does or does not sufficiently secure persons from being improperly certified and confined as lunatics; and whether or not the present mode of admitting patients into Asylums upon an order for reception, signed by a relation or friend, and two Medical Certificates, is not liable to be greatly abused? The subject is one of very great public importance, and to it we shall, at a future period, recur.

IMPORTANCE OF PRACTICAL TOXICOLOGY TO MEDICAL MEN.

A VERY slight acquaintance with the records of our daily Journals is sufficient to convince any one that the crime of secret poisoning is still practised, not only in this country but elsewhere, to a frightful extent. It is, indeed, doubtful, whether the histories of the most barbarous times,—whether, in fact, the lives of such wretches as Locusta, Tophana, Brinvilliers, or even that of the Queen Mother herself, can furnish instances of greater atrocity than those with which we have of late been made familiar, under the name of the "Burial Club Murders." And we can easily imagine, that those who possess but an imperfect acquaintance, either with the resources of science, or with the intricacies of the law, will be apt to inquire, after contemplating the continued practice of such crimes, and the interval which too often elapses between the act and its discovery, whether the efforts of the former are paralysed, or whether the retributive justice of the latter is totally annihilated? To this, however, we will answer, and soon, also, we shall have an opportunity of proving, that the powers of science are not weakened, but that the uncontrolled exercise of them is still amply sufficient to lay bare the designs and practices of the most secret murderer. It is not at the door of Science, therefore, that the atrocities in question can be laid; but they are, in our opinion, chargeable rather to the impotency of justice, and to the apathy of our legislative authorities. We will, in fact, venture to assert, that the crime of secret poisoning has its main source in the unchecked traffic and licentious use of every deadly and dangerous drug. It springs also from the irregularities of our Coroners' Courts, and from the unbridled practices of our Criminal ones. But, independently of these,—the great sources of the crime,—it must be admitted, that it receives a tributary current from the gross negligence which is often manifested by the members of our own Profession,—a negligence which makes them indifferent to the symptoms whereby the action of a poison is characterised, and regardless of the means whereby the presence of it may be positively demonstrated. In fact, the subject of toxicology does not appear to be cultivated with that zeal which it so truly deserves, for it is only at present regarded as a subordinate branch of medical study, and, in consequence, there are but few who care to use that energy which is necessary to make them masters of it. We are, however, fully convinced that a better knowledge of its principles, and the more frequent application of its doctrines, would tend in a great measure to check, if not totally to suppress, the crime of secret murder. Being assured of the truth of this opinion, and being, moreover, impressed with the importance of the subject, not only as regards its influence on the public welfare, but also as concerns its bearing on the character of our own Profession, we strongly urge upon our brethren its more careful cultivation; and we are glad to be able to direct the attention of our readers to a course of *Practical Toxicology*, which will be published in this Journal, by Dr. Letheby, who, as our readers are aware, is the talented Lecturer on Chemistry at the London Hospital, and one of our leading authorities in all matters which relate to Medical Jurisprudence.

This course will embrace an inquiry into the physical and chemical properties of the various poisons. In it will be discussed all the processes which have been advanced for the detection of poisonous agents; and their results, fallacies, impediments, and relative values will be clearly illustrated. An account will also be given of the *modus operandi* and comparative worth of our numerous chemical antidotes. Reference will be made to the number, proportions, and sources of those poisons which are considered to be normal constituents of the animal body; and such other matters will be incidentally referred to, as may serve to help the practitioner in his entire management of a case of poisoning.

We may mention, moreover, as another inducement to the publication of the above-mentioned Lectures, that the Apothecaries' Company have just issued, in their *curriculum* for October next, a regulation to the effect, that all who commence their studies from the present time will be required to attend a *specific* course of instruction in practical chemistry. We regard this as a very important regulation, and we trust that one of the chief features of the course will be an inquiry into the properties and modes of detecting the various poisons. This we know has, for some years past, been made the basis of the lectures annually delivered by Dr. Letheby at the Laboratory of the London Hospital.

THE JOHN HUNTER CLUB AND COLLEGIATE ELECTION.

THE power of association, the great feature of modern society, which has, in some instances, done good to the Medical Profession when properly wielded, is now, it would appear, to be made the engine whereby an injury is to be inflicted on many of our meritorious surgeons. A Club is now in existence, arrogating to itself the honoured name of John Hunter, but having a purpose, which, if possible, would tarnish the lustre of that name, and from which the upright mind of its assumed patron would recoil.

The Club is a clique among some of the College "Fellows," including several hospital surgeons and members of the Council, whose business it will be at the ensuing College Elections to endeavour to exclude those Fellows from a seat in the Council who are not attached to a Hospital or public Institution; all these in fact who will not enter with themselves into this unholy conspiracy against right and merit. It is duly organized as a political Club; it has its acting "*whippers-in*," who will bring down a sufficient number, at any moment, to the sup-

port of their party; and if it prove deficient in numbers, it will not be wanting in energy.

The enemy is now discovered; and although its numerical strength be undetermined, yet its manœuvres are pretty well known, and the honest and independent Fellows of the College of Surgeons have only to marshal themselves together, in order to discomfit the host. They must oppose the power of association by association, and must firmly unite against the would-be dominant principle of cliquism, resting assured that they have the support of the great body of the members of the College.

The formation of the Club is an attempt made to uphold the tottering system of nepotism and party,—an attempt, however, which will but hasten its overthrow.

At the approaching Election three vacancies are to be filled up—one caused by the retirement, in the prescribed order, of Mr. Luke, who, however, is eligible for re-election—the other two by death. The two latter are most probably those only which the Fellows will be called upon to fill up, for the re-election of Mr. Luke is but due to his position as a surgeon, and his character as a man. The next name in order on the Fellows' list eligible for election as resident in London is that of Mr. Hodgson, late of Birmingham, of whose fair fame we need not remind our readers, and on whose claims to a seat in the Council we need not insist. But probably some greater difficulty will occur to the Fellows in the selection of another Member of Council at the approaching election from among the Fellows next in seniority on the list. Indeed, we are given to understand, that Mr. Wormald, Assistant-surgeon of St. Bartholomew's Hospital, who is next in order, will have his election on the Council strongly opposed by a powerful party. If we could fathom the motives of this opposition, we should, we fear, discover private interest as the moving principle, such as seemed to actuate the Surgeons of St. Bartholomew's but recently in their combination against a *Fellow* of the College for the support of a *Member*. (a)

The succeeding names in order on the Fellows' list are Mr. Pilcher, the deservedly well-known Aurist; Mr. John Bishop, F.R.S., Surgeon to the Northern Dispensary; Mr. J. P. Perry, Government Inspector of Prisons; Mr. G. Simpson; Mr. Macmurdo, Surgeon to St. Thomas's Hospital; Mr. Kiernan, the distinguished Physiologist; and Mr. Malyn. For an account of the several contributions made by these gentlemen to science, we may refer to our Number for February the 3rd.

On the nomination of Mr. Pilcher at the ensuing, or on a future occasion, we also anticipate considerable opposition. The John Hunter Club will no doubt use its best efforts in opposing those who will not attach themselves to its principles and party. Hospital cliques,—famous among which are those of St. Bartholomew's and St. George's, will exert their influence against the unfortunate who is not duly recognised by them, or above whom some favourite is to be placed.

(a) At the recent election for an Assistant-Surgeon of the Middlesex Hospital, when Mr. Henry, a *Member*, was appointed in preference to Mr. Hillman, a "*Fellow*" *by examination*.

The prospects of the ensuing Election are, therefore, exciting. It will be no mere formal proceeding, at which it is a matter of indifference whether the Fellows attend or not. On the contrary, the Fellows have an important duty to perform,—they have to resist the noxious principles which have sprung up in such rank luxuriance,—they have to fight the cause of justice,—to relieve the victim of party. In their contest for equity, they will be brought in contact only with *some* of "the powers that be;" by others they will be seconded. There are those on the Council who will join with them in deprecating proceedings calculated to stain the fair fame of their colleagues.

The course to be adopted by those who would see merit assume its proper station is clear. If the position in the Council of the College of Surgeons be an honourable one,—if it confer any dignity or advantage on the holders of it, then the Fellows should endeavour to secure it for those of their number who have obtained a well-earned reputation,—who have contributed to the advancement of science, who are known as gentlemen, and as desirous of promoting the interest of the Profession. Nor should the want of any official post in hospitals or similar institutions be a bar to the success of a candidate.

APPROACHING ELECTIONS AT THE COLLEGE OF SURGEONS.

Next month the Fellows of the Royal College of Surgeons will be again called upon to elect three Members of Council from the general body of Fellows. The mode in which this election is conducted, is as follows. The Chairman reads from the College list the names in order of seniority, and it is permitted to any one present, on any name being pronounced, to propose, and to any other Member to second the proposal, that the Fellow named should be elected to the Council. Nothing more than simple proposing and seconding are allowed—no enumeration of the grounds upon which the proposal is made being admitted. The matter is entirely left to the consideration of the Fellows, many of whom are frequently unacquainted with the gentlemen for whom they are about to vote by ballot. It is unpleasant to use the black-ball—it is cowardly to reject a man in secret, whom we would not oppose openly. It would be much better if every Fellow, present or absent, were allowed to send to the Chairman a list of three Fellows whom he thought most deserving of a seat at the Council—the three gentlemen being chosen whose names were found in the largest proportion in the voting papers. In this way, comparative youth would be no bar to merit, and every one would be left to the free and open expression of his wishes. Still it is clear, that, for the present Election at least, the Fellows must vote as of old; and we think it necessary, therefore, to urge them not to let their natural feelings of dislike to the black ball prevent them from rejecting men not worthy of the honour intended for them. It is not seniority—it is not the fact of holding an important Professional position—which should be the test of fitness for the Council. The real question is, whether the gentlemen proposed have made proper use of the advantages they have enjoyed,—whether they have contributed to the progress of the science and practice of surgery;—not whether old or young,—not whether they are senior or junior Fellows, but simply if they are the men best able to honour the Institution and the Profession? If the senior men are not this, then we say black-ball them without *arriere pensée*, and reward those of their younger rivals, who have *really* done something for practice and literature, before they are too old to enjoy their triumph.

WHAT IS HUMBUG?

The letters which have lately appeared in the *Medical Times*, in reference to open shops, and the qualifications of Hospital and Dispensary Surgeons, suggest the consideration—What is Humbug?

Nothing is easier than to ask a question, but few, indeed, are they who can give a philosophical answer. It is one of the greatest difficulties with nine-tenths of mankind. How often the fluent and plausible speaker is arrested in his discourse, and no little posed, by the simple question, "What do you mean by such a term, or how would you define it?" He is a clever fellow who is ready with the fitting reply. The question, however, is generally a deathblow to all eloquence. The man flounders, hesitates, and is clearly embarrassed. His opponent, if shrewd and bent on mischief, plays with him, as the angler does with a fish too big to draw out at once. He drowns him in his own element—words.

What, then, is Humbug? Most of our readers, not waiting for a reply, will immediately answer, "Every one knows what that is." So they may, but we are not quite sure of it. Suppose we asked them to define a great coat. If they began to reflect, they would discover that it is occasionally so metamorphosed that at length it becomes a garment most perplexing to designate. So it is with humbug. It is easier to define it negatively than positively. That which is *not* humbug may be defined, SILENTLY AND UNOBTRUSIVELY WAITING TO BE APPRECIATED.

The grocer stands duly and steadily behind his counter, allowing his sign and window to indicate the nature of his business and puff his goods—the manufacturer superintends the making of his various articles, sending out no traveller to expatiate on their wonderful qualities, nor conveying an admirable idea of them through the Press—the merchant pursues the same dignified line of conduct—the barrister does not foam at the mouth with indignation at the suspected guilt of a Courvoisier—the publisher permits his books to speak for themselves—he never interests himself, good man! for a favourable review, nor selects a few kindly words from many condemnatory sentences, to attract and impose upon the public—the newspaper proprietor never advertises the number of his stamps, never boasts of the great sale of his journal, its wide circulation, and hence its fitness as a vehicle for advertisements—the candidate for the suffrages of an unbiassed, high-principled, and intelligent class of electors, never dwells on the necessity of removing incurable evils, of diminishing taxation, at one fell swoop, by 10,000,000*l*.—the political party in power have

no clap-traps, no whippers-in, no great measures in prospect, never threaten a dissolution under embarrassing circumstances, never appeal to the country as the only men who have the good of it at heart, promise no titles or rewards, nor use back-stair influence—the physician and surgeon place a brass plate upon their door, anxious only that it should be kept bright; never dream of keeping a horse, a carriage, or a boy in buttons, until they can afford it; give no lectures which are to be widely noticed, nor write books to be reviewed by friends, proving that they possess every Professional quality in a rare degree; transmit no paragraphs to the papers, stating, that they were called to the Duke or Duchess of Dash; that an operation was performed yesterday in so many seconds, and with the happiest results; do not, after a defeat for an honourable appointment, insert in the leading journal testimonials of high professional talent; re-publish no stale lectures on a stale subject, when they resume practice, after an interregnum, the remembrance of the fees rendering retirement intolerable. The absence of all these things, IS SILENTLY WAITING TO BE APPRECIATED.

Now, reader, we have attempted to show what is *not* humbug, and have so far cleared the way for showing what it is. Every condition of life teems with it. Where it begins or ends, what forms it assumes, what appearances it puts on, what trickery it calls into requisition, or how the pulleys act by which it operates upon the public mind, is an inquiry of no little difficulty. HUMBUG IS THE STUDIED ATTEMPT TO PRODUCE FAVOURABLE IMPRESSIONS, BY FALSE OR EXAGGERATED REPRESENTATIONS. The definition is, unquestionably, comprehensive, and we see no means of escaping from the truthfulness of its application.

The Medical man who displays his horse, livery, or carriage, before he may be said to require any of these, or can meet, except from anticipated advantages, the expenses they entail, is employing means, with taste and judgment, by which he calculates to impose upon the public, but certainly by conduct which may be justly designated humbug. Many will bristle at such a charge. And what are nine-tenths of the Medical books which are published? Do they originate in a love of Science, or do they add anything to existing knowledge? One writer satisfactorily shows, that it is a trifling evil to be either deaf or blind, as he cures both diseases without any difficulty. Another exhibits his wonderful success in the treatment of asthma and consumption; a third has a specific for dyspepsia, epilepsy, gout, impotency, or barrenness. These distinguished Authors present such an array of cases, or speak so confidently of their practice, that the learned, the titled, and the illiterate become equally their dupes. All this is humbug. Some Medical men, in the beginning of their career, are so fully occupied, that they cannot possibly accept a non-professional invitation, or, if they accept it, they have no sooner dined, than an urgent call drags them from the hospitable table; if they find time to go to church, a breathless messenger summons them from among the gazing throng, in the midst of the sermon; their sight is bad, and they wear glasses, but it is singular they are never deaf; the white and prim cravat, the measured step, and studied expression of countenance, the soft and silvery tones, and the exquisite sympathy they manifest, as if the feelings of their whole life were concentrated to a point, and this was the dear patient before them—all this, in plain language, is humbug. Whatever sophistry is employed to gloss it over, it will still retain its character; it will still be palpable to the senses, like the celebrated substance sung by Dean Swift, that defied all ingenuity to render it sweet.

The objector, while admitting, to some extent, the truth of these remarks, will, perhaps, contend that it is humbug in such a modified form, in so slight a degree, and so universal as to be unexceptionable. This reminds us of the frail fair, who, in extenuation of her fault, said that the baby was only a very little one. The universality of what is vicious does not make it right, or give it the noble qualities of virtue. If we are agreed, that the tendency to make false or exaggerated representations is universal, the consideration then is placed on very different grounds.

Professional conduct, which passes at the present time without animadversion, would, a century ago, have been condemned. It would have been regarded as not in tone or keeping with the powdered wig and gold-headed cane. Advance of civilization, change of manners and habits, and the vast revolutions produced in the sentiments and conditions of society by competition, have created a different standard of Professional etiquette. This, in fact, is the cameleon. Were it represented in its true colours to-day, it would not be recognised at a future period.

It must not be imagined, from these observations, that all degrees of humbug are to be viewed with the same complacency or indulgence. The prevailing disposition to practise it, must not make us lose sight of broad and acknowledged distinctions. There are certain legitimate modes which the Practitioner is permitted to employ, so as to place himself prominently before the public,—modes which have become legitimate from the usages of society, and which do not detract from the character of the gentleman, or the integrity of the man. There are modes which are unprincipled, because they directly mislead the public, both as to the talents of the individual and the success of his treatment. To confound these distinctions, would be as absurd as to endeavour to show that all actions are selfish, which, by a refined species of metaphysical subtilty, might be established. The common sense of every person is sufficient to tell him when he acts correctly in his social and Professional relations; and he always feels when he borders upon the questionable line. Though the philosopher could not define it, the instinctive sense of propriety, innate in every mind, never fails to intimate it with unerring accuracy. Every man knows when he overleaps the Rubicon of Professional etiquette, or breaks the rules of Professional conduct.

While we are anxious to maintain the dignity and respectability of the Profession, by showing what is right and exposing what is wrong, we cannot help thinking that the Profession is far from being in a healthy state. Were it less solicitous about forms, less sensitive about their infringement, and more careful to excite in its members a pure and elevated love of science, it would become instinct with far higher qualities. All substantial improvements must come from knowledge; and, in proportion as this is extended, the more difficult will it be for the ignorant pretender, or the educated quack, to impose upon the public. The sensitiveness which is exhibited on matters of little moment, compared with the moral worth and talents of individuals, brings to mind, and, slightly altered, applies to the case in question, the exquisitely fine and apt expression of Paine, in reply to Burke, who, in a blaze of eloquence, displayed his sympathy for the unfortunate Antoinette,—"He pities the plumage, but forgets the dying bird."

THE DUTY OF PETITIONING FOR MEDICAL REFORM.

THE Session of Parliament is gradually creeping on, and time is hourly becoming more precious. Although we are satisfied that a prolongation of the contest between the National Institute and the College of Surgeons must eventually strengthen the hands of the General Practitioners, yet we are disposed to think that success may be purchased too dearly; and that by estranging the sympathies of the different classes of the Profession, by engendering a diseased condition of mind most unfavourable to the prosecution of our peaceful pursuits, by inducing a hungering after excitement, and a chronic agitation, more evil may be done to the Profession's true interests, than good will be obtained from Legislative enactments. The present state of things is to be deplored like every other calamity that cannot be avoided, and must be borne. We should, however, like wise men, endeavour to escape from its pressure as soon as we can.

Delay seems to be the policy upon which the Council of the College of Surgeons are now acting; and they hope that if they can stave off legislation this session they will be able to make better terms in the next. This is a great, and so far as their views are concerned, a fatal error. Invasive principles grow stronger by time. Everything tends onwards in this age of liberality and free examination. The wave that is not quickly checked increases its force and volume the further it rolls. The Council cannot stifle the voice of the Profession, and they cannot smother the demand for justice and fundamental rights. The tide is still on the flow, and the Council think that they can keep it back with a sieve.

Let the Profession *petition* the House of Commons for immediate legislation; and let the Home Office be assailed with memorials. If rights are not accorded with grace, they must be wrung by force from a Ministry. The principles adopted by the Conference are clearly the best bases for the united action of the Profession at the present moment; in fact, they are the only basis, although, of course, such minor modifications may be suggested by each individual as are most consonant with his private opinions. It is better, however, to sacrifice self a little, in order to obtain union. Difference of opinion

leads to anarchy, weakness, defeat: *union is strength!* Let this motto be ever remembered.

There is no opposition to these principles of the least consequence, in the ranks of the General Practitioners, that need be feared. Some of the old opponents of the National Institute have been resuscitated, and after uttering a vain cry, they have again expired. Let the good men and true, then, fear not, but besiege the Legislature with Petitions to legislate during the present session of Parliament.

The Lord Advocate has declared that he intends to make haste with the Bill: he will not move the slower for being spurred. The promises of Ministers and their friends are often only snares to capture credulity, and to gain time; and are intended to be performed only under reservation. We say again, —PETITION!

THE SOLUTION OF CHLORIDE OF ZINC. We beg to call the attention of our readers to some important extracts from official reports in our present Number, proving the great advantages to be derived from the use of chloride of zinc in dissecting rooms, in the holds of ships, and in other situations where offensive effluvia are in operation.

The Profession, and the public generally, are deeply indebted to Sir William Burnett.

REVIEWS.

The Skin in Health and Disease. With Cases and Coloured Explanatory Plates. By THOMAS INNIS, M.D. 8vo. Pp. 200. London: Whittaker and Co.

Since Dr. Jonathan Greene's famous plagiarism of the "Abrégé Pratique des Maladies de la Peau," of MM. Cazenave and Schedel, (a) we have seen no specimen of literary larceny so boldly conceived, or so cleanly executed, as the Essay of "Dr." Thomas Innis now before us. (b) The ostensible object of Dr. Greene's luckless appearance in print was to form a *point d'appui*, by which he might be enabled, by advertising, to keep his "sulphur baths" before the public; so we find that his brother plagiarist has also an "establishment" to puff into notice, in the shape of an obscure "dispensary, opened by himself in the year 1847, for the exclusive treatment of skin diseases," concerning which dispensary the author and sole proprietor informs us, in his preface, "ungentlemanly and ungenerous remarks have not been altogether withheld" on the part of the Profession; but these he magnanimously disregards, and, in the divinest spirit of charity, chastened by the most exquisite humility, tells the Profession and the world in general, including his beloved "public," that he "has found a consolation for worse injuries in rendering assistance to those who, suffering from some of the most distressing ills that flesh is heir to, have applied to him for it, irrespective of their ability or non-ability to *accompany the application with a fee!*"

O passi graviora! dabit Deus his quoque finem!

What noble philanthropy! What utter abnegation of self! And yet that people should exist so thoroughly ungrateful, and so corrupt at heart, as to insinuate other motives against the founder of the "Dispensary for the Cure of Diseases of the Skin, and *all other Cutaneous Affections*"! But never mind, injured man! although the world is insensible of your good works, you will always find some mutual friend of yours, of science, of the Profession, and the public, willing to point out your peculiar claims on all three, as we propose to do just now.

The Author states, in his Preface, that "his object in preparing his brief manual for *public consideration* has not been the addition of any new doctrines or discoveries in relation to a subject which has been, of late years, so widely discussed, neither does he wish to inflict a deal of *remorseless learning* on the hapless reader." Further on, we are informed, that, "although the book is not devoid of such doctrines as may serve to keep the attention of the *student* from wandering far away from the elementary principles of the healing art, it is more especially intended for the general reader." Here, then, is a work which, by the Author's own showing, contains no new doctrines, nor discoveries, is purged of all "remorseless learning," but is peculiarly suited to the genius and comprehension of the *general reader!* Alas, "general reader," how much has been done for you, or in your name; and yet it would seem, from the foregoing estimate of your powers, as if you were doomed to perpetual ignorance and stupidity!

"Remorseless learning"! Did the Author ever hear of remorseless twaddle? If not, we commend him to his own pet "four first chapters;" for a more choice *melange* of the most hackneyed common-places of general hygiéne and sentimental twaddle, we have never before had the luck to fall in with. Even Othello and Desdemona are not lost sight of—the one so black and the other so fair. The contrast is beautiful!

The worthy "Doctor" says, in the language of "Shakspeare,"—

> —"Yet I'll not shed her blood,
> Nor scar that *whiter skin* of hers than snow,
> And pure as monumental alabaster."

And continues, in his own strain: "Alas! for the transitory existence of a beauty so full of enchanting emotion! Every step in dissipation undermines her charms and sullies her bloom."

Alas, and alackaday! say we. Still, we read on, in the hope of being enlivened with a passage from *Romeo and Juliet*, equally apposite, and tending to elucidate the pathology of the skin; but we were doomed to disappointment,—for the next sentimental passage we encountered carried us so far away into the regions of bliss, that we lost sight, for the moment, of "skin diseases and all other cutaneous affections." The passage runs thus:—

"It is true there are some minds so happily constituted as to find pleasure and intellectual enjoyment in reference to any object in nature,—to whose enchanted gaze all the varied forms, animate or inanimate, of this material world, present an ever-varying aspect of beauty and the appliances of beauty, who not merely find

> 'Tongues in trees, books in the running *brooks*,
> Sermons in stones, and good in everything;'

but, from the very elements of discord and disagreement, distil beauty and harmony undreamed of by the rest of the world." (P. 52.)

To those of our readers who delight in finding "books in running *brooks*" like these, and who believe they can thereby cure such unsentimental complaints as Ring-worm, Scald head, and the Itch, we pray of them, by all means, to lose not a moment in providing themselves with "Thomas Innis, M.D." on the Skin. So much for the learned Doctor's "four first chapters," which, he informs his readers, are sufficient for all ordinary purposes; but cases unfortunately occur sometimes, as we are informed, not so easily vanquished; and, for this reason, the Author tells the public,—the Profession has little business in the matter,—that a more systematic account, however brief, of "skin diseases and all other cutaneous affections," is necessary, and forthwith proceeds to draw upon Dr. Burgess's edition of "Cazenave," and Dr. Burgess's original work on "Diseases of the Skin," reviewed in a recent Number of this Journal.

The Author devotes seventy-four pages of his "book" to what he calls a "concise view of diseases of the skin." The arrangement and classification of this "concise view" are borrowed avowedly from Cazenave's Manual by Dr. Burgess; and the prescriptions are stolen wholesale from the recent work of Dr. Burgess, just referred to. Not content with interlarding freely his brief treatment of skin diseases with the remedies introduced to the notice of the Profession by Dr. Burgess, and passing them off as his own, in an Appendix, consisting altogether of seven pages, he gives five pages of prescriptions from Dr. Burgess's work, copied *verbatim et literatim*, indicating the diseases they are suitable for, and without the slightest acknowledgment whence this information has been derived. As curators of the morals of the Profession, we must protest against dishonesty like this.

Dr. Innis tells his readers that he borrows Cazenave's classification because it "places several diseases under their proper heads, and thus has a tendency to promote a more correct view of their character and phenomena," and proceeds at once to discuss the exanthemata. The first complaint of the skin which comes under his "brief outline" is Erythema,—the *causes* and *diagnosis* of which seem to be altogether beneath his notice, for not a word is said upon either; but the *treatment* is so unique that we shall give it in the original. "The proper treatment of erythema," says Dr. Innis, "is quite *simple*. The patient must take some mild purgative, afterwards the *liquor arsenicalis(!)* at the same time rest, in the horizontal posture, must be enjoined." *Voila tout!* The "Doctor's" idea of "simples" is, at least, original, for it is the first time that we, or any of our readers we take it, have heard of *arsenic* being the chief ingredient in a treatment which is "quite simple!" But we should be doing injustice to Dr. Thomas Innis if we did not inform the reader that, as the Musulman places his entire faith in Allah, so does Dr. Innis place his in arsenic, so far as "skin diseases, and all other cutaneous affections" are concerned. Unfortunately, however, this is not an original, but a borrowed faith, like that in Cazenave's classification, and is, moreover, a very delusive, if not altogether an erroneous one. Arsenic may remove temporarily certain skin diseases, but none permanently. The propriety of administering arsenic for so evanescent an eruption as "inflammatory blush," we shall leave the reader to determine.

In the chapter on Scabies, the Author informs us that it is his opinion, the immunity of the Face from attacks of Itch, "is due to the circumstance, that the face seldom escapes from the daily ceremony of ablution." This explanation is certainly as simple as it is original, and will, we hope, set the question at rest for ever. Under the head of Acne, the Author recommends "cooling lotions, and a very weak solution of bichloride of mercury (vide Form in Appendix)" which "form" is copied from Dr. Burgess's work without acknowledgment. For acne indurata "lotion of the cyanuret of potass is recommended as an excellent one," borrowed from the same source; and for acne rosacea, or, as the Author terms it, "gin or grog blossoms," cooling astringent lotions are recommended, "or, *what is better*, the lotion of the cyanuret of mercury," which is stolen from Dr. Burgess's work. Under the head of Alopecia, the Author tells his readers that he has found "very considerable advantage from fumigations of iodine, red oxide of mercury, and sulphur, according to the proportions given by Cazenave." This is likewise appropriated from the Author's most favoured victim; for Cazenave never described or recommended this remedy in any shape or form; which was first published by Dr. Burgess in his "Notes" to Cazenave's Manual, and subsequently in his own recent work. The learned plagiarist is resolved not to lose sight of what he evidently considers to be a *bonne bouche*; for he

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(a) See *Provincial Medical Journal*, for Jan. 21, 1843.

(b) Thomas Innis, M.R.C.S. (1840) is the title and signature of the Author in the *Medical Directory* for January 1st, 1849.

introduces the remedy again several times in his "Cases," at the end of his volume, and finally winds up the list of stolen prescriptions with the same.

Case 17 will give the reader an inkling of the Author's disinterested philanthropy:—H. B., Esquire, had been a severe sufferer from a scaly disease of the skin of one leg for many years. After losing all patience, and from sympathy with all who suffered in a similar manner, he called at *my dispensary. He at once became a subscriber, and subsequently a patient.* Arsenic was prescribed internally, and then, says the Doctor, "I had the limb subjected to the vapour of iodine and sulphur, confined to the parts affected by means of an oil-skin bag, twice a-day." Of course a radical cure was effected in less than no time. But enough of this.

The "coloured explanatory plates," we had almost forgotten, which would be a pity; for we never enjoyed a more lusty laugh in our lives, than on beholding for the first time the Author's misrepresentations of acne and sycosis. The subjects of those plates have been found, we venture to say, in the shop-window of some west-end hair-dresser. For a pair of brisker-looking fellows, with pink cheeks, blackened eyebrows, neatly trimmed whiskers, and, above all, crisp, "stunningly" curled hair, in profusion, we might search for in vain elsewhere. A capital basement this, whereon to pourtray disease; and so we find, on a "skin, *pure* as monumental alabaster," to use the Author's false quotation of the immortal bard, the most taking little saffron-coloured spots, laid on, as a lady does her paint, here and there, but with all the seducing tact of a sign-board painter. The destruction of the several tissues, in those lesions, is beneath the notice of both Author and Artist; if, indeed, either the one or the other have any knowledge of minute descriptive anatomy.

In conclusion, it remains for us merely to say, that Dr. Innis's book, as regards the improvement of cutaneous pathology is utterly worthless. There is not one idea, from beginning to end, with reference to the history of skin disease, which is not either borrowed or stolen from other Authors, with the most barefaced audacity; and yet so disjointed and confusedly arranged are those piracies, that they are worse than useless in a practical point of view. The book is evidently got up, if not written, by an individual who has made up his mind to stop at nothing that can gain him notoriety, or bring grist to his mill. The position he has taken up in the advertising columns of the *Times*, with the name and *address* given in full, would indicate this.

If it should appear to any of our readers that we have dealt harshly with "Dr. Thomas Innis," we beg they will take into consideration the very evident fact, that this person is one of a class of whom Montesquieu most happily said, "Ce n'est q'en les ecorchant, qu'on les chatouille."

Health of Towns; a Digest of several Reports on Sanitary Reforms. By WILLIAM SIMPSON, Esq., Surgeon. London: Henry Renshaw, 356, Strand. 1849.

The Author of this Digest, which contains scarcely a page of his own, may be pretty accurately judged from the little he says. He evidently has self-esteem, love of approbation, and acquisitiveness large. He gives us twenty-three pages of matter, extracted from the works of Mr. Chadwick, Dr. Southwood Smith, Dr. Neil Arnott, and Mr. George Alfred Walker, his object being to transmit the fruits of their exertions to remote posterity, which, unaided by him, they would not reach without serious mutilation. He certainly is considerate; for he takes care that succeeding ages shall not complain of the bulk of the burden he would impose upon them. Let him speak for himself:—"It appeared to me," says he, "that, unless something of this kind were done, the history of Sanitary Reform would fall into nearly *the same state as the early history of Rome.* Claimants for priority of original ideas are springing up in every region of the earth; and the Essays, from which the following Digest is culled, were in danger of going down to posterity, *shorn of their beams*, solely because they are so true and pertinent, that they seem like old fragments ingeniously put together, without trouble or claims to originality by their Authors. True, Homer and Shakspeare have, at certain hands, shared the same fate,—and that must be some satisfaction to those who dare to publish what is simple and true in language that can be understood by the merest tyro."—Preface.

This is modest, and exquisitely logical. He admits that the Essays in question would go down to posterity, but shorn of their beams, unless accompanied by twenty-three pages of matter extracted *from* them, with the addition of his *own* examination on the sanitary movement, as an Appendix. Why it should be so we cannot possibly divine. The compiler does not show, nor do we think the reader can guess.

He compares the gentlemen of the Commission, in their fate, to Homer and Shakspeare. It is certainly the first time that Mr. Chadwick, and Mr. Walker who has written on graveyards, ever suggested the immortal poets, and it is likely to be the last. Flattery of this kind is disgustingly gross, and if correct feelings predominate, these gentlemen will exclaim, God preserve us from our friends! Dr. Southwood Smith possesses great taste and extensive acquirements; Dr. Neil Arnott is a man of unquestionable genius; but even the four together would never remind us of Homer or Shakspeare.

Why essays, in going down to posterity, should be shorn of their beams, because they are "true and pertinent," is a strange doctrine. They go down because they *are* true and pertinent; and nothing, wanting these qualities, ever lives to take so long a journey. It dies early by the way. Mr. Simpson, however, would appear to be preparing himself, by their aid, for a choice berth in connexion with the sanitary movement. Indeed, he intimates the want of a Medical man to administer the Act; and hence we may understand his gratuitous services to these gentlemen, putting them in excellent travelling condition, well packed and labelled with the Digest, with a recommendation how to proceed, and facilitating their reception at the different stages where they rest, on that rugged, circuitous, and little frequented path, which ultimately terminates in Posterity,—the most ungrateful of all personages, who never did the slightest good.

We approve of the plan of giving to the world, in a cheap form, an epitome of elaborate inquiries into the sanitary condition of the people. The same principle is carried out in regard to all branches of science. We have our abridgements on Astronomy, Physics, Chemistry, Political Economy, Botany, &c., and why should not a knowledge of those matters, which bear immediately on the health of mankind, be brought home to them in such a manner that it cannot fail to teach them to think? Our objection is to the inflated nonsense of the writer. His flourishes about the history of Rome; the striking similarity between it and the imperfect recollections of the early sanitary movement; the extraordinary transition from Homer and Shakspeare to Mr. Chadwick and his colleagues, and the marvellous coincidence in their fate, are truly ludicrous. Is it possible that the labours of these gentlemen can suggest to the classical reader the imperishable productions of the immortal poets? Mr. Chadwick is unquestionably a character, and the dramatist might weave his actions into an admirable plot. We do not wish in any degree to detract from their merit. The man who can ride the storm like the petrel, uninjured by the clashing elements, and who, like the young cuckoo, when the struggle is over, remains the sole tenant of the nest, has no small claims on our consideration.

There are more battles on a cabbage leaf than the historian imagines. We have studied them, thanks to the microscope. They certainly do not remind us of the achievements of Homer and Shakspeare; they tend rather to lower us in our own estimation, by calling to recollection some of the lowest features of humanity,—its strife for power, its ingenuity for pre-eminence, its persistence in a determined cause,—not always ennobling in its aim,—the tact with which the desired end is accomplished, and the thorough discomfiture of an enemy, thrown upon his back—a position in which some animals perish, not having the power of righting themselves—are among the striking phenomena we have observed on a cabbage-leaf.

One word of parting advice to Mr. Simpson. If he will not confine himself to the registration of the deaths in St. Giles's, and to the fabrication of paper figures, to teach the Hindoos anatomy, let him study simplicity of style. He may rest assured, that when a man *attempts* to write finely, leaves the ground on which he has been accustomed to walk, and gets upon stilts, he is then in the condition of an inexpert swordsman, and using a weapon which is sure to do injury either to himself or others.

On the Treatment of Headache by Benumbing Cold: with an Account of other Remedial and Anæsthetic Uses of Congelation. By JAMES ARNOTT, M.D. London: J. Churchill. 1849.

A gentleman about to proceed in a judicial capacity to India, was advised by the friend to whom he owed the appointment, to assign no reasons for his decisions in Court; for, said he, "I am sure that your judgments will be right, as I am that your reasons for them will be wrong." We wish some such advice could be impressed on the minds of writers on therapeutic agents. Their facts are often irrefutable; but when they attempt to explain them, we detect a fallacy in the explanation and then we disbelieve, or what is the same thing, disregard them altogether. We are particularly anxious to impress this on Dr. James Arnott, of Brighton, our author, because we know, that not only is he a most scientific physician, but also a man peculiarly able to advance our knowledge of the effect of remedies.

The little pamphlet before us is composed of three parts: the first on the treatment of headache by congelation; the second, on the effects of the same process as a remedy in erysipelas; while, in the third, he details the advantages of severe cold as an anæsthetic agent. By severe cold, Dr. James Arnott intends not cold water, nor even ice, for of the latter he says, "instead of immediately benumbing the part to which it is applied, as congelation does, it causes pain or aching, and consequently excites irritation;" but a frigerific mixture capable of reducing the temperature to zero of Fahrenheit, produces "such a degree of cold as will immediately benumb the part to which the mixture is applied, arrest the circulation of blood through it, and even congeal the fluids contained within it."

The following are the practical directions given by Dr. James Arnott for preparing and applying the frigorific mixture:—

"The frigorific that I have usually employed in the treatment of headache, and other diseases, is the common mixture of pounded ice and salt; which, if properly prepared, reduces the temperature to a few degrees below zero of Fahrenheit's thermometer. In applying this frigorific to the scalp, when the hair has not been shaved, but only closely cut, I have occasionally rendered it more powerful by the addition of a little powdered sal ammonia and nitre. The most convenient and efficient mode of applying the frigorific mixture is to put it into a small net, made of thin silk gauze, tied to a ring of gutta percha, and to allow the more or less of the net, according to the space to be congealed, to rest upon the part, the brine being absorbed, as the ice and salt dissolve, by a sponge, or a piece of moist flannel."

The frigorific mixture is to be kept in contact with the skin till the latter becomes white and hard; from one to three minutes will ordinarily be sufficiently long to effect the congelation. Dr. James Arnott combats powerfully any argument *à priori* against the application of such a degree of cold to the animal tissue, and asserts that not once in the five hundred instances in which he has employed it, have any injurious effects followed its use. After pointing out the necessity of ascertaining the particular affection which causes the pain in the head, our Author proceeds to show that it is in those forms of headache usually termed nervous headaches, sick headaches, brow agues, and rheumatic headaches, that cold applied of such a temperature as he directs has proved to be "as efficacious a remedy as bark in intermittent fever." Ten cases of headache are

then detailed, in nine of which either temporary or permanent benefit was obtained.

The benefit to be derived from the application of severe cold in erysipelas is limited to its local effects: "it will obviate the danger that would arise from the accompanying external or accessible inflammation."

The other cases in which congelation is recommended by Dr. James Arnott are, suppurating boils, carbuncles, and glandular swellings, mercurial ptyalism, toothache, various skin affections, and especially impetigo and prurigo. With the following case of a very obstinate form of the latter disease cured by congelation we must conclude, assuring our readers, however, that they will find this little work one of high practical utility:—

"Mrs. W——, 5, Blackman-street, was in attendance at the Dispensary, in November last, for another affection, when she was attacked with prurigo pudendi. After the ineffectual use of prussic-acid lotion, and other measures, congelation was applied, by placing a rounded piece of ice, covered with salt, between the labia. It was dipped twice in the salt and retained in contact with the diseased part about a minute, during half of which time, probably, the surface was congealed. A considerable smarting succeeded the application, and continued an hour. There was much relief from the itching; but, as it was not quite gone two days afterwards, the congelation was repeated, and with the effect of entirely removing the disease."

DEATH OF WILLIAM CLIFT, ESQ., F.R.S.

This gentleman expired at his residence, Stanhope Cottages, Hampstead-road, on Wednesday morning, the 20th inst., in the 77th year of his age, having been born at Bodmin on the 14th February, 1772. He received his education at the school of his native town, and, manifesting more than usual abilities, and a marked talent for drawing, he attracted the attention of Mrs. Gilbert, the wife of Davies Gilbert, Esq., the late President of the Royal Society, between whose family and that of John Hunter there had long subsisted a close intimacy. By this gentleman he was recommended to Hunter, who, requiring the services of an anatomical assistant and draughtsman, engaged the services of the deceased, as a youth well calculated to supply the place of so able a man and accomplished an artist as the late Mr. Bell. That he acquitted himself to the admiration of his illustrious master is well known; but the following tribute of the great Cuvier sufficiently testifies to his talents as an artist. In his "Ossemens Fossiles," speaking of the fossil bones discovered by Mr. Joseph Widbey, an account of which appears in the Philosophical Transactions for 1823, with Mr. Clift's elaborate drawings, he observes: "Et suivie d'une description et d'excellentes figures des os les plus remarquables qui q'ont été trouves, faites par M. Clift, dont le beau talent a déjà enrichi ce recueil de tant de planches, non moins remarquables par leur exécution que par leur fidélité."

Mr. Clift was deservedly well known to the public as the conservator of the Hunterian Museum; a situation he had held for nearly half a century, having been appointed to that office on the purchase of the collection, by Government, of the executors of John Hunter, to whom he had been an articled student and fellow-labourer in the formation of that magnificent monument of the genius of his immortal master.

Mr. Clift was a Fellow of the Royal Society, and greatly esteemed by the present and former distinguished *savans* of that body, particularly the late Sir Joseph Banks, Dr. Wollaston, and Sir Humphrey Davy, then President of the Society, who had so high an opinion of the deceased, that he used his influence to admit Mr. Clift as a "Fellow," before the increase of the now expensive admission fees, this gentleman being the last admitted on the old scale.

Mr. Clift was a man of sterling honesty and independence; indeed, so far did he carry the latter feeling, that he hesitated not to severely censure the late Sir Everard Home, the President of the Royal College of Surgeons (and from whom he had received the greatest kindness), when told by that gentleman that he had destroyed the whole of the Hunterian MSS. Mr. Clift's reply was, "Well, Sir Everard, there is but one thing more to be done, that is, to destroy the collection;" saying which, he turned his back on the literary incendiary; and, as he told the writer, "could not help crying, to think that all the labours of his great master had been destroyed by a man that his wholesale plagiarisms might not be detected in the lectures on Comparative Anatomy, and papers, communicated to the Royal Society by Sir Everard Home, after Hunter's decease." The statement of the destruction of the MSS. was obtained from Mr. Clift in his examination before a Committee of the House of Commons, when this disgraceful affair was, for the first time, made public. One of the reasons given by Sir Everard Home for burning the papers of Hunter was, their unfitness to meet the public eye; but the writer has in his possession a letter from his lamented friend, in which, after expressing his conviction that a manuscript account of the cure for hydrocele (a) is undoubtedly in the genuine handwriting of John Hunter, proceeds:—"The orthography, calligraphy, and punctuation afford but a lame excuse to Sir Everard Home for destroying all the Hunterian manuscript; the sense is good enough and strong enough for those not wilfully blind."

The lamented deceased was at the College of Surgeons on Friday last, in apparently good health; on Tuesday, he took rather a long walk, and returned very much exhausted, complaining of shortness of breath, and some uneasiness about the heart; he retired to rest, when the symptoms increased, and he expired in the arms of his only child, the amiable wife of Professor Owen, apparently of the same affection as his great master.

Mr. Clift was the Author of the following contributions from the Geological Transactions:—"On the Megatherium brought from Buenos Ayres by the late Sir Woodbines Parish;" "On the Fossil Remains of Two New Species of Mastodon;" "Remarks on the Bones of the Mammoth sent from New York;" and "On some Fossil Bones from Oreston," from the Philosophical Transactions.

EXTRACTS FROM OFFICIAL REPORTS ON THE SOLUTION OF CHLORIDE OF ZINC, as an agent for the destruction of deleterious gases, or the effluvia arising from the decomposition of animal and vegetable substances; for purifying the wards of hospitals or sick chambers; and for preserving anatomical preparations.

EFFECTS OF THE SOLUTION OF BILGE-WATER AND THE EFFLUVIA ON FOUL HOLDS.

The Right Honourable the Lords of the Admiralty having directed Sir William Burnett to cause the following facts relative to the action of the solution of chloride of zinc on bilge-water, and on certain deleterious gases extricated during the decomposition of animal and vegetable substances, to be made known throughout the naval service, and to the public generally; it is proper to state, that it is not intended to claim for the solution any direct influence over the more subtle elements of which the contagion of febrile and exanthematous diseases is supposed to consist, although it yet remains to be proved whether it has or has not some controlling power over these; were presumptive proof admissible, evidence is not wanting to warrant the conclusion that it has, at least, a modifying influence. For the present, it is not deemed advisable to do more than to point out, by a selection of documentary evidence of a character hardly to be disputed even by the most incredulous, that it is a fluid calculated, above all others that have yet been discovered, to improve the sanitary condition of densely-populated localities, as well as to add to the comfort of all grades of society, whether in health or disease. In proof of this it will not be necessary to resort to vague assertion; the facts which will be adduced to prove its action on known deleterious gases, and on what may be called the morbific or offensive animal miasmata, are explicable upon the principles of sound chemical philosophy, or, at all events, admissible on the grounds of the constancy of the results obtained from repeated experiments carefully conducted under the observation of men, the conscientious wording of whose documents sufficiently attests, that their only aim in these investigations was truth. Nothing has been stated on bare theory, and nothing admitted until the premises were undeniable. It is, moreover, a consideration of no minor importance to know, that the fluid being innocuous in itself, no evil consequences need be apprehended from its most abundant use,—a quality not possessed by several other substances and fluids employed for disinfecting or purifying purposes.

For the preservation of timber, canvas, and cordage, the chloride of zinc was first employed under patent in the year 1838, and is now in general use for that purpose in the principal Royal Dockyards and Arsenals, as well as in many extensive private establishments; but it was not until a later period, that the discoverer, Sir William Burnett, by the most simple process of reasoning, was led to suppose, that, as it acted as a preservative on these bodies, it would also arrest decay already begun. This, by experiment, was found to be the case, and further, as a necessary consequence, that the evolution of effluvia was also instantly arrested. To put this property, however, fairly to the test, some substances in a state of decay, together with offensive bilge-water, were obtained, to which, in separate portions, small quantities of the solution, of various degrees of strength, were added, and in every instance with the most satisfactory result. The effluvium was instantly and completely annihilated.

(a) Published in this Journal, January 27th.

Extract of a Letter from E. Elliott, Esq., Assistant-Surgeon R.N., to Sir William Burnett.

The Vanguard, Albion, and Rodney, were all at Malta during the greater portions of February and March, of 1847. The two latter were cleared out, and thoroughly caulked, but the after-hold of the former was only cleared, which was well swept, dried, and then thoroughly imbued with the solution of chloride of zinc, used according to the directions, so that it might come in contact with the whole of the surface, and the remainder of the proportion supplied was injected by means of the fire-engine, through the skin of the vessel, into every part, fore and aft, and would, consequently, be applied to a large proportion of her timbers, as well as under the lining, about the kelson and wells; but this course was not pursued in either of the other vessels. In the Albion, a small quantity was simply sprinkled in the after-hold, and in the Rodney I could not learn that it had been used at all, or, if so, not sufficiently to produce any good results.

All these vessels sailed about the end of March for the coast of Greece, and were employed there, and among the Greek and Ionian Islands, until their return to Malta, early in October. During this period, they were exposed similarly to the same causes; in neither was leave given to the ship's company, by which any diseases might have been introduced or originated from intemperance while on shore; and almost the same discipline was observed; they had all been upwards of two years in commission, and nearly similar hygienic rules respecting the cleansing of decks were observed in each; and yet the comparative immunity which the Vanguard enjoyed from disease, and the small number of her sick-list, was the general subject of remark among the medical officers of the fleet. She was not more roomy or better ventilated than any of the others, indeed, perhaps, less so, as they had each a scuttle abaft the mainmast, through which a windsail passed to the after-hold, which she had not; all were equally crowded with supernumeraries, yet on going on board either of them there was a marked difference in the sweetness of the ships below, and their freedom from unpleasant smells.

In both the Albion and Rodney, the effluvia from the after-holds, which contain salt provisions, was very disagreeable, and the smell of the bilge-water rendered the cock-pit cabins scarcely habitable to the officers, blackening not only the white paint, but tarnishing gold lace. The diseases which occurred in these vessels assumed a more severe type, especially on board the Rodney, and the numbers on the sick-list of each were generally double that of the Vanguard. Now, to what can this immunity and this difference be attributed? After much reflection on this point, and viewing it in all its bearings, I can come to no other conclusion, than that the chloride of zinc, used as it was in the Vanguard, must have produced some effect, and is entitled to its full share of credit in contributing to this singular freedom from those diseases which may originate from effluvia, arising either from stagnant water, or the evolution of deleterious

gases during the decomposition of animal or vegetable substances in the holds of ships.

I have the honour, &c., &c.

(Signed) ERNEST ELLIOTT.

To prove the correctness of the statements made in the preceding letter, the reports from the Rodney, Albion, and Vanguard were referred to, and the comparative rate of sickness found to be as follows :—

Department of the Director-General of the Medical Department of the Navy, January 17, 1848.

A COMPARATIVE QUARTERLY STATEMENT of the Sick of the following Ships, extracted from the Nosological Returns received into Office during the year 1847.

Ships' Names.	Number Sick. Lady Quarter, 1847.	Midsummer Quarter, 1847.	Michaelmas Quarter, 1847.	Total Number Sick during Nine Months.	Of Diseases frequently influenced by causes within ships of war, there occurred on board the undermentioned as follows. Fevers.	Erysipelas.	Rheumatism.	Ulcers.
Rodney ...	243	194	279	716	55	11	37	40
Albion ...	156	210	204	570	48	2	33	42
Vanguard.	155	146	113	414	6	2	22	24

B. P. HOBART.

PRESERVATION OF ANIMAL SUBSTANCES.

Not the least singular and useful of the properties belonging to the chloride of zinc solution is that of preventing or arresting the process of putrefaction in dead animal substances; for this purpose, together with its "antibromic" powers, it has been recently used with marked benefit in several of the London anatomical schools, and by private individuals, in performing laborious dissections of the inferior animals. It has also proved a singularly useful menstruum for preserving specimens of morbid anatomy. As a proof of its having these properties, it is presumed the following documents will be deemed satisfactory; if they are not, the production of any others tending to establish the same facts, would as a matter of course be equally unavailing:—

14, Golden-square, February 13th, 1846.

My Dear Sir,—It affords me much pleasure to state the result of some experiments I have made with your patent fluid, with the view of testing its value as a preservative of animal structures prepared by the anatomist. This will not require many words. When used in a proper degree of dilution (about one part to fifty of water) its success is complete, and it appears to me to preserve the colour and texture of the parts very admirably. It has the further very important advantage of not acting on the steel instruments employed, being, in this respect, equal to alcohol. I consider this fluid as a very valuable addition to the means hitherto at our command for such objects.

Believe me, my dear Sir, very faithfully yours,

(Signed) W. BOWMAN, F.R.S.,

Demonstrator of Anatomy in King's College, and Assistant-Surgeon of the King's College Hospital.

Sir William Burnett, K.C.H., &c. &c.

14, Golden-square, March 8, 1847.

My Dear Sir William,—Since I last reported to you the result of the application of your fluid to the purpose of preserving anatomical specimens, I have had more extended experience of its employment in the same way. We have injected with it the subjects dissected at King's College, under the provisions of the Anatomy Act, during the last six months, and I have great pleasure in assuring you that I regard it as a very valuable material. The different animal textures admit of being perfectly preserved from putrefaction under its judicious employment, and I need not say that it has enabled us to keep the apartments where dissection is carried on, in a more salubrious and wholesome condition than heretofore. When we consider how extremely important it is to the whole community that the fullest means should be afforded to medical students to master the details of human anatomy, and thus to lay the foundation for a substantial and sound knowledge of medicine and surgery, the discovery of a fluid which will remove the greatest impediment to dissection, and render its prosecution not unhealthy, must certainly be regarded as a public boon, and the liberality which you have shown in giving us abundant supplies of your preparation, for the purpose above mentioned, deserves our warmest acknowledgments.

(Signed) W. BOWMAN,

Demonstrator of Anatomy, &c.

Sir W. Burnett, K.C.H.

From Professor Sharpey.

University College, London, Oct. 29, 1845.

My dear Sir William,—I gladly state the result of the trials I have hitherto made of the chloride of zinc, as a preservative of the dead body for anatomical purposes. * * * *

The liquor not only prevents the access of putrefaction, but corrects its effects, and arrests its further progress when employed after the process has commenced. I witnessed a most signal instance of its efficacy in correcting offensive putrescence, and checking further decomposition, during the warm and moist weather of July, and can speak most confidently on the point.

We are now trying the qualities of the solution as a liquid for preserving wet preparations in jars, for which purpose I think it ought to answer well. I shall let you know the result of our trials when sufficiently advanced.

I remain, my dear Sir William, yours faithfully,

(Signed) W. SHARPEY.

To Sir William Burnett, K.C.H., &c. &c.

University College, London, March 10, 1847.

My dear Sir William,—Further trials, and eighteen months' further experience of the use of your antiseptic liquor, have only served to confirm my conviction of its decided efficacy in checking the putrefaction of animal substances, in permanently preserving from decay portions of the animal body immersed in it, and in correcting offensive smells, arising from putrescent animal matter.

Yours faithfully,

(Signed) W. SHARPEY.

Sir W. Burnett.

ACTION OF THE CHLORIDE ON OFFENSIVE EFFLUVIA.

To obtain a substance harmless in itself, and free from smell, but possessed of the property of destroying all other smells, particularly such as are offensive or injurious to health, has long occupied the attention of scientific men, more especially such as were interested in the health, comfort, and longevity of that part of the community compelled to reside in densely-populated towns; but, until this solution was brought into use, it may be safely asserted, that no such boon had been extracted from the secret stores of nature. Under this privation, we had become accustomed to the employment of various things that are not only ineffectual, but, in a large majority of instances, positively obnoxious to the senses, detrimental, and, it may even be asserted, occasionally dangerous to health. Such, for instance, are the fumes of corrosive gases, which, from their irritant effect on the delicate bronchial tissue, can never be breathed without considerable risk by those who have either actual disease of the lungs, or a predisposition, from whatever cause, to disease of these organs. These gases, or, at all events, chlorine gas, are, in other respects, highly objectionable, from the injury they occasion to the better sorts of furniture. The well-known bleaching properties of chlorine render it totally inapplicable where there are tissues consisting of silk, cotton, or wool of delicate dyes. The colours it would instantly destroy, and, if used to a moderate extent, it would even act upon the fabric itself.

Chloride of lime was at one time extensively used as a fumigating or disinfecting agent, both in the chambers of the sick, and for the dispersion of foul odours in close places, but without the slightest advantage. The same objections, in a modified degree, apply to it as to the former. It has, therefore, of late, been almost entirely discarded from use within doors; the smell arising from it being, moreover, to many people, more insufferable than those it has been required to correct, particularly as it only partially covers other effluvia, without in the least degree destroying them or preventing their evolution. It thus becomes an aggravation of the evil sought to be got rid of. The smell of vinegar, although grateful and refreshing, yet, when mixed with the tainted air of a sick chamber, or the wards of an hospital, where offensive animal effluvia are seldom altogether absent, is exceedingly disagreeable and sickening. Equally offensive, if not more so, is the smell from burning rags,—a mode of fumigating that has too frequently been resorted to, from a want of other means, in the humbler walks of life.

Pastiles, although they are seldom burned in the presence of the sick, are not unfrequently made use of to overcome offensive odours; the principle, in fact, on which nearly the whole of these articles have been used, and the only advantage they are capable of affording.

Considering the acrid, poisonous nature of several substances with metallic bases, the introduction of secret chemical compounds for purifying the wards of hospitals, and the dwellings of the poor, cannot be too strongly repudiated, at least by medical men; yet a preparation of lead, one of the most obnoxious of the metals as regards health, with which we are acquainted, but which possesses considerable destructive power over certain mephitic gases, has been proposed for general use as a disinfectant. Whatever its properties may be in this respect, and it is assumed they are not great, there are few people acquainted with the danger of sleeping while in sound health in a newly-painted room, that would consider the diffusion of the vapour of a solution of one of the salts of that metal in the wards of an hospital anything but a very dangerous and an unwarrantable procedure. As the vapour of the preparations of mercury, when diffused in the atmosphere, will speedily produce the specific effects of that mineral on those exposed to them, so it is submitted, under every precaution, will those of lead produce its specific effects, namely, obstinate colic, paralysis, and permanent decrepitude. The danger attending the application of the solutions of lead, mercury, and arsenic, to even superficial sores, is well known to every medical man; in an equal degree should the community be advised of the danger of these poisons when applied directly to the body, diffused in the foul atmosphere of an ill-ventilated house, in the wards of a crowded hospital, or between the densely-peopled decks of a ship.

THE CHOLERA AT DUMFRIES.

[To the Editor of the Medical Times.]

SIR,—In Dr. Grieve's reply in the *Medical Times* of the 16th inst., he admits, that the precautions taken to isolate the cholera patients in the Dumfries Infirmary, were the same as those always in force with respect to *typhus* and other febrile diseases; which precautions have hitherto been found sufficiently rigid to prevent the spread of fever in the house. The isolation of the patients being the principal question as to which Dr. Grieve and I are at issue, I think it equally unnecessary and unbecoming to protract the controversy any farther.

I am, Sir, your obedient Servant,

W. T. BARKER.

Dumfries, 18th June, 1849.

OPEN SHOPS AND HOSPITAL SURGEONS.

[To the Editor of the Medical Times.]

SIR,—A Correspondent, who signs himself "M. D. Edin," in your Publication of the 2nd inst., has thought proper to repudiate, in an indirect manner, the motives that actuated the late Surgeons of the South London Dispensary to resign their situations, when it became essential for their own reputation and the character and respectability of the Profession. I trust, Sir, the majority of the respectable moiety of the Profession will accord to them their unqualified approbation. If we are to secure a proper status in public estimation, we must convince society that we are actuated by honourable and gentlemanly feelings.

In canvassing the conduct of the above-named individuals, your Correspondent appears to have mistaken the real bearings of the question, and, to serve his own unworthy purpose, and obliterate, if possible, the real gravamen of the charge, viz., the open sale of quack medicines, (the prominent ground of attack,) his denunciation seems to have been directed alike on friend and foe.

The real facts of the case are these:—A resolution of the Committee of Management had been in existence and rigidly enforced since the formation of the Dispensary for the rejection of all persons keeping open shops, whereby they were incapacitated from holding the office of Surgeon to the Institution; and why, in this instance, so salutary a regulation should have been annulled, is to me a matter of surprise and extreme regret. Does this "M. D.," the champion and advocate of the Purer of the Profession, pretend to deny, that the open and undisguised sale of secret remedies, together with its concomitants, is anything but derogatory to the dignity and character of a member of the Medical Profession; and if, as it appears, by his own admis-

sion, he is a Member of the College in Lincoln's-inn-fields, how does he reconcile such disgraceful conduct and practice with the solemn asseveration made on his admission to that Institution? Does he by these means redeem the pledge then given of supporting the dignity and character of the Profession to which he belongs? And are these the feelings and sentiments by which a member of our body ought to be actuated? Doubtless, he will smile with ineffable contempt at my Gothic notions of character and respectability; but depend upon it, Sir, the value of our services, and the rank we sustain in public estimation, will be measured by the estimation in which they are held amongst ourselves.

We must be governed by nobler motives than those emanating from a desire to obtain a pounds-shillings-and-pence distinction; we ought to prefer praise to pudding; and, though I willingly acknowledge that every man is entitled to a fair remuneration, for services rendered the community, yet no man is entitled to distinction in our profession whose sole aim is to aggrandize himself at the sacrifice of honour and respectability.

To dispute the legitimate right of any member to keep an open shop for the sale of drugs, quack medicines, tooth brushes, &c., &c., would be absurd. It is his violation of the moral law, and his dereliction of the sacred duty he owes to the character of his profession, I most solemnly condemn; and even the plausible plea of necessity, so repeatedly urged by those whose cupidity prompts them to a commission of this violation, ought not, in my estimation, to shield them from the discredit they deserve. True, every man may claim an inherent right to resort to any stratagem calculated to insure the one important consideration—an increase of practice. But when he has demeaned himself and disgraced his calling, he has no right to quarrel with the public, if they are sufficiently complimentary to estimate him according to his own standard of valuation. Those men who keep open shops, and thereby convert an honourable and scientific profession into a trade, are precisely the individuals above referred to. Permit me, in conclusion, to declare, that, in making the foregoing comments on this important subject, I have been actuated by no other motives or wishes than those arising from an ardent desire for the honour and welfare of the Profession, to which I have been connected for many years. I have no connexion directly or indirectly with the South London Dispensary or its Medical Board, and I therefore disclaim all interested or personal feelings in the matter. As a disinterested party, I have defended their conduct, and I trust they will meet with the sympathy and approbation of all the General Practitioners in the Kingdom.

I remain, Sir,
Yours obediently,
PHILO-MEDICUS.

June 12, 1849.

[At the request of our Correspondent we have inserted this letter, but must decline publishing any more communications on the subject, except as advertisements.—ED.]

CORONER'S INQUEST.

DEATH CAUSED BY A DELETERIOUS QUACK MEDICINE.

On Saturday, the Coroner for East Middlesex held an inquest at the Market-house Tavern, Finsbury-market, on the body of Jane Garner, aged 23, whose death was occasioned by the administration of a well-known deleterious quack medicine, under the circumstances subjoined.

The inquiry was adjourned from the previous day, for the purpose of having a *post-mortem* examination of the body, and an analysis of the contents of the stomach; committed to Dr. Leeson, of Finsbury-square, in conjunction with Mr. Davis, a surgeon.

From the evidence it appeared that the deceased, who was a single young woman, had been in servitude, had recently left her situation in Yorkshire, and was staying at her brother's, No. 41, Finsbury-market. About a week previously to her death she caught a severe cold, which compelled her to lay up. In a few days afterwards, her brother David, finding she did not get better, took upon himself the treatment of the case, without consulting any properly qualified medical practitioner, and adopted as a remedy the *lobelia inflata*, or emetic weed process, administering a teaspoonful at a dose. The medicine, however, proved ineffectual, and the result was, the patient died, on Thursday the 14th instant, four days after the first dose.

Dr. Leeson examined: I have made a *post-mortem* examination of the body, as well as an analysis of the contents of the stomach, and was assisted by Mr. Davis. There were no external marks of violence on the body, which appeared to be correctly and symmetrically formed, but slightly attenuated from chronic inflammation of the left lung. The brain was healthy. From the nature of the inflammation, the powers of life seem to have been principally carried on by the right lung. On examining the œsophagus, we found adhering to its sides large quantities of the powder of lobelia. In the stomach we also found a considerable quantity, none of which had passed the intestines or the duodenum. The heart was large and flabby, and the kidneys were in the same condition. The deceased was not pregnant, as had been supposed. We separated the contents of the stomach by filtration, and found considerably more than a teaspoonful of the powder.

The Coroner: How many grains do you think would be sufficient to produce an emetic?

Witness: I should say about 10.

The Coroner: And how many do you consider were administered in this case?

Witness: About 140. (Sensation.) This powder acts similar to tobacco, *i. e.*, powdered tobacco or snuff.

The Coroner: Do you mean to say that powdered tobacco or snuff would destroy human life the same as this powder?

Witness: Yes; a teaspoonful of either would kill any person. Lobelia introduced into the stomach would affect the whole nervous system, produce a spasmodic action of the muscles, ending in convulsions and death.

The Coroner: Oh, then, have you any doubt in your mind that death was caused in this instance by the lobelia powders?

Witness: I have not the least doubt about it.

Coroner: Are the nerves visible at all so as to show that?

Witness: No; we only decide by analogy. We know that, if certain things are introduced into the system they will produce death; and that is how we arrive at a conclusion in such cases as the present; otherwise, the science of medicine would be but a mere nonentity. Narcotic poisons leave no other evidence of their administration, the action being entirely on the nerves, and so paralysing the vital functions, which causes death. As a remedial measure, this herb has never been received into the London Pharmacopœia.

Coroner: Yes, yes; but are you, as a medical man, enabled to say whether, in this particular case, death has been produced by lobelia?

Witness: According to every rule in medicine, I should say, that this powder *would*, and *has*, produced death in the present case.

Coroner: But you must tell us, if you can, positively, whether it has, or whether it has not, caused the death of the deceased.

Witness: To the best of my belief it has.

The Coroner: This is one of the most extraordinary cases I have ever had come under my notice since I have been a Coroner. I certainly did mention the subject to a physician yesterday, a gentleman of very great professional repute, and he informed me, that lobelia was used as a medicine in large quantities; although I hear, upon the present occasion, it has been condemned as an improper medicine.

Mr. Davis was next examined. He corroborated the evidence of the last witness, and said, that there was an extensive adhesion of the left lung to the anterior surface of the ribs, the diaphragm, and the pericardium, whilst the lung itself was emphysematous. Taking into consideration the healthy condition of the brain, there being no extraordinary secretion of the windpipe, the healthy condition of the stomach and the intestines, and also the liver, the plump state of the body externally,—I am of opinion that there are no grounds to state that she was in a condition approaching to death, notwithstanding the diseased state of the lungs; but, on the contrary, believe that death has ensued from the administration of a certain powder, which I believe to be *lobelia inflata*.

Cross-examined: I have administered the tincture of lobelia in asthma. I have looked into the work adopted by David Garner, and the instructions therein are, to give a dose of a teaspoonful at a time, and to be repeated every half-hour until the medicine operates as an emetic; the author continues, "never mind *Hooper*."

Coroner: What is meant by that?

Witness: Hooper is one of the most eminent medical authorities of the day, who has written against the use of lobelia as a dangerous quack medicine.

Rebecca Ford, 24, Union-street, Spitalfields, herbalist, deposed to her having sold the medicine to David Garner, with the understanding that he had the work of Mr. Coffin.

Coroner: Can anybody purchase this powder at your shop?

Witness: No, we never sell it to any one who has not the book. We had been in the habit of selling it to Mr. Garner, and of taking it ourselves. It has never done us any harm. We always get the medicine from Mr. Coffin, in Manchester. We buy about four or five pounds at a time of him; we sell it at 5d. per ounce.

The Coroner then cautioned the witness against the sale of so dangerous a medicine in future, observing, that she would render herself amenable to the law in the event of a second case occurring. The witness retired.

The Coroner summed up at great length, and observed, that it would be a question for the decision of the jury, looking at the vague and very improper way in which the medicine in question had been dealt with in the work already alluded to, whether Garner had exercised rashness or gross inattention so as to cause the death of his sister; but, if they should be of opinion that he had been misguided by the book, and that he had no intention to destroy the life of deceased, then he could not be held criminally responsible for her death, otherwise the case clearly amounted to one of Manslaughter.

The jury then retired, and, after half an hour's deliberation, returned the following special verdict:—

"We find that the deceased, Jane Garner, died on the 14th of June, inst., from the deleterious effects of a certain noxious *medical herb* called *lobelia*, administered to her as a medicine to restore health, and without any intention of destroying life. The jurors, however, cannot separate without expressing their opinion of the injurious effects thus being produced by a work written by A. J. Coffin, of Manchester, which has led to an incautious and indiscriminate use of the medicine in question, which has been condemned by medical testimony, and which is entitled, "A Botanic Guide to Health."

At the conclusion of the inquiry, it was stated that there had been fourteen editions of Mr. Coffin's work, and the one in question was the eleventh, published by Irwin, of Manchester, in 1848.

The man Garner, who is a mechanic, now lies dangerously ill from an overdose of lobelia, coupled with the excitement consequent upon the decease of his sister.

[The death of Sarah Garner is another call to the Legislature to use its power to put down quackery. It is not a question which relates merely to the welfare of the Medical Profession, but to the public at large. Quackery has never, that we know of, accomplished any good; while there are many instances in which it has increased human suffering, and brought on premature death.—ED.]

CITY NUISANCES—CHOLERA.

Mr. Simon, the London Officer of Health, has addressed a letter to the Court of Sewers, wherein he says, that "within the last fortnight I have found many reasons for believing that an extensive outbreak of cholera is impending. The steps of its approach are uncertain, depending, probably, on atmospheric variations which it is impossible to foresee; but there is no reason within my knowledge for indulging a hope that the city will continue to be exempt from an epidemic prevalence of the disease. Whether we shall escape comparatively unhurt, or shall suffer from the pestilence in the same proportion as Paris, where, a week ago, 600 or 700 deaths were occurring daily, from the cholera alone, this is a question on which (however alarming may be the doubt) it is impossible to pronounce a decided opinion." And he then proposes immediately to carry out the suggestion advocated by us in a former Number, of employing a sufficient body of the more intelligent of the police force, vigilantly to inspect and report upon the state of those parts of the City that seem to require it, and strictly to enforce the abatement of every nuisance that may come under the influence of the Act. This proposition was fully acquiesced in by Mr. Deputy Peacock, the Chairman; and Mr. D. W. Harvey, the Commissioner of the City Police, most readily undertook to carry it out in its fullest effect, reporting the results to Mr. Simon, who will sit daily at Guildhall to receive the same. We hail this as a good omen, hoping that the example will extend to every city, town, and village in the kingdom; for sure we are,

that, notwithstanding the great improvements of modern times, there is still a large margin in this matter; and nothing has more surprised us, than the apathy exhibited by the continued existence of nuisances of the most offensive and injurious kinds, both in town and country, which, by a little sense and a little expense, might easily have been removed.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, 14th June, 1849:—George Thomas Jones, Winthall; George Chatfield; Alfred Puddicombe, Moreton Lampstead, Devon; Edward Edwards Phippen, Westmore, Somerset.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the diploma were admitted members of the College at the meeting of the Court of Examiners on the 15th inst.:—Messrs. Thomas James Dunne, Haslar Hospital, Gosport; Horace Crofts Hastings, Turnham-green; Joseph Lake, London; Samuel Wallace, Carshalton, Surrey; George Samuel Garrard, Tasmania; William Bayldon, Royston, Yorkshire; Thomas Carlyle Beatty, Easington, Durham; Thomas O'Reilly, Virginia, Ireland; John Denis Macdonald, Berners-street, Oxford-street; John Wilson, Lower Thames-street; George Parker, Brightlingsea, Essex; and Alexander Scott Fogo, Dublin.

COLLEGE PRIZES. — The Collegial Anatomical Prize, founded by the Council of the Royal College of Surgeons for the best dissertation on a given subject, has just been awarded to Mr. Henry Gray, of Wilton-street, Grosvenor-place, a member of the College, and Demonstrator of Anatomy at St. George's Hospital Medical School, for his Essay on "The Origin, Connexion, and Distribution of the Nerves of the Human Eye, and its Appendages; illustrated by Comparative Dissections of the Eye in the other Vertebrate Animals." And an Extraordinary Premium of Fifty Guineas has been awarded to Mr. Alfred Poland, of Cloak-lane, City, a Fellow of the College, and Demonstrator of Anatomy at Guy's Hospital Medical School, for his Dissertation on the same subject. *The Jacksonian Prize*, for the best Dissertation on "Diseases of the Mammary Gland, Male and Female, and the Treatment thereof," has been awarded to Mr. John Birkett, of Broad-street Buildings, a Fellow of the College and Assistant Surgeon to Guy's Hospital.

THE COLLEGE ELECTIONS.—The *London Gazette* informs us, that the President, Council, and Fellows will proceed in solemn form to the election of three Fellows into the Council of the College, on Thursday, the 5th day of July next, at three o'clock in the afternoon, when our professional "*Vates*" predicts the results as follows:—the re-election of the retiring member of the Council, and the election of that renowned chief in surgery, Mr. Hodgson, late of Birmingham; and Mr. Wormald, of Bartholomew's Hospital, one of the most successful teachers of the day.

WAR OFFICE, June 15th.—59th Foot—Assist.-Surg. to the Forces George William Powell, M.D., to be Surg., vice Williams, promoted on the Staff. Hospital Staff.—Surg. Thomas Williams, M.D., from the 59th Foot, to be Staff Surg. of the First Class, vice Thomas Forrest Cotton, who retires upon half-pay; Acting Assist.-Surg. Edward Burrowes Sinclair to be Assist.-Surg. to the Forces, vice Powell, promoted in the 59th Foot.

OBITUARY.—At Penshurst, Kent, on the 3rd inst., in the 49th year of his age, John Pickance, Esq., surgeon, sincerely and deeply regretted.—At Stockton, on Tuesday week, Mr. Johnson, surgeon, of Appleton-on-Wisk, late apothecary of the Stockton Dispensary.

FUNERAL OF MR. CARMICHAEL.—The funeral (a public one) of this eminent surgeon took place last week. All the Members of the Colleges of Surgeons and Physicians were in attendance, besides a long train of mourners, composed of all the gentry and Professional men at present in town. The deceased has bequeathed a sum of 16,000*l.* to be divided between the College of Surgeons for the establishment of prizes, the Medical Benevolent Fund Society, and the Richmond Hospital School of Medicine.

THE CHOLERA.—Forty-two cases of this disease are reported in London during the past week, and they appear most of them to be attributed to bad drainage in the neighbourhoods where they occurred, or to want of cleanliness in the houses. An inquest was held on Tuesday on the body of a woman sixty-five years of age, who resided in Griffith's Rents, Bermondsey-street, and who died of cholera after about twenty-four hours illness. These Rents consist of eleven or twelve houses, and, according to the surgeon's testimony, are only fit to be pulled down. At the backs of the houses are foul drains, overflowing into the yard; the stench from them being very bad. The Inspector of Nuisances had reported the state of the place to the Board of Health, but nothing up to the present time has been done. The medical officer also said, at the inquest, that this spot is quite a focus of fever. The Board of Health appears to have been dosing a little. We hope, however, it will soon wake up. When places like Griffith's Rents are "reported," there should be no delay in employing sanitary measures. In the provinces the disease is again on the decline. Favourable accounts also are received from Ireland. At Rennes, the mortality has been great from cholera. It has also broken out in Silesia, at Vienna, Presburg, Cairo, and Alexandria. In Holland it is on the increase, and, in America, it is spreading with fearful rapidity.

MORTALITY TABLE.

For the Week ending Saturday, June 16, 1849.

CAUSES OF DEATH.	Total.	Average of Five Springs.
ALL CAUSES	912	963
SPECIFIED CAUSES	909	959
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	251	198
SPORADIC DISEASES:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	32	48
Tubercular Diseases	165	200
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	117	123
Diseases of the Heart and Blood-vessels	24	34
Diseases of the Lungs, and of the other Organs of Respiration	88	131
Diseases of the Stomach, Liver, and other Organs of Digestion	63	62
Diseases of the Kidneys, &c.	13	11
Childbirth, Diseases of the Uterus, &c.	11	8
Rheumatism, Diseases of the Bones, Joints, &c.	4	8
Diseases of the Skin, Cellular Tissue, &c.	..	1
Malformations	3	3
Premature Birth and Debility	23	21
Atrophy	21	17
Age	31	50
Sudden	19	11
Violence, Privation, Cold, and Intemperance	44	33
Causes not Specified	3	4

TO CORRESPONDENTS.

"M. D." has sent us a communication, containing strictures on the letter of a correspondent who signed himself "Nemo," and who stated that he had two powders, prescribed by a homœopathic doctor for a patient afflicted with chronic rheumatism, analysed by a skilful chemist, when a little sugar was detected. "M. D." says that it is quite impossible to analyze an infinitesimal dose, and that when homœopathists prescribe, their powders are merely the neutral vehicle by which the medicine is conveyed, the quantity being, in chronic cases, infinitesimal. "Nemo," and all others who are disposed to exhibit a morbid feeling against homœopathy, are recommended to consider the remarks of Drs. Forbes, Andrew Coombe, and Professor Brera on that subject.

"Psychologist."—It is sometimes a hereditary affection; sometimes it arises from disordered state of the viscera; most generally, perhaps, it is the result of long-continued irritation of a set of painful ideas nursed in solitude.

"Rusticus."—The librarians admit, on the recommendation of any one known to them, either personally, or by reputation.

"A retired Surgeon" directs our attention to some singular facts connected with poisoning by water conveyed through leaden pipes, which occurred at Ascot, some years ago. The buckhounds had for a long time suffered from "kennel lameness," the cause of which could not at first be discovered. One of the servants, however, of the establishment having been attacked with severe constipation and paralysis of some of his limbs, it was suspected that the symptoms were produced from drinking water impregnated with lead. The water of the kennel, which passes through a long extent of leaden pipe, was therefore analyzed, and found to contain so large a proportion of that metal, as to be exceedingly injurious to the animal system. The usual remedies for paralysis produced by lead poison were administered to the man, and he speedily recovered, and it appears from the investigation which followed, it was proved that the "kennel lameness" in the dogs was a species of paralysis, produced by the animals imbibing mineral poison from the water supplied by the ordinary means of leaden tubes.

"A Subscriber and Constant Reader."—We noticed the articles in the daily "Times." We have found chloroform administered in the early stages of diarrhœa a most useful medicine. In doses of from ten to fifteen minims, it speedily removes pain and arrests the action of the bowels. Mr. P. Brady, in the "Medical Times," was one of the first to recommend its employment.

"A Zealous Reformer."—We are not in the confidence of the Lord Advocate, and, therefore, are unable to give our Correspondent the "Outlines of the New Medical Bill." As soon as Medical Reform is brought before the House of Commons, we will lay before our readers all the facts.

"Mr. Bower" is referred to the Secretary of the Apothecaries' Society.

"H. P. L."—James's Powder and Pulv. Antimonialis of the London Pharmacopœia are differently prepared.

"Mr. Williams."—The formula is contained in the Dublin Pharmacopœia.

"Omicron."—Cod Liver Oil is obtained from the common cod, by exposing the livers to the sun, when, as they putrify, the oil runs from them; it is afterwards filtered. This is of a dark brown colour, from the presence of some solid matter in a state of decomposition; but it may be prepared nearly colourless by exposing the fresh livers in an earthen pan to the heat of a stove not exceeding 200 deg. Fahr. The oil then escapes and must be collected and filtered. The best is of a pale golden colour.

"A Member."—The fee allowed by law is one guinea.

"Amicus."—The work is in the library of the College of Surgeons.

"A Poor-law Surgeon."—The Guardians are not empowered by law to impose such labours. Our correspondent should lay his case before the Chief Commissioner.

"A Candidate."—Six weeks' close study will be a sufficient preparation.

"G. I., Hackney."—Glycerine is obtained by saponifying any fatty matter by a caustic alkali. The solution is then decomposed by tartaric acid, which precipitates the fatty acid. It is then evaporated, and the glycerine dissolved out by strong alchohol.

"Leonard."—There are varieties in cretinism. Its worst form is that of pure idiocy; next, deafness and dumbness; third, that species of bodily weakness common to albinos, in which the hair and skin are pure white, and the eyes so weak that they cannot endure the full light of day; and the fourth is that of goitre.

"A Lover of Truth."—We cannot give the statistics.

"An Apprentice."—The hospital is recognised by the College of Surgeons.

"A Licentiate of the College of Physicians."—Yes.

"J. P."—The article is declined.

"Anglican."—No such officer is connected with the University.

"T. D., City."—Application must be made by letter.

"Adolescens."—The Hospital contains about 500 beds. Fee for one year, £36 5s.

"Jurisprudence."—The liquid contains fibrin, red colouring matter, and other constituents of blood. The differences noticed are, that it has an acid re-action, from its admixture with vaginal mucus, and under the microscope it is mixed up with epithelial scales, which it has derived from its passage through the vagina.

"Querist" shall receive a private letter.

"A Senior Member of the College."—(1) The application would meet with no success. (2) Yes. (3) Yes.

"Ajax."—We shall not lose sight of the matter.

Mr. Stedman's "Case of Cholera" received.

"Old Subscriber."—(1) Mr. A. Rutherford. (2) The Company will not receive indentures of apprenticeship except from an apothecary, or a Medical Man in practice prior to 1815.

"A Subscriber of Five Years' Standing, Stratford-on-Avon."—Smith and Beck's Compound Achromatic Microscope would suit. The price will depend upon the "finish" of the instrument.

"I. I."—We agree with the remarks of our correspondent, on female medical practitioners, but it would be useless to publish the letter.

"A. B. C., Congleton."—Any of the Philosophical instrument makers will furnish our Correspondent with the required apparatus.

"An Old Subscriber."—We believe one conviction has taken place.

ORIGINAL LECTURES.

LECTURES
ON THE
PROCESSES OF REPAIR AND REPRODUCTION AFTER INJURIES.
DELIVERED AT THE
ROYAL COLLEGE OF SURGEONS OF ENGLAND.

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[Reported for the "Medical Times."]

LECTURE II.

The materials provided for the repair of injuries in the human body. Division of injuries into open and subcutaneous. Modes of healing of open wounds—by immediate union—by primary adhesion—by granulations—by secondary adhesion—by scabbing. Modes of healing of subcutaneous wounds—by immediate union—by connexion, mediate union, or bonds of new substance. Part taken by extravasated blood in the healing of injuries—its frequent absence—its various disposal when present—its ejection, absorption, or organization. Coagulable lymph the general material for repair by new substance—its chemical and vital properties. Probability of the existence of two varieties of lymph, characterized by their different modes of development into connective tissue—the one, as formed in open wounds, being developed through nucleated cells; the other, as formed in subcutaneous wounds, through nucleated blastema. Similarity of these modes to the development of the same tissue in other instances—relations of each of them to the process of inflammation and to suppuration.

MR. PRESIDENT AND GENTLEMEN,—In the last lecture I endeavoured to establish the principle, that the power exercised in the repair of injuries was the same as that put forth in the development of the germ from the lowest to the most perfect state in the full-formed animal; and that this power was not determined by the fact of a higher or lower position in the scale of animal life, but that it bears an inverse proportion to the power expended in the development of the germ. I omitted all reference, then, to the amount of reparative power in the highest vertebrata. In the warm-blooded animals the only parts capable of being reproduced may be divided into three classes.

1. Those in which each part is replaced by a repetition of the act which formed the first; among these are, the blood and cuticle. 2. Those of the lowest organization or chemical composition—the gelatinous tissues and the osseous system. 3. Those accessories to the organic structures—the blood-vessels, nerves, and lymphatics. These include all which can be reproduced. I shall now devote the time allotted to this lecture to the consideration of the materials necessary to the processes of repair; and I hope I shall not err in limiting myself to certain typical instances. I propose to limit myself to wounds and fractures, and now to speak especially of the materials necessary for the repair of injuries, taking for illustration such wounds as are made in operations. Recent improvements in surgery have shown how right Hunter was in laying down the necessity of discriminating injuries—especially those which are exposed to contact with the air. He says:—"The injuries done to sound parts I shall divide into two sorts, according to the effects of the accident. The first kind consists of those in which the injured parts do not communicate externally, as concussions of the whole body, or of particular parts, strains, bruises, and simple fractures, which form a large division. The second consists of those which have an external communication, comprehending wounds of all kinds, and compound fractures." And again, "The injuries of the first division, in which the parts do not communicate externally, seldom inflame; while those of the second commonly both inflame and suppurate." Here he has expounded the whole art of subcutaneous surgery. I might remind you of the difference of the processes of repair in simple and compound fracture; although the simple may be attended with less violence, yet from exposure to the air, if continued, they seemed to be far the worst; even after extreme violence the symptoms of suppuration are far less than in compound fractures. I found a number of examples of this truth in some experiments I made to see how the tendons were healed. In a certain number I made openings in the skin, and certainly the wound externally was more severe than in subcutaneous wounds. In a rabbit the tibialis anticus and the extensor longus digitorum were divided on the right side, with a wide section through the skin, and on the left with a subcutaneous section, through a small opening. Twelve days after it was killed; the subcutaneous wound had healed, and on the right side there was a large collection of pus on the wound, covered in by scabbing, and no trace of repair. The case is yet stronger, because in making a subcutaneous wound, the violence is greater than in making an open one. Still subcutaneous wounds seldom inflame; while open ones are much subject to this process and to suppuration. The reason for this difference is, that the materials for the repair of the two kinds of wounds are different. But before I speak of this I will just mention the different modes in which open injuries are healed:—1st., by immediate union. 2nd. By primary adhesion. 3. By granulations. 4. By secondary adhesions. 5. By scabbing.

The process of immediate union corresponds with that of Hunter's "union by the first intention," and is accomplished by the effusion of coagulable lymph between the two old surfaces of the wound. Hunter's account of it was, that a bond of union was formed by the blood extravasated between the surfaces of the wounded parts; the blood organises itself, and, becoming vascular, forms a connecting tissue between them. Without doubt Hunter was in error in supposing that extravasated blood is used commonly for this purpose; but I will speak first of what share it really has. First, I may remind you of the evidences adduced in a former course for coming to the conclusion that blood may be organised. We may assume, that granules form a tissue and become vascular. I have already mentioned several cases in which organisation in the tissue occurred—cases of clot forming in the veins and becoming organised—cases of clots of blood in the heart organising into tumors,—and clots above ligatures in tied arteries. Dr. Zwicky has clearly traced this process till it became a part of the fibrous cord. A case of this kind occurred in the dura mater of an insane person examined by Mr. Holmes Coote,—beneath it there was a distinct layer of clotted blood like that which is effused in apoplexy of the cerebral membranes as described by Mr. Prescot Hewett. A number of small vessels passed from the dura mater into this clot; and it was from these vessels, while filled with blood, that I made this sketch (diagram exhibited). Here it bears a close resemblance to a sketch I have made of the vessels of an old adhesion; and the structure of the clot is interesting as being similar to the material used for adhesion. When acetic acid was added to it there appeared in it elongated corpuscles, and fibre with dark edges, bearing no distinct granules. No such structures are found in the ordinary products of inflammation; but, from comparison, they bear an exact resemblance to the nuclei formed to develope ordinary cellular tissue. The examination of this specimen shows one stage of the clotted blood becoming vascular in the formation of cellular tissue, and is of the same kind as that for the healing of subcutaneous injuries. With all this evidence that the blood becomes organised, it was with surprise that I found that blood effused and extravasated, can hardly ever become a bond of union in injuries. In a large majority of cases no blood is extravasated. Thus, in subcutaneous wounds of the tendons, it is very rare to find the blood extravasated. I find out of twenty cases in which I have divided the tendon Achilles in rabbits, only one in which a clot existed in the track of the wound. In subcutaneous division of the tendon the same thing holds, except where an artery is involved; and amongst fractures there is seldom so much blood effused as could form a bond of union. Here is the tibia of a man, whose legs were crushed by a railway carriage, in which there is no such quantity of blood as could form this bond. These cases, then, prove the fact that extravasated blood is not necessary as a bond of union. Still, when blood is extravasated, the question arises what becomes of it. If the blood be enough to form a large clot, and the wound be exposed to the atmosphere, it is obvious that the blood will be cast out of the wound. But under favourable circumstances, the more ordinary mode is by absorption. But my observations have led me to dissent from the opinion generally entertained of the absorption of blood thus effused. The common idea is, that the blood is absorbed and lymph takes its place. But this can hardly be, since the absorption of blood is a very slow process. In cases of fractures I have found the blood not absorbed in five weeks; and in a common leech-wound I have found the blood corpuscles all as perfect a month afterwards. The truth rather seems to be, that the blood is enclosed within the effused reparative material, and is by it finally absorbed. In one case the tendo Achillis was divided six days before the death of the animal. As repair was proceeding, on slipping through the length of the substance forming the bond of union, I found a perfect clot of blood, which had been effused from a large vessel, and the new material was formed completely round it, and absorbed it. This only confirms me in the opinion that the inclosure was formed of extravasated blood. In another case I found still within the reparative substance traces of blood corpuscles imbedded previous to its absorption. Still I should not be willing to believe that it would never be organised. Hunter states that he has seen extravasated blood forming a bond of union; and one does sometimes find blood so adhering to the bones that one can hardly believe it is about to be absorbed. The conclusion, then, as to the share blood takes in the repair of injuries, is this:—

1. That it is not essential or favourable to the healing of any wound.

2. That most commonly, if existing in large quantities, and exposed, it is ejected.

3. In favourable circumstances it may be absorbed, subsequent to the adhesion of the new material.

4. It may become organised and form part of the reparative material.

The material most commonly employed is that of coagulable lymph.

Our notions concerning the properties of this substance, when once effused for the repair of injuries, are derived almost entirely from examinations of the lymph effused in acute inflammations. The identity is far from being proved, but their similarity is in many particulars evident, and especially in that both manifest, by their spontaneous coagulation, that they contain fibrine. The coagulum, which is spontaneously formed in reparative material, is identical with that of fibrine: chemically, too, they appear the same. The natural tendency of coagulable lymph is to develope itself into common fibro-cellular tissue; but in certain cases the development of lymph passes beyond this form. Thus, for the repair of bone, the lymph may proceed a certain distance towards the development of a fibrous tissue, or the lymph may proceed at once to the formation of a nearly perfect cartilage, and this may ossify. Where it is produced, it has characters adapted to the functions of the parts that it unites. The bond for the union of a tendon is much tougher than that for a common scar in the skin; that in skin is tougher and less pliant than that in mucous membrane, and so on. It has been thought a nice question, whether these varations are determined by the properties of the lymph itself, or by an assimilating force in the parts in which it is deposited. I have little doubt it is such a germ-power as that which forms the embryo out of very different materials. We have yet no observations to show a difference in the characters of the materials effused for the repair of injuries of different parts, or in different circumstances; and yet such a difference, in even the original characters of the lymph, is indicated by the fact, that it passes through two different ways of development. The lymph, or new material, which is produced for the repair of open wounds, generally developes itself into fibro cellular tissue through nucleated cells: that formed for the healing of subcutaneous wounds as generally developes itself into the same tissue through the medium of nucleated blastema.

It must not appear an objection, that there should be two modes of development to the same perfect tissue; for this is usual, and has been observed in nearly all the tissues. I spoke of it last year in relation to the developement of the blood corpuscles, of which a first set are formed from part of the embryo cells that form the germinal area or the whole body of the embryo, and the second set are formed exclusively from the corpuscles of lymph and chyle; and so it is with the cartilage, the muscular, and other tissues that are formed in the earliest periods of embryo-life. At first they are developed from some of the embryo cells; yet in later life, no such cells are seen among them, but others appropriate to them, and of widely different form. So also in the bones, which at first are developed through cartilage, but in their subsequent growth are increased by ossification of fibrous tissue; and in the repair of which we shall find even more numerous modifications of these different developements.

(Here several diagrams were exhibited, of embryo cells, exudation cells, and granulation cells.)

The cells first formed are round, very slightly granular, display a well-marked cell-wall, and a clearly-defined round nucleus. Whether in granulations, or in inflammatory exudations, such cells present a striking resemblance to the white corpuscles, or lymph-corpuscles, in the blood. In the developement of cellular tissue from these cells, the first apparent change is in the nucleus. It becomes oval, even before the cell does, and at the same time becomes clearer and brighter. One or two nucleoli now appear distinctly in it, and soon it attenuates itself; but this it does later, or in a less degree, than the cell; for a common appearance is that of elongated cells bulged out at their middle by the nucleus. With these changes each cell also is developing its structure; first becoming more granular, then having its cell-wall thinned, or even losing it. It elongates at one or both ends, and thus are produced a variety of lanceolate cells, which gradually elongate towards the filamentous form. As they thus change, they also groupe themselves, so that the swollen part of each, at which the nucleus lies, is engaged between the thinner parts of the two or more adjacent to it. The final disposal of these nuclei is hard to discern. In many instances, they are developed into filaments, like those of elastic tissue. But in the development of the cellular tissue formed in inflammation or granulating wounds, the nuclei rather seem to waste, and be absorbed. Certainly such nucleus-fibres are not found in scars lately formed, though common in those of old standing. But, in their time, they display more organic activity than the cells,—for they take the initiative in the multiplication of the cells. In granulations, one may often find large compound cells, containing eight, ten, or more, nuclei. These have been derived by subdivision from the nucleus of the simple cell, and are probably destined to be the nuclei of as many separate cells. Such is the process for the development of fibro-cellular tissue through nucleated cells, and though some modifications of it take place, yet none of them affect the essential characters of the process.

The development of fibro-cellular or fibrous tissue through nucleated blastema is observed in the natural development of tendons and ligaments. It is the same which Henlé regards as the only mode of development of the fibro-cellular and fibrous tissues. Schwann, on the other hand, believes that that there is no other mode than that which I have just described. Certain it is, that both these modes of development of fibro-cellular or fibrous tissue may be traced; nor can any better example be selected than in the formation of scars from granulations, and of the bonds that unite subcutaneously divided tendons. Of the union of divided tendons I shall speak in a future lecture. For the present purpose, and in relation to the development of fibro-cellular or fibrous tissue from nucleated blastema, it may be enough to state, that when the first effusion of the products of the inflammation, excited by the violence of the wound, is completed, then a quantity of finely molecular or dimly-shaded substance, like homogeneous or dotted fibrine, begins to appear in the space in which the bond of union is to be formed. This substance is infiltrated in the tissue that collapses into the space between the retracted ends of the tendon. At first there is no appearance of nuclei or cytoblasts in it: it seems to be merely a blastema of fibrine; but as it acquires firmness and distinctness, the nuclei appear in it; they seem to form out of collecting clusters of granules, and presently appear as oval bodies, with dark hard outlines, soon becoming elongated, with clear contents, without nuclei, irregularly scattered, but so firmly imbedded in the blastema, that, in general, they cannot be dislodged. Commonly the application of acetic acid is necessary to make them distinct, by making the intermediate substance transparent, while the nuclei themselves acquire dark edges and shrivel up a little. The nuclei undergo little change, while the blastema in which they are imbedded is acquiring, more and more distinctly, the filamentous appearance, and then the filamentous structure,—only they appear to elongate, and to attenuate themselves, and to grow more irregular in their outlines as if by shrivelling.

The blastema may become at length perfect fibro-cellular or fibrous tissue. The final disposal of the nuclei is doubtless sometimes that they are developed into the nucleus-fibres, and constitute some of the various forms in which elastic yellow tissue is found mingled with the proper white filaments. But, in the process of repair by tissue thus developed, as well as by that which is formed through cells, I believe that the nuclei finally shrivel.

The deduction from these facts appears to be, that the material of repair for subcutaneous wounds is developed into cellular tissue through the formation of nucleated blastema; while that for repair by primary adhesions, and by granulation, is developed into the same through nucleated cells. These instances, then, may enable us to conclude respecting the existence or non-existence of inflammation in the healing of injuries. The material of repair in union by primary adhesion and granulations is the same, in appearance and mode of development, as we find produced in other conditions which are called inflammatory. But, in the healing of subcutaneous wounds, we find a different material of repair, which resembles, in both appearance and mode of development, that which we find forming growths whose production is not attended with any signs of inflammation. On these grounds, therefore, we are justified in holding, generally, that inflammation ensues in the healing by adhesion and by granulations, but does not exist in the healing of subcutaneous wounds. Although inflammation may be deemed necessary for the production of the lymph that may form adhesions or granulations, yet we have no evidence that the continuance of inflammation is necessary for the organisation of the lymph. Rather, the persistence of inflammation seems to hinder the organisation of the lymph, to keep it in a low state of development, or to favour its degeneration.

ORIGINAL CONTRIBUTIONS.

ON SCARLATINA.

By J. W. TRIPE, M.D., M.R.C.S., and L.A.C., London.

(Continued from page 454.)

B. c. γ. There are perhaps few persons, excepting those who have investigated the subject for some specific purpose, who are aware of the vast amount of aqueous vapour that is held in suspension in the atmosphere, and the great extent to which evaporation is constantly proceeding.

In the preliminary observations to Mr. Glaisher's (of the Royal Observatory, Greenwich) Hygrometrical Tables, it is stated that the amount of water, thus—*i.e.*, by evaporation—changed into vapour, is very large indeed. "From experiments I have made during the years 1844, 1845, and 1846, it appears to be nearly fifty inches annually. It is probable that this quantity is much above the average; but all experiments that I have seen justify us in assuming that the average evaporation is more than thirty inches annually (that is, that the vapour in the atmosphere in one year, if reconverted into water, would cover the surface from which the evaporation took place to a height of thirty inches.) Assuming that this is about the annual quantity, and that the surface of all the waters on the earth is 130,000,000 of miles, then water to the amount of 62,000 solid miles would be annually changed into vapour. To this large amount must be added the evaporation from moist earth, and from the watery parts of the animal and vegetable kingdoms."—P. 9.

The quantity of aqueous vapour that the atmosphere will hold in suspension varies according to the temperature; at 20° Fahr., one cubic foot of air, if saturated with moisture, will contain 1·58 grains of vapour; at 30° Fahr., 2·21 grains; at 40° Fahr., 3·09 grains; at 50° Fahr., 4·28 grains; at 60° Fahr., 5·87 grains; at 70° Fahr., 8·00 grains; at 80° Fahr., 10·81 grains; and at 90° Fahr., 14·50 grains. This must especially be borne in mind, as will be again mentioned in considering the humidity of the different months, because 1·000 is invariably used as indicating the saturation of the air at the temperature of the month.

In regard to the quantity absolutely contained in the atmosphere, we must again refer to Mr. Glaisher, who states, that, "if a perpendicular column of air, to the top of the atmosphere, had the whole of its vapour precipitated to the bottom, the depth of water so precipitated would be about five inches. This calculation is made on the supposition, that the temperature of the air was 50° Fahr., and that it was saturated with moisture.

Besides the temperature, there are several other causes which modify the quantity of aqueous vapour contained in the air. Thus, Humboldt Kosmos, Vol. I. p. 365, "Sabines Trans.," states, that "the elasticity of vapour is greatest with south-west, least with north-east winds. On the west side of the wind-card it diminishes, and, on the contrary, it rises on the east." Glaisher states, p. 16, "In the open sea the air appears to be generally saturated with moisture; on the coasts, therefore, the quantity of vapour must be great, and it probably diminishes as the distance from the sea increases." Saussure states (*vide* "Turner's Chemistry," 7th edition, p. 210,) that an unusual humidity of the atmosphere is ordinarily accompanied by a diminution in the quantity of carbonic acid in the air, in consequence of the moist earth absorbing the gas in unusual quantities.

From these considerations, it is evident that the variations in the amount of moisture suspended in the air, must exert considerable influence on the health of all animated beings, whether animal or vegetable, and it is somewhat strange that so little consideration has hitherto been bestowed on the subject. Dr. Caspar has shown that the opinions generally entertained by non-professional and by many professional men are erroneous, and that a humid state of the atmosphere, so far from being prejudicial, is actually more conducive to a healthy state of the community than a dry condition of the air. He points out that different classes of disease prevail in these opposite conditions of the atmosphere; that catarrhal, rheumatic, and glandular diseases, with intermittent fever, prevail during a humid state, while inflammation, hæmorrhage, apoplexy, &c., are more frequent during a dry condition of the air.

As it will be foreign to our purpose to follow Dr. Caspar in his conclusions, I will content myself by quoting from the *British and Foreign Medical Review*, July, 1847, page 102:—"We thus arrive at the conclusion, that a humid state of the atmosphere is more favourable to health and life than that which is dry; for, taking the average mortality in a given population to be 100, the deaths will be 101·9 in dry seasons, and only 99·2 in wet seasons. It is evident, not merely from these, but from the Berlin observations, that no state of the atmosphere is so prejudicial to health and life as that of dry cold. And again, contrary to the opinion of Kopp and others, it is not humid warmth, but humid cold, which tends to increase the mortality in a population." Having made these few cursory remarks, we will pass on to the consideration of the influence of humidity on the mortality of scarlatina,—pre-

mising, however, that the tables necessary for the full elucidation of the subject have been made, and will be partly considered, but will not be inserted, as they would occupy too great a space. To fully treat of this division of our subject, the sum of the inches of rain, and the mean temperature of the dew point, as well as the mean humidity of the atmosphere should be compared with the mean mortality; and, lastly, the mean temperature and the mean force of the elastic vapour of the air should be conjointly considered, together with the mortality from the disease. The space required for this would obviously be too great for the pages of the *Medical Times*.

JANUARY.

The average temperature of the air for these eight months (1841—48) of January was 37°·4; so that, if the air had been saturated with moisture, it would have contained 2·80 grains of aqueous vapour in a cubic foot, which would have been indicated by by 1·000; but, as the mean degree of saturation was only ·911, the mean quantity actually contained in the air was only 2·57 grains in a cubic foot. Four of the months presented an excess, and four a minus of humidity; the comparative mortality in the four that were in excess was once plus and three times minus; and in the four that were unusually dry it was plus three times and minus once. The mean comparative mortality for the four months in which the mean humidity was above the average, amounted to 77 only, and for the four months in which the latter was below the average, it reached 88. It is, therefore, evident, that the ordinary decrease in the mortality from scarlatina which occurs in January, is greater than usual, when an excess of moisture is present in the air, whilst it is less than ordinary when the air is unusually dry.

FEBRUARY.

The mean temperature for this month, in the years 1840—48, as before stated, was 38°·3; so that, if the air had been saturated with moisture, it would have held in suspension 2·92 grains of aqueous vapour in each cubic foot of air. But, as the air was not saturated,—the point of saturation, as before stated, being represented by 1·000,—the mean humidity being ·909, the average quantity which it contained in a cubic foot amounted to 2·63 grains. Of the four months in which the point of saturation exceeded ·909, one presented a plus of comparative mortality, and three a minus; and of the five in which it was less than ·909, three had a plus of mortality, and two a minus. The mean comparative number of deaths for the months in which the humidity was plus, was 91; and for those in which it was minus, it was 100. We may, therefore, say, that those months of February, which were characterised by an excess of humidity, were the same which presented the smallest number of deaths from scarlatina.

[To be Continued.]

ON CHOLERA.

By Dr. REID CLANNY.

(Continued from p. 620.)

In the recent visitation of the cholera to this town, (Vide *Medical Times* for Feb. 24, 1849,) in our reports to the Board of Health, London, in nearly if not every case of cholera, we mentioned, that there was a difficulty of breathing, or a "hindrance of respiration," which was most remarkable. In experiments which I made in the progress of the epidemic, I found, that considerably less carbonic acid gas than usual was given out in the process of respiration. In the investigation, I was so particular, that I had in readiness an admirable apparatus, sent to me by Mr. Newman, of Regent-street.

When we take into consideration the very peculiar state of the atmosphere at that period, and the observations which have been made in that respect, not only on the Continent but in these Islands, we are compelled to attribute the *fons et orgo mali* to electrical changes in the atmosphere.

It is remarkable, that when, in the months of October, 1831, and in October, 1848, the pestilence visited Sunderland, it had progressed from India in a north-western direction; so that, if a line be drawn upon a globe, it will, as nearly as may be, indicate Sunderland as that part of these Islands at which it might have been expected to commence its deadly career amongst us. I may remark, that, previous to the first flash of lightning of a late very severe thunder-storm, I was in a state of stupor, even to somnolency, which continued, in a most remarkable manner, for several hours continuously. The respiration was hindered, and lassitude prevailed to a great extent, during the whole day. Since the outbreak of cholera in this town, we had several severe "dropping cases," as they are called.

During the thunder-storm, when I was removing two stone bottles of ale from a cool cellar above ground in my garden, the moment I placed one of them on the ground, the ale exploded, and the bottle was dashed into pieces. I tried a second one, and the same results took place. When I brought other bottles into the dining-room, no such phenomenon took place. From facts like these, I am compelled to believe that very frequently the clouds are, in respect to electricity, in a negative state, and the earth gives to them continued currents of electricity. May not this state disturb the formation of carbonic acid in the course of the circulation? We are aware that, (according to Pouillet,) when two bodies combine,—for instance, the oxygen from the atmosphere comes into contact with the free carbon of the blood in the course of circulation,—carbonic acid is formed, and electricity developed. This is the usual state of the circulation; but, if the earth be positive in respect to the clouds, as mentioned above, a hinderance of respiration, a deficiency of formation of carbonic acid, and, consequently, the cold stage of cholera will be the result; and, should the debility continue from the retarded respiration and slow pulse, carbon will pervade the system, even to the centre of the bones, as their dark tint verifies even to a superficial observer. It is remarkable, that, if the two surfaces of an animal membrane come in contact with, on both sides, two fluids of a different description, and the surfaces possess different powers of absorption, or dilation and contraction, this state will continue as long as the fluids undergo a change of composition.

In all cases in which a permanent change of the volume of the two fluids, separated by the membrane, is always accompanied by permanent differences in their nature whilst in contact with the surfaces of the membrane; and it follows naturally those portions of animal membrane, of even the closest texture, undergo, during the exchange, a succession of contractions and dilations, or, in other words, a continued motion is kept up. It follows that this change in volume and quality of the two fluids by the medium of the surfaces of the membrane, depends, in a great measure, upon their relation in respect to moisture, to the unequal action of the membrane in regard to the imbibition of fluids, as also upon the nature of the fluids themselves in respect to the kind of the substances held by them in solution. When atmospheric air is rapidly renewed in the lungs, according to Viorordt, though the per centage of carbonic acid in the exposed air becomes diminished, yet the total amount of this gas thrown off from the lungs, within a given time, is proportionably increased; while, on the other hand, when the respirations are diminished below the natural standard, though the per centage of carbonic acid in the expired air be increased, yet the total quantity thrown off from the lungs, in a given time, will be proportionably diminished. If the atmospheric air in the lungs be rapidly renewed by an increased frequency of respirations, the diffusion of the oxygen in the higher, and of the carbonic acid, in the deeper parts of the air tubes, will proceed more rapidly, and the air in the air-cells of the lungs will contain a less per centage of carbonic acid, and a greater per centage of oxygen, than if the respirations had been carried on with the usual frequency and force.

If, then, we add the increased flow of blood through the capillaries of the lungs to an increased frequency of the respiratory movements, as occurs when suitable exercise takes place, the interchange between the oxygen of the air and the free carbonic acid of the blood will be carried on with greater activity. When, on the other hand, if the air be renewed in the lungs less frequently than usual, as takes place when the respiratory movements are diminished in frequency and extent of power, the air in the deeper parts of the lungs will contain less oxygen, and more carbonic acid, than usual, and the interchange between the oxygen of the atmospheric air and the free carbonic acid of the blood will proceed more slowly. When the respirations are reduced to about one-half of their natural frequency, (as occurs in the course of Asiatic cholera,) the carbonic acid gas gradually accumulates in the blood, less oxygen is absorbed, and choleric apoplexy may supervene.

It may not be out of place if I revert to the great value of the treatment of the cholera adopted by my colleagues and myself, as recorded in the 491st Number of the *Medical Times*, being for February the 24th ult. It is my desire, that the impression obtained from the great prostration of strength, and the slow action of the lacteals and lymphatics, only small portions of our heroic doses of calomel were carried into the circulation; but those small portions of that most excellent medicine effected far more than we had anticipated. When the epidemic some weeks afterwards visited the parish of Sunderland, on this side of the River Wear, I was informed, from the best authority, (for I did not visit a single case), that, at first, though the usual routine of practice was most judiciously followed up, yet the fatal cases were very alarming, and also continued up to the time at which the medical men in charge adopted the plan of treatment so successfully followed up in the parish of Monkwearmouth, and by which, it is stated, the fatal cases were materially diminished. I believe the same good results took place at Belfast in Ireland.

CASE OF MALIGNANT CHOLERA, TERMINATING FATALLY.

By W. HOME POPHAM, Esq., Surgeon, London.

Mr. T. W., a gentleman residing in Hunter-street, Brunswick-square, was attacked, on Tuesday night, about twelve o'clock, with purging and vomiting. He had been engaged during the day at his usual business, and had partaken of peas at dinner, with porter for drink. The first evacuation from the bowels consisted of fœcal matter, and, after the two following ones, which were liquid, the character of the discharge began to assume the peculiar rice-coloured appearance, which is one of the most constant attendants of asiatic cholera. I was summoned to him at half-past one, a.m., when I found him in the following state:—Countenance dusky and anxious; skin, particularly of the extremities, cold, and bedewed with clammy perspiration; eyes sunken; purging and vomiting recurring almost every five minutes; great thirst and violent cramps, particularly in the legs. I immediately administered 30 drops of laudanum in 2 ounces of brandy; ordered bottles of hot water to the feet, friction over the epigastrium and extremities, with flannels sprinkled with warm turpentine, and the following draught every hour:—

℞ Mist. cretæ, ʒi.; tr. catechu, ʒiss.; tr. opii, mxx.; sp. ammon. aromat., ʒj.; ol. menth. piper., mi. M.

At 3, a.m., I visited him again. The skin was a little warmer than when I first saw him; he had vomited and had been purged only once since I saw him before. Continue the draughts and the free use of brandy.

8 a.m.—A decided change has taken place since I last saw him. The eyes are more sunken and glazed; the tongue is perceptibly cold; the breath also cold; the fingers and nails quite blue, and the skin distinctly shrivelled; and, in a word, his appearance indicated the doom which soon awaited him. I continued the brandy, and other stimulating remedies, as the only chance that could be given to bring about re-action in the system.

At 10, a.m., I requested my friend, Mr. Gordon Bailey, of Pentonville, my colleague at Tooting, to see him, and he agreed with me, that it was one of the most decided cases of malignant cholera that he had yet witnessed, and that the case would terminate fatally. We remained with him about half an hour, endeavouring to get some brandy down, but life was fast becoming extinct, and we witnessed his death twelve hours from the time of his first seizure.

Remarks:—It may be interesting to remark on this melancholy case, that this poor gentleman had been in the habit of taking aperient quack medicines, which kept up a constant diarrhœa; he was, therefore, peculiarly susceptible of the choleraic influence, which I believe still abounds in the atmosphere, and I incline strongly to the opinion, that the best chance that can be afforded to those attacked is to relieve the diarrhœa early, which is almost invariably the precursor of this fearful disease.

There was no urine passed from the time he was first seized, and his cries were alternately excited by cramp and thirst. We sent for the electro-magnetic apparatus, but before it arrived he expired.

CHOLERA TREATED WITH CALOMEL AND BRANDY.

By WM. STEDMAN, Esq., Haslemere.

Anthony Heather, aged 43, labourer, was in perfect health up to the 11th June, when, at 3 o'clock a.m., he was going to work, and had occasion to go to the water-closet. When there, he was seized with violent vomiting and purging of fluid matter, precisely like rice-water, and became so faint, that he was unable to move for an hour, the vomiting and purging continuing. On recovering, he attempted to walk to the house, and fell down in the garden, from exhaustion, before he could reach the door. As soon as he could get in, he was again seized with the vomiting, purging, and fainting fits, which continued, almost incessantly, till six o'clock, when he was seized with very severe cramps of the legs and thighs, and, as his wife expressed herself, "he turned almost black, and I thought he was quite dead."

At half-past seven, a.m., I found the man in a state of collapse; skin cold and blue; the eyes sunken in the sockets; tongue coated with a whitish fur; pulse scarcely perceptible; indeed, he had every appearance of not living an hour. I ordered friction with hot flannels to the extremities, gave him a wineglassful of hot brandy and water, and at eight o'clock I gave him calomel gr. iv.; ol. caryoph. ♏ ij; opii gr. iss.

At eleven o'clock I saw him again, and found him slightly revived. He had vomited twice, and had had two evacuations similar to the last. The cramps had returned since I saw him last; but he was now nearly free from them. His pulse was rather more distinct, but very weak and intermitting. Calomel gr. iv.; ol. caryoph ♏ ij, with brandy ʒss, in a little water.

At three o'clock, p.m., there was slight re-action; the pulse fuller and more distinct, but still intermitting at every six or seven beats; has had no evacuation or sickness. Calomel, gr. iv.; ol. caryoph. ♏ ij; brandy ʒss in water.

At seven p.m., much better; has passed a fluid evacuation, slightly tinged with bile; pulse softer, more regular; skin warm and dry. Calomel gr. iv.; ol. caryoph. ♏ ij.; brandy ʒss in water.

At half-past eleven p.m., I saw him again, and found him decidedly better in every respect; had passed another slightly tinged evacuation; pulse soft, and about 84; skin rather hot and dry; left to nature for the night.

12th, seven a.m.—Has passed a tolerable night, having slept about four hours. Having had no further action on the bowels, I gave him ol. ricini, ʒss. This, in about two hours, produced a copious green, bilious, fluid evacuation, which was repeated twice in the course of the day. I saw him some time in the afternoon, and found him considerably better, but with a good deal of fever about him, with hot dry skin, quick pulse, &c. I gave him sodæ sesquicarb. ʒj; vin. antim. tart. ♏ x.; sp. æth. nit. ♏ xx.; tertiis horis; with acidi tart. gr. xv. in an effervescing state.

13th. eleven a.m.—Much better. Has passed another green bilious motion.

14th.—No evacuation since yesterday morning. Ol. ricini ʒss. This acted in two hours, producing a healthy yellow motion, and from this time, with the exception of considerable debility, the patient is very well.

NITRIC ACID.—ITS APPLICATION TO HÆMORRHOIDS.

By R. TUTHILL MASSY M.D., Physician to the Exeter Dispensary.

Pure nitric acid performs most rapid and wonderful cures in bleeding piles, whether external or internal, and is a safe and easy remedy in its application. Since Mr. Cusack, of Madam Stephen's Hospital in Dublin, first introduced it into practice, I have frequently recommended surgeons to try it before using the ligature or knife; but they have one and all expressed a dread of the consequence, fearing intense pain, inflammation, and sloughing; but I can assert, from some experience in using it myself, and from the writings and remarks of others, that we have not a better or safer application to *cure* hæmorrhoids.

One gentleman, who consulted me in May, 1847, described his piles as hanging about his legs. I shall give the notes from my medical case-book of record:—

A B, aged 30, a farmer, of fair complexion, stature 5 feet 6 inches, countenance anæmic, has been an invalid for some years with bleeding piles, which came on gradually; and to them he has a family predisposition. Present state of the complaint:—Has got a large vascular tumor of the rectum protruding at the verge of the anus, which bleeds half a pint of black blood immediately after stool. The tumor has two bleeding surfaces, with an excoriation of almost an inch square.

His bowels are moved at ten o'clock p.m. every night by taking at noon each day (which is an hour before his luncheon), a wine-glassful of the following aperient mixture:—℞ Infusi sennæ, ʒvi.; sulph. magnesiæ, ʒiv.; carb. magnesiæ, ʒiss. M. ft. mist.

One night after stool, as he lay on his side on a mattress, I applied, with the feather of a quill, nitric acid to the bleeding surface; and when the part turned white I laid on a pledget of lint, covered with olive oil, and then returned the gut.

Complained of slight darting pains during the night.

Got up on the 2nd day; made an examination on the 12th day; the tumor is greatly reduced in size, and bleeds very little now; applied the nitric acid as before.

Remained in bed for a day; felt a degree of tightness during defecation, in the region of the anus.

24th day.—Applied the nitric acid again to contract a small remaining portion of the tumor.

36th day.—Is now cured; can ride and drive, and walk about during the whole day; feels a new man.

I have touched with the acid a bleeding surface three inches up the rectum, with the same benefit.

A. C.—This man lost, at each stool, a large quantity of blood; he was quite emaciated and worn out with pains in the back, and down the thighs.

On looking up the rectum I discovered an oval bleeding surface, its greatest diameter being more than an inch; it was soft, vascular, and elivated, and about three inches from the verge of the anus.

Two applications of the acid cured this patient.

A. D., aged 27; this gentleman had external blind piles; two were visible at the verge of the anus, feeling tense, and looking as large as a hazel nut.

Touched them with nitric acid. On the fourth day they were quite contracted, and drawn up.

It is now more than twelve months since he was cured, and he has had no return of them since.

Persons having hæmorrhoids should always be advised to defecate just before going to bed; this can be easily arranged by giving a dinner pill,—say three grains of the pilules aloes, diluted with one grain of gum mastic.

As this pill mass is not given in the Pharmacopœia, I may state its composition:—

Pilulæ Aloes Dilutæ, *Jephson.*

℞. Aloes bbs., saponis hispan., ext. glycyrrh, theriacæ aaq. partes æquales; solve in aquâ; coda spissa leni calore.

Although I always look to the state of the liver, and give a blue pill at bed-time, and a saline aperient early on the following morning, that the bile may be removed, and the bowels cleared out before using the acid, yet I look on many cases as local, and by no means connected with the portal circulation.

I am in the habit of desiring the patient, after I have used the acid, to lie on a sofa, or to remain in bed for the day; notwithstanding this injunction, I have now and then met one, on the sofa-day, at a dinner-party, or walking about town, the pain from pure nitric acid is so slight, causing little or no inconvenience.

A. E., aged 41, the mother of eight children; her aspect is truly sad; there is a degree of languor in her glossy eye and bloodless cheek. She looks and feels haggard and worn out, by pains and palpitations of the heart, and a daily loss of blood.

She stated, that two large bleeding piles were removed by ligature, some years ago, under Dr. Budd's directions, at Plymouth.

This last year she has been just as bad as ever, the piles come down on the least movement of her body,—even standing up brings them down.

April 6th.—I examined this tumor, in company with Surgeon Kingdon. Outside the verge of the anus there was a tumor as large as half a section of an orange, with two raw surfaces, each an inch in their greatest diameters.

Those surfaces we touched with pure nitric acid; and, after the parts became white, we laid on some olive oil on lint; then we returned the gut and loose membrane. She had no pain.

9th.—Feels a little tightness at stool; the bleeding has not returned since. Advised a hard seat, made of wood, in preference to the hair-bottomed chair.

12th.—Is getting stronger; can stand and walk a little without their coming down; tongue large, pale, and flabby.

Ordered two grains of citrate of quinine with iron, and one grain of carbonate of ammonia, in an ounce of quassia water, three times a day.

14th.—On examination I found two new cicatrised surfaces where we applied the acid, but contracted to half an inch. The membrane at each side is loose, and to this I applied the acid.

I fear that the gut is diseased up further than I can examine. She occasionally passes a fold of false membrane, and this is usually preceded by a rumbling and griping pain. One of those membranes I examined to-day. It is enclosed in mucus, appearing fleaky and of a pale red colour.

18th.—Has bled a little every day since I last applied the acid, but to-day it has almost ceased. She looks stronger and better.

28th.—Continues improving in health, and feels better able to move about.

May 1st.—Has got a diarrhœa; cheeks collapsed and sallow; eye sunken. Haust. rhei.

8th.—Is now sitting up and improving; directed to go to the country, as the locality which she occupies is not healthy.

22nd.—Has walked to the dispensary to-day; is gaining strength.

QUANTITY OF AMMONIA IN THE ATMOSPHERE.—By a series of well-conducted experiments M. Fresenius has determined that 1,000,000 parts of atmospheric air contain during the day 0·098 parts of ammonia, equal to 0·283 parts of carbonate of ammonia. During the night the same amount of air contains 0·169 ammonia, equal to 0·474 carbonate of ammonia. These results are the closest approximations which have been made.

HOSPITAL REPORTS.

ST. BARTHOLOMEW'S HOSPITAL.

Cases under the care of R. A. LLOYD, Esq. Reported by T. M. GIRDLESTONE, Esq., M.R.C.S., Surgeon to the Blenheim-street Dispensary. Formerly House-Surgeon to St. Bartholomew's Hospital.

OBSTINATE SYPHILITIC ULCER AND BUBO CURED BY LARGE DOSES OF CONIUM.

Robert Williams, aged 22, an excavator on a railway, who has been in the habit of drinking gin freely, was admitted on the 24th October, 1848. He then had two syphilitic sores, one on each side of the frenum, and a suppurating bubo in the left groin. He stated, that he had never suffered from syphilis before contracting the present disease, which commenced about one month ago. He had been taking mercury, and his mouth was sore before his admission.

October 30.—The bubo was opened, and he was ordered to take five grains of blue pill night and morning.

In the beginning of January, 1849, the sores near the frenum healed, but the bubo remained open; the mercury was discontinued. About this time a sore commenced on the centre and anterior aspect of his right thigh. He was ordered to take five grains of iodide of potash, with some tincture of iodine, three times a day. Various lotions, as well as caustics, were applied to the bubo, and to the ulcer on the thigh, but with no good result; the quantity of iodide of potash was shortly increased to ten grains three times a day.

February 27.—The sores presented the following appearance: the one on the front of the thigh was circular, rather larger than a five-shilling piece, and was surrounded by a reddish, elevated, irregular margin, which overhung its surface, but its inferior part, which did not present an elevated edge, had the appearance of healing; its surface was pale, and covered with a thin, unhealthy, purulent discharge. That in the left groin was smaller, but had the same elevated edge, except at its inferior margin, where, like the other, it appeared healthy. They were both tender and painful. He was ordered extr. conii. gr. v. ter die; to apply some simple ointment, and to omit the other medicine.

March 29.—The conium has been gradually increased to 240 grains daily without ill effects, excepting a slight nausea on one occasion; it makes him feel giddy, and he has a desire to shade his eyes from the light; it also slightly relaxes his bowels. The sores are quite altered in character, the elevated edges have nearly disappeared, and they are both healing. He is to continue the medicine, the quantity being gradually increased. He progressed favourably until April 12; at this time, while taking 360 grains daily, he was seized with unusual giddiness, pain in the eyes, nausea, and a burning sensation in the stomach; on this account the medicine was omitted for two days when, the symptoms having subsided, it was continued as usual, as well as the following application being made to the sores:—

Extr. conii, mist. acacias, aa. ℥ss.

May 7.—The conium has been increased to 435 grains. This quantity he has taken daily since April 30. The sores are now quite healed, and he is apparently in good health. He is to leave off the medicine.

May 10.—Discharged.

A similar case to this, in which the same treatment was employed, is reported in the *Medical Times* for January 6, 1849, and there is also one now under treatment in the Hospital in which conium has been found equally advantageous.

PROGRESS OF MEDICAL SCIENCE.

FRANCE.

[From our own Correspondent.]

You will, I feel assured, receive almost with as much pleasure as I transmit the news, that a very sensible improvement of the public health has taken place since the date of my last communication. The epidemic appears to have attained its *maximum* of intensity on the 8th of the present month, and since then it has gradually declined both in virulence and extent. This, in fact, is the history of the disease in all climates and in all seasons, and I do not anticipate any recrudescense, although most of the medical men here seem to apprehend that a return of the heat, which has been excessive for the last few days, may be accompanied by a corresponding increase of mortality; up to the present moment, this has not occurred.

The usual weekly Table of mortality in the city and in the hospitals shows how steadily—but at the same time gradual—has been the diminution of the disease:—

	Deaths in City.	In Hospitals.	Total.
15th	188	117	305
16th	118	111	229
17th	122	89	211
18th	107	79	186
19th	91	55	146
20th	74	49	123
21st	74	46	120
			1323

The above speaks sufficiently for itself. Last week the mortality was 3,600; this week it has fallen to 1,323, and we may express the firm conviction, that another month will see the end of this terrible epidemic. In proportion to the fall of mortality the cases become more tractable; but this is a fact so well known to all medical men, that I need not insist on it. Neither increased experience of the disease, nor the repeated discussions which take place in the medical assemblies here, appear to have advanced us much in the treatment of this malady. At a recent meeting of the Academy of Medicine, M. Bonnafont, chief surgeon to the Military Hospital at Arras, presented several Tables, illustrating the mortality at Paris and in the provinces. For the former it has been 53 per cent., for the latter 51 per cent.; M. Bonnafont hence concludes, that the treatment has very little effect on the result of the disease. This opinion is, I believe, generally entertained by the majority of practitioners. Still, as it is my duty to record passing opinions as well as facts, I may mention that M. Le Petit, of Poictiers, speaks favourably of the ætherial tincture of phosphorus, and that the Academy of Medicine has rejected, *en masse*, all the specifics submitted to its examination.

The electric theory was again the subject of discussion at the last meeting of the Academy of Sciences. M. Manssenet claimed the honour of having discovered that Asiatic cholera arises from some abnormal electric action of the earth. The learned academician, however, did not think proper to inform the public of the grounds on which his assertion was founded.

M. de Chavagneux hereon took the opportunity of entreating the Academy to have his new method, which he denominates "terrestro-magnetic," applied in practice. This method, as far as we could understand its author, consists in establishing a magnetic connexion between the patient and the earth, by means of metallic rods like lightning-conductors, or by electric telegraphs, descending either from the patients' beds, or from the apartments in which they reside.

While M. de Chavagneux was theorising, a medical man, Dr. Deseze, was, if we are to believe him, experimenting. He is firmly convinced, that cholera depends on a subtraction of animal electricity, effected by the air or earth. He had produced cholera artificially in animals by the subtractive influence of metallic rods. In one case, where he had employed the same means for the cure of violent muscular pain, the patient, who had prolonged the action of the remedy too far, was seized with a severe attack of cholera, similar to Asiatic. The Academy, I must confess, did not seem to give much credence to these curious declarations; still less to an assertion of M. Leclercq, who affirmed, that he had cured four persons attacked by cholera, within the space of ten minutes, by simply making them swallow salad oil.

During the past week we have not to regret the loss of any physician of eminence, though many of our more humble *confreres* have fallen victims of their zeal. The upper classes, likewise, continue to furnish their contingent, and, amongst the most regretted, I may mention the venerable mother of General Cavaignac, whose primitive virtues had attracted the respect and admiration of all parties, during the temporary reign of her iron-hearted son.

Reverting to the treatment of cholera, I may relate, *en passant*, an anecdote which has received great publicity here, and likewise record a specimen of Chinese therapeutics, to which your readers will attach whatever value it may deserve.

A poor woman, it is said, had the misfortune to have a drunkard for a husband. One day the latter returned home "particularly drunk," and finding his wife on the floor—the poor creature had been struck down by cholera—insisted that she was drunk also, and forthwith inflicted on the moribund a dreadful castigation. Strange to say, saith the chronicle, the re-action occasioned by this new remedy, cured the patient.

However this may be, an analogous mode of treatment seems to be known and practised in China.

In a letter, published some time ago, from P. Joseph Rixolati, Apostolic Vicar of Hong-Kong, to the General of the Franciscans at Alexandria, we find the following passage:—

"Amongst other misfortunes, I have had an attack of cholera morbus, and would have certainly died within the twenty-four hours, had not the disease been combated at once by an excellent physician. The method commonly employed, and which was practised in my case, is as follows:—

"The tongue is pierced in several places with a table knife, or a crystal blade, so as to give rise to an abundant discharge of blood. This done, some of the assistants extend forcibly the principal muscles, while others inflict severe blows on the chest, back, thighs, and loins, until the blood issues in streams. When the crisis has been thus produced, the patient recovers in a few days with his scars and contusions, and his skin as black as that of a negro.

I do not, of course, guarantee the authenticity of either the beating or the blackening, nor recommend any one to employ the treatment on himself or others. Some may, perhaps, venture on one of the methods, which, since Adam's time, has produced a variety of extraordinary results.

M. Jobert took possession of his service at the Hotel Dieu, on Friday last, and looked superb with his new cross of Commander of the Legion of Honour. The only other medical men, unconnected with the army, who have obtained this distinction are, I believe, MM. Orfila and Serres. What Jobert has done to merit being Member of the Trinity I cannot guess, for his chief surgical exploit consists in sewing up tattered perinæa.

M. Guillot, Physician to Salpetriere, succeeds to the place of Head Physician to the Enfants-trouvés, vacant by the death of M. Baron.

An accident, which had nearly deprived of his sight M. Cunier, Editor of the "Oculist's Annals," occurred here a few days ago. While examining a patient, he incautiously introduced some pus between his own eyelids, and granular ophthalmia of the most violent kind set in. He is now a little better, though not yet out of danger of losing one eye at least.

The great destitution of the poor, and the losses occasioned by deaths from cholera amongst the working classes, have, at length, opened the eyes of Government to the necessity of organising something resembling a Poor-law. It is called "public assistance," however, and, though extremely restricted, is a step in the right direction. Amongst the members of the Directing Board are Dr. Hourteloup, of the Hospital Necker; Monod, Surgeon to the Maison de Sante, of the Faubourg St. Denis; and Berard, Dean of the Faculty of Medicine.

GERMANY.

BRONCHITIS WITH THE FORMATION OF BRONCHIAL COAGULA.

Dr. Pechelt, junior, of Heidelberg, in his monograph on this disease, (published in the *Heidel-*

Annalen, XIII. 4, 1848,) gives the following case of this interesting and rare complaint. We quote from *Schmidt's Jahrbucher*, No. 3, 1849 :—

"A parish priest of 43 years of age, strongly built, and addicted to the use of spirits, had formerly suffered frequently from catarrh. Six weeks before the breaking out of the disease now spoken of he had suffered from a rheumatism, which had yielded easily to colchicum and local bleedings. On a raw November day, in going to his church, he experienced a violent chill, which was followed by a severe catarrh, accompanied by fever and much pain in the chest. With this were expectorated solid white clumps, which branched like a tree, extending to the breadth of the hand (!) and they seemed so extraordinary to the surgeon of the place, that he transmitted some of them to the author for a more minute examination. Some days after, the author was called in to the case. He found a very strong, robust man, whose face, of a dark red colour, announced great uneasiness, while the violent rising and falling of the chest bespoke much lack of breath. He was only able to talk in short broken sentences, and his voice was somewhat hoarse. The pulse numbered 100 in the minute, and was full. The tongue was covered with a thick white fur. He especially complained of a very violent cough, which was accompanied by great anguish, and returned about every second minute: it was especially excited by an irritation which was seated in the lower part of the trachea. A tracheal rattle preceded the cough, and was audible at a considerable distance. The cough was very convulsive, and of a somewhat hoarse character, although otherwise it had no peculiarity of tone; and it ended by the difficult expectoration of very solid clumpy sputa, which, on each occurrence of the cough, were extended in the shape of rods, through the nose and mouth simultaneously. The cough began immediately if the patient lay on his right side, or even when he inclined his head on his breast; he was, therefore, constrained to lie in a very elevated position, and on his left side. He complained of no pain in the chest, either on deep or ordinary inspiration. The physical exploration of the chest gave quite a normal percussion sound over its whole extent; and vesicular murmur was everywhere audible, but anteriorly, and on the right side, some mucous rattle was also heard. The solid clumpy sputa were of different sizes: many were only the size of a bean, but others were several inches in length, and many lines thick. They exhibited a trunk, with branches, twigs, and sprigs. Their colour was a grey, like mother of pearl; their consistence was solid.

"Two days after, the patient exhibited little alteration. He sat upright in bed and took some broth; but the cough continued with equal severity, and the expectorations had been so copious that they filled several wash-hand basins. The appearance of the patient was somewhat bluer, the breathing completely faintless, and he could lie on the right side with somewhat more ease. The percussion-sound was normal, as before, but auscultation exhibited mucous rattle and sibilus on both sides of the chest. The pulse and tongue were as before, and so all other symptoms.

"2nd December.—The patient took an emetic of two grains of tartarised antimony. He was thereby relieved of a large quantity of sputa, together with the contents of the stomach, and felt great temporary relief, since the cough was diminished, and the solid sputa were also rendered smaller in quantity. But the feverish symptoms were unaltered.

"4th December.—The cough again returned with greater frequency, and strained the patient excessively. An immense quantity of bronchial coagula were evacuated: some of these had the form already described; others were more dissolved, and swimming in water, and containing many bubbles of air, they formed flocculent masses, which resembled thin sheets of moss. The most excessive dyspnœa preceded the cough and the expectoration, so that the patient sat upright in bed, groaning and sighing, until the coughing fit was over. But, even in the intervals, he was never quite free from dyspnœa. A great decrease of strength accompanied this increase of the disease the pulse sank, the face was pale, the glance of the eye was disturbed, and the voice expressive of the greatest anxiety.

"In the night of the 4-5th of December, the appearances of dyspnœa were increased, so that a second emetic was administered. This again brought away much sputum, and essentially relieved the breathing; but, at the same time, it brought on such a violent diarrhœa, that the fæces were passed involuntarily, and the patient exhausted in the greatest degree.

"6th December.—The patient had less dyspnœa, but the bronchial coagula were ejected as before, and their colour was redder than previously. The diarrhœa continued; the patient's strength sank constantly, especially towards evening, when diarrhœa set in.

"On the morning of the 7th the patient was somewhat stronger, but cough and sputa were as before. Towards mid-day, the diarrhœa and involuntary evacuations returned, and were followed by such prostration that the patient could not speak a word, and lay quite apathetic.

"In the night of 7-8th December, the patient at first slumbered quietly, towards midnight delirium set in, and continued all the following day and night. On the morning of the 9th, with rattling and complete unconsciousness, the patient died. The friends would allow no *post-mortem* examination."

On microscopic examination of the sputa, and magnifying them from 3-500 diameters, they were found to be quite structureless, and offered nothing but a few straight and decussating striæ.

The Author's monograph seems mainly to consist of a compilation of the cases published by various observers.

The best narrated we know of may be found in Watson's Lectures, vol. ii. p. 57. And we mention this in order to pointing out, that really there seems little in the case before us which would prevent its being fairly referrible to bronchitis, with an unusually viscid or consistent secretion. While that alluded to, like others of the published cases, is contrasted by the co-existence of hæmorrhage, by the fibrinous, or albuminous nature of the polypi, the little dyspnœa, the absence of fever, and the chronic character of the disease altogether. We might say, also, by its lesser fatality, only that in the case before us one can scarcely affirm positively whether the patient died of the disease or the remedies. But although, on the whole, the balance of evidence is rather in favour of these two varieties being distinct diseases, yet it is possible that they may be connected by infinite gradations; and it is for future clinical research to show which of these two classifications is the correct one.

If the treatment mentioned includes all, or even the main remedies made use of, it does not need criticism in this country.

Finally, as regards the name of "plastic bronchitis," usually applied to this disease, we may add, that, although the word "plastic" absolutely implies only consistence, yet it is so often associated with and taken for "organizable," that, perhaps, the name of "croupy" is preferable, since it would at once avoid this objection, and connote a pathological analogy.

SCOTLAND.

[From our Edinburgh Correspondent.]

CHOLERA.

At the meeting of our Medico-Chirurgical Society, on the 20th current, the general conclusions drawn by Dr. W. Gairdner, in his account of the *post-mortem* appearances in cholera, read at the previous meeting, fell under consideration. The account included all the cases from the neighbouring cholera-house, and examined in the pathological theatre of the Royal Infirmary. The general conclusions are, in the main, of a negative character. Persons labouring under acute diseases appear to have been entirely exempt from cholera, its victims being either previously healthy, or such as were affected with chronic diseases. It was not, however, chiefly fatal in persons who had suffered from previous ill health. And there was no evidence that those affected with a morbid condition of the mucous membranes were more liable to be cut off by cholera. No deficiency in the coagulability of the blood was discoverable, but the serum was viscid in proportion to the degree of collapse before death. There was no indication of extensive congestion of blood, that state being principally confined to the right side of the heart. Ecchymosis was a frequent appearance; it was observed to affect the mucous membrane of the bowels in about one-half of the bodies examined; it occurred also elsewhere, as in the neck. The liver was seldom found diseased; the gall bladder was unusually full; thus the defect of bile in the intestines must depend rather on the non-application of the physiological cause of its discharge from the gall-bladder, namely, the stimulus of chyme in the duodenum, than on any special pathological condition of the biliary apparatus. To the rule that the urine was suppressed, there were some exceptions. The nervous system showed no sign of being concerned in the disease. The microscopic and chemical elements of the discharges from the alimentary canal were much the same as those which the mucus of incipient catarrh exhibits, but there was no tendency, as in the advanced stages of catarrh, to the production of albuminous elements and pus corpuscles.

A short discussion followed the reading of these general conclusions. In answer to questions put by several members, Dr. Gairdner stated that pulmonary diseases were rare among the cases examined, that morbid conditions of the uterine system were frequent, and that the solitary glands of the intestines were enlarged in about two-thirds of the whole number. The subject of the alleged protection afforded to syphilitic patients under the influence of mercury, as stated in the *Gazette Medicale*, was introduced as a question by Mr. Syme, who was in the chair. Dr. W. Robertson and Dr. Fleming showed, by a reference to several other examples, that the inference was erroneous.

SCARLATINA.

Dr. Patrick Newbigging then read a paper on Scarlatina, including an interesting account of the disease as it appeared last autumn among the children in John Watson's Institution near Edinburgh. In this Institution there are a hundred children from seven to fourteen years of age, boys and girls, whose parents generally have seen better days. The population of the house is altogether 136. The first case occurred in the beginning of September, and in the course of five or six weeks twenty-five of the children were attacked. One, a boy who had been for some time before in delicate health, died. In five anasarca occurred, which yielded to slight treatment. The urine showed the presence of albumen by the test of heat, not merely in the dropsical cases, but in all those attacked with the fever. A short time before the epidemic ceased, all the children of the Institution who had not before had scarlatina, numbering sixty-nine, were treated by belladonna, to test the alleged antidotal power of that drug. From 1-16th to 1-4th of a grain of the extract, according to the age, was given night and morning to each child. After this practice was begun, three of the children were attacked.

A short discussion followed, which turned chiefly on the coagulability of the urine, and the state of the kidney in the fever, and the subsequent dropsy. Dr. Bennett contended, that albuminous moulds or casts of the renal tubuli are generally discoverable by the microscope in the urine of scarlatina. Others were disposed to regard these casts as confined to the subsequent dropsy—the view taken by Dr. J. W. Begbie, in his paper on this subject, in the Monthly Journal for January. Dr. W. Gairdner pointed out the numerous cases in which coagulable urine was met with independently of renal disease.

The meeting in general seemed satisfied, that few things in pathology were more requisite than a complete revisal of the whole subject of coagulable urine.

The alleged antidotal powers of belladonna were hardly noticed in the discussion, but afterwards became the subject of conversation among groups of

the members. It would be wrong to cast aside the opinion without examination; but it plainly makes no progress towards confirmation. Scarlatina is exactly the disease to beget a fallacy on such a point. For it seldom attacks all the unprotected who at any one period happen to be placed within the sphere of its influence. That is, though it spreads as rapidly through a district or school, for a time, as small-pox or measles, yet a greater number of the unprotected usually escape than would be the case in either of those diseases. This is an observation which has often been made, both in this country and in France. There are a few whom neither small-pox nor measles attack; and a greater number who never suffer from scarlatina. A slight extension of the same principle, suggests a ready explanation of what has been observed in regard to the smaller proportion of the unprotected seized with scarlatina at each return.

Dr. Newbigging, in his paper, gave some account of the site and accommodation of John Watson's Hospital, as it is called in Edinburgh. And many of us think that the circumstances under which a fourth part of the children in that Institution were seized with scarlatina deserve the special attention of the Central Board of Health. They are bound to consider how far the whole case of the epidemic in that house, (and we regard it as a common case,) squares with the doctrine laid down in their late Report on Contagion, &c. Let them withdraw their attention for a while from crowded lanes, filth and foul air, and tell us why epidemics like that before us, occur in places where all the appliances of health and comfort exist in profusion. Scarlatina is among the diseases regarding which they authoritatively make the following statement:—"It has been stated, that, however wide the range over which the influence of an epidemic may extend, it cannot localize itself in any particular spot, unless it find there fitting conditions, and that by attending to those localising conditions, and removing them, we can avert its attack, or arrest its progress when it does break out." None of us dispute the aggravating effects of what the Board here terms localising conditions, both as respects the wider spread and the greater mortality of an epidemic. But we insist as regards those diseases referred to by the Board, of which we have experience—for example, typhus and scarlatina—that their Report makes too light of the precaution of preventing intercourse with the sick, and of separating the healthy as much as possible from those already affected; the application of the poison being, according to our views, the essential condition on which the spread of these diseases depends and paramount to epidemic influence and such concurrent or predisposing causes, as they refer to under the name of localising conditions. John Watson's Hospital, which is a school, is a large building erected within the last twenty years, distant half a mile from the nearest point of the town, on an elevated bank, with the freest possible exposure, and drainage not to be surpassed. The interior arrangements are on the most liberal footing, and the most careful attention is given to the diet, comfort, and health of the inmates. Why, then, according to the doctrine of the Central Board, should scarlatina arise here? We absolutely deny the influence of localising causes in this case. We ascribe the origin and spread of the disease, apart from previous predisposition in the constitution, solely to contagion and epidemic influences.

MISCELLANEOUS.

A late visit of a party of our medical brethren to Glasgow is much talked of. It appears that several years ago an Edinburgh and Glasgow Medical Club was established, which meets once a year, alternately in either city, and, occasionally, at some of the intermediate places on the Edinburgh and Glasgow Railway. The purpose of the Club is to cultivate a friendly feeling between the members of the Profession in the two cities, and that end is sought by dining together, after the visiting party have been taken over the newest lions of the town which happens to be the place of meeting for the year. The idea is praiseworthy. The curiosity of the visiters, on these occasions, is not confined to the Infirmaries, Museums, Botanic Gardens, and other sights of mere professional interest, but it extends to the vast and varied manufacturing establishments, and the many pleasing and instructive exhibitions in the chemical arts, such as Glasgow in particular affords. On this occasion, we are told, the visiters, among other wonders, inspected the iron steam-frigate the Simoom, lately built in the Clyde, and took particular notice of the midshipmen's berth, the future abode of the Assistant-surgeons, which they were pleased to find more commodious than usual, while they felt satisfied that the Admiralty plea of want of room for a separate cabin to the Assistant-Surgeon, could not be fairly urged in the case of this vessel. The visiters speak highly of the attentions of their Glasgow friends. At the dinner, Dr. Ritchie, of Glasgow presided, and Professor Simpson, of Edinburgh, was croupier. There were several Professors of both Universities present, and many well-known medical men of both cities, the dinner-party numbering about thirty. Mine host did his part to admiration. The wines went glibly down, and the evening was enlivened by songs, one or two of which had a professional turn, particularly one giving a humorous history of chloroform, and another describing, in a very jocular style, an affray between the Duke of Athol and a party of botanists, with the Edinburgh Professor of Botany at their head, in Glen Tilt, where the botanists, the summer before last, were shut up, by the Duke's orders, on the charge of disturbing his deer. The party returned to Edinburgh by the last train, and reached home about the usual time of going to bed.

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THE MEDICAL TIMES.

SATURDAY, JUNE 30, 1849.

If any persevering antiquarian of the Royal Society shall, in the year of grace 1949, turn over the dusty folios of obsolete archives, which witness to the industry of past generations and to the indifference of the present, his attention may possibly be arrested by numerous memoirs on the Nerves of the Uterus, and by minutes of perpetual meetings of Councils and Committees, at which these Memoirs were somewhat warmly discussed. If our philosopher be as well versed as his predecessor of 1849, in the habits of the "*genus irritabile*," he will know that these Memoirs are merely the lighter indications of a fierce torrent of controversy which bears them on its surface. If now he turns to the contemporary literature of the day, he may perhaps acquire a full knowledge of the *public* portion of the controversy in which he has become interested; the *private* portion, that is such parts as cannot be more than intimated in the printed discussion—the personal quarrels, the bitterness of individual debates, the loosening of the ties of friendship, the mutual doubts of the disputants regarding each other's honour and probity—our philosopher can only conjecture, from his own experience of the scientific debates of the twentieth century, whatever these may be. But he will rise from the consideration of the controversy with feelings not altogether favourable, either to the scientific knowledge or to the moral dealing of the *savans* of the nineteenth century. He will see, in the first place, that this discussion has not had for its subject any speculative or doubtful theory, concerning which the imagination might bias and warp the judgment; but a simple anatomical fact, which the senses only were called on to decide. He will glance over plates in which is depicted an uterus with enormous nerves, and presently he will meet with others, in which these nerves are reduced to the most modest proportions. He will find the most different opinions given by different persons, regarding this material and sensual fact, and, on referring to his Medical Bibliography, he will find the opposing parties to be composed of men alike regarded, in their day, as of the highest consideration. He will, to his astonishment, learn, that a man may express a positive opinion in the morning, and change it for one equally positive, but diametrically opposite, before night. He will find one learned Professor declaring, that the microscopic evidence of nervous tissue is "flimsy;" and another, equally celebrated, declining to base his opinion except on the very test which is thus ridiculed. And, looking at the question from a height which his predecessors in the past century could not reach, our *savan* may sadly smile at the way in which men heap thorny brambles in their own paths, and dig pitfalls for themselves in the road which was before sufficiently rugged and dangerous.

But, secondly, when our philosopher turns from the alleged facts, to consider the spirit in which they have been put forward, sustained, and rebutted, he cannot but feel a kind of pity at the clamour and violence which have attended the discussion. He may, perhaps, see the spectacle of a man whose fretful and ill-regulated mind would not bow to the decision of his contemporaries, but who pertinaciously clung to opinions which had been demonstrated to be errors, and who did not hesitate to insinuate the blackest accusations against those who had exposed his fallacies. He may, perhaps, trace the blind workings of a wounded vanity in the reiterated assertion of error, and the marks of disappointed ambition, in the acrimony with which those errors were defended.

Or, on the other hand, it may appear that an important discovery was at first received with scepticism, and was finally established only at the expense of the reputation of many learned Physiologists who had strongly opposed it. And possibly it may be decided, that not only was the scientific reputation of these Physiologists thus endangered, but that grave doubts were suggested, whether their opposition was not based on more reprehensible feelings than those which could be developed by a simple and earnest desire to determine the truth. But, if this be the case, it may still be regretted that the discoverer himself, when he found his observations disputed, should not have confined him-

self to the task of accumulating evidence in his own favour, and that, having done so, he should not, with the dignity of one who knows the integrity of his own mind, have turned aside from the opposition and detraction of his fallible fellow-workmen, and have committed his cause, as the Great Master of Inductive Philosophy did before him, to the judgment of posterity, "and to the next age."

We have been led to these remarks by receiving a copy for review of Dr. Lee's "Memoirs of the Ganglia and Nerves of the Uterus," which have been now published collectively, and are accompanied with a statement of the proceedings of the Royal Society in this matter. But how can we review the scientific question of the existence of these uterine nerves, or how, with an *ex-parte* statement before us, can we enter into the controversy, already hackneyed, of the just or unjust decisions of the Royal Society? Without more decisive evidence than we possess, we declare our inability to decide the first point, and our unwillingness to discuss the second. We have no bias nor prepossession in this matter; we scarcely know a man connected with it; we are not on the Physiological Committee of the Royal Society; and we were never competitors for Royal Medals. We have never even given an opinion on Dr. Lee's or Mr. Beck's dissections, and are, perhaps, therefore, in a better position to give one now than older Physiologists who have already done so. Nor should we hesitate to state our opinion, could we see reason sufficient to decide it. But here we have Dr. Lee citing the opinions, or the letters, of such men as Solly, Marshall Hall, Dalrymple, Grant, Hodgkin, John Davy, Knox, Grainger, Wharton Jones, Paget, Lawrence, and others, in favour of his statements; and in opposition to these we find, even from Dr. Lee's own Memoirs, that such men as Owen, Sharpey, Todd, Bowman, Quain, Kiernan, and other anatomists of the same high repute, have decided unequivocally against the accuracy of his dissections. And we know, as, indeed, we cannot help knowing, that the majority of the best Physiologists of the day are inclined to join with the latter section. And, however much we may be astonished that a question of pure anatomy cannot, by these eminent anatomists, be decided conclusively one way or the other, we hold that the existence of such indecision exonerates us from the necessity of expressing a positive opinion.

If the scientific fact must remain in abeyance, of course the conduct of the Royal Society must equally remain so. If Dr. Lee's dissections are wrong, he cannot blame the Society for expressing their opinion by awarding the Royal medal to the opposing dissections of Mr. Beck. If this was awarded somewhat irregularly, it is to be regretted; but, from Dr. Lee's own Memoir, we cannot make out that any other fault has been committed.

If, indeed, Dr. Lee's dissections and plates are true and faithful, and if the members of the Physiological Committee have refused to inspect them; or, if after so inspecting, they have wrongly reported upon them, the question is very different. But this is the very point on which Dr. Lee's evidence is inadmissible. We cannot allow any one to be witness and judge at the same time. We must hear the other side.

Let us venture on a little advice to Dr. Lee, which we hope he will receive in good part. We would say to him,—Comprehend the true dignity of scientific inquiry, and do not obscure it with what is personal to yourself. Forget the puny workman in the divine labour. Let the work elevate the labourer. Do not suffer the earthly passions of the labourer to lower and profane the work. Establish the correctness of your dissections, not because you may confound your adversaries and acquire a temporary and fugitive fame, but because, in so doing, you are adding to the stores of truth, and are placing another stone on the grand temple of Science. And be sure of it, if you follow Truth in this spirit, you shall find her, and this, even if you get no other acknowledgment, ought to be an ample recompense, and an exceeding great reward."

ARMY AND NAVY SURGEONS.

In the House of Commons on Thursday night, Sir De Lacy Evans brought under the consideration of the House, the claims of the Medical Officers of the Army and Navy to military rewards and distinctions, from which they are excluded, notwithstanding the eminent public services rendered to the country by these gentlemen. He obviated the objection, that they were non-combatants; and, enlarging upon the importance of their duties, merely asked that they should be placed on a similar footing in respect to honorary distinctions, as the same class in the other European armies. He concluded by moving a resolution, declaring that it is not expedient nor just that the Medical Officers of the army should be excluded from a share in honorary distinctions and rewards.

Mr. Hume seconded the motion, upon the principle adopted by Napoleon, that every man who served in the army ought to be considered entitled to reward for distinguished conduct.

Lord John Russell bore testimony to the merits of this class of public servants, and to the value of their services; and as the Order of the Bath had been extended to civil servants, he admitted that it deserved consideration whether this distinction might not be conferred upon the Medical Officers in the two services; but he desired to have an opportunity of consulting the Secretary of State and the Secretary at War before he stated positively the manner in which it could be done; and, the matter belonging more properly to the Executive than to that House, he moved the previous question.

Sir De Lacy Evans thereupon withdrew his motion.

It appears that Members of the House of Commons are not thoroughly acquainted with the part Medical Officers of the Army and Navy have to play on the field of battle, at a siege, or in naval warfare. Yet a glance over the late *Gazettes* would have convinced them, that a large proportion of Army Surgeons have been killed and wounded in the late Indian actions. From the Greek poets we find that Army Surgeons in olden times united in one character the attributes of the prince, the soldier, and the physician, and that even Divine honours were their reward. In modern times the danger has increased with the system of military tactics, but the rewards are diminished. In the Navy, the equality in point of personal experience between the Medical and Executive Officers is more evident than in the Army. If a ship be sunk, or an explosion take place, all suffer alike. In all flush-decked vessels everybody is equally exposed to shot and splinters. Yet Medical Officers of the Navy who have been at the Nile, at Algiers, at Trafalgar, Navarino, and Acre, are left without suitable decoration. They, of course, have the medals which all officers and seamen have, but the real decoration of war-service—the Companionship and Knighthood of the Bath—has been hitherto denied them. It appears, however, at last, from the conversation in Parliament, which we have just quoted, that the Ministry have at length been made sensible of a previous want of generosity and proper feeling. To show the risk run by Naval Medical Officers especially in action, we may mention one or two circumstances which took place in the last great Naval battle, that of Navarino. The Surgeon of the Brisk was amputating a leg, when the head of the gentleman, who was assisting him by holding it, was carried off by a cannon shot. Mr. Marshall, the assistant-surgeon of another ship, a cutter, was amputating the leg of a midshipman, when the cutter swung beneath the stern of one of the Turkish ships, and some Turks immediately boarded our little vessel. Mr. Marshall rushed on deck with his bloody amputating knife in his hand, and with it killed two of the Turks, and thus gave time for the seamen to dispose of the rest. He was promoted for this act of bravery, but not decorated. Had he been an executive officer, he would have been made a Companion of the Bath for saving his ship. Even in the last little affair at La Plata, the Assistant Surgeon of a small steamer was killed in the gun-room, in the execution of his medical duties. We trust, after this, it will not be said that the services of medical officers of the Army and Navy in action are not "war services."

THE EVILS OF QUACKERY.

The Medical Profession has, for some time past, been led to understand that the Lord Advocate has been *enceinte* with a Medical Reform Bill, and the period of his *accouchment* was anticipated with lively interest. It appears, however, that *His Lordship* has had nothing more than a false conception, and we are, therefore, left to live in hope that, at some future period, a member of the Legislature will have a successful gestation, and a safe delivery.

Medical reform is a question which affects not only the Profession, but the public. The one, in truth, only exists for the benefit of the other; and it is because medicine is a science, requiring from those who devote themselves to it thought, study, and experience, in order to treat diseases with the greatest success, that civilised governments have called into existence "the Profession," and given it some protection by college charters and legislative enactments.

The Royal document which founded the first English Medical Corporation, was a

Regal denunciation against quacks, while it was an act of justice to science and humanity. Had nostrum-mongering and empirical practice been that pleasant cheat, which some of our modern Legislators would have us suppose,—had its evils not been clearly seen and painfully felt even to this day—we should have remained without a single medical college or a penal enactment against ignorant pretenders to medical skill.

It was not to be expected that, at the revival of learning in our own country, a perfect measure for the regulation of the Medical Profession would at once be adopted. The Eighth Harry was not Jupiter, neither was Linacre a second Vulcan—the physician, therefore, failed to extract from the Royal cranium another Minerva. The offspring exhibited the imperfections of infancy, and time and experience were necessary to make it a man. That completeness, after the lapse of more than two centuries, has not yet been attained, and hence a demand has for some time been made for improved laws to regulate the Medical Profession.

This is a question, as we have already asserted, which concerns the public as much as the Physicians and Surgeons of this country. When they ask that their chartered Institutions should be liberalized, it is that every impediment to medical science may be removed. When they demand the suppression of quackery, it is that the lives and health of the members of society may receive the best protection. The Legislature is not required to put down nostrum-mongering and empiricism for the purpose of conferring worldly advantage upon legitimate Practitioners. If ignorant charlatans merely damaged the Profession pecuniarily, the Government might leave Science to vindicate her own honour. But the suppression of Quackery is not a question of pounds, shillings, and pence, but one of vital importance to the lives and health of all men.

Experience teaches us that Quackery is a gross deception. It lives upon falsehood, and it is infinitely surprising that the credulity of men should be so great in things appertaining to medicine. The most ignorant empiric may make the most impudent assertions, and multitudes will believe him. There are persons in every grade of society who seem to think it is possible for some men to have an intuitive knowledge of the healing art,—Divine doctors, miraculously endowed to cure all those diseases which bid defiance to the efforts of scientific individuals. The quacks have recourse to every stratagem which is calculated to advance their unholy avocations. The names of eminent Medical Practitioners are forged,—virtues are ascribed to drugs which they do not possess,—and cures published which were never effected. Now, we ask, ought not such a system to be at once suppressed?

But Quackery, moreover, is a system of unrelenting cruelty. The number of human lives sacrificed excites no feeling of remorse in the bosoms of those who ignorantly assume the functions of the Medical Practitioner. Our space will not permit us to recount the many instances recorded within the last few years of frightful mutilations or premature deaths which the victims of empiricism have suffered. Our pages only last week contained an account of a young woman whose death, according to the testimony of a Coroner's jury, was occasioned by "a noxious medical herb called lobelia, administered to her as a medicine to restore health, and without any intention of destroying life." The quantity given to this poor creature for a dose was no less than 200 grains; and the Surgeon who examined the body informs us, that he found the powder adhering to the sides of the œsophagus in a large quantity, and also in the stomach. In Cumberland, also, one of the herb doctors, a disciple "of the Botanic Guide to Health," is awaiting his trial in consequence of a verdict of manslaughter against him for administering the lobelia to a man so as to cause his death. This sect of empirics, we are informed, is very considerable in the North of England, and is composed of persons of the lowest grade in society.

Such occurrences as these should excite every benevolent person to use his efforts to induce the Legislature to check the progress of Quackery. We regret the postponement of the Lord Advocate's Bill, because we have reason to suppose that it would have contained an efficient and summary process for the punishment of ignorant dabblers in physic.

THE JOHN HUNTER CLUB.

We beg to call the attention of our readers to the correspondence in another part of our Journal upon the John Hunter Club.

On one part of the subject it would ill become us to say a word; and that because Mr. Wormald has, in all humility, and in forcible language, stated the grounds on which he claims a seat in the Council. The members of the John Hunter Club cannot do better than read, mark, learn, and inwardly digest his statement. For our own opinion of the constitution and actions of that Club, we refer our readers to our last Number. The question at issue is a public one: it would be very different if the matter to be decided were "Is A. to be admitted a member of a Friendly Convivial Society?" In that case we readily concede that any number of the members of the Society would have a perfect right to combine in excluding any man who was personally disagreeable to them. Thus, no such Society would willingly admit into its Fellowship a man of notoriously bad character, one whose great delight was to quarrel, who was desperately conceited, arrogant, and overbearing, or who entertained opinions diametrically opposed to its constitution. In such a case, every "good man and true" could pursue but one course, inasmuch as a house divided against itself cannot stand. But the Council of the College of Surgeons is a public body, having great public duties to perform; and Mr. Wormald, a man of high respectability, offers himself for election into their body on these very grounds. He declares distinctly, and clearly shows, that he has every legal qualification, and no moral disability whatever for the object of his ambition, and that his public and professional character in some degree depends upon the result of the election.

We strongly advise the Members of Council to consider well before they commit themselves to any invidious line of conduct.

MR. SIMPSON, F.R.C.S.

We regret very much to find that the gentleman who reviewed the Digest of the Health of Towns Report, by Mr. William Simpson, in our last Number, has fallen into the mistake of identifying that gentleman with Mr. George Simpson, of Bedford-street, Bedford-square, late Surgeon of the Westminster General Dispensary, and Registrar of Deaths for St. Giles's, and who prepares papier maché figures (very ingenious and useful preparations, we are assured), for teaching anatomy to the Hindoos.

We deeply regret having made this mistake, and beg to assure Mr. Simpson that it was totally unintentional and inadvertent. It was one into which a reviewer entirely ignorant and unacquainted with the author of the work he was reviewing might easily fall; and we thus take the earliest opportunity and most effectual means in our power to proclaim it to be a mistake, and to state that he, Mr. George Simpson, is not the author of the "Digest of Several Reports on Sanitary Reform." We sit in the chair of Aristarchus, not of Zoilus; and although a part of our motto is, and ever will be, "*sans peur*," we do not consider it complete unless we can conscientiously add, "*et sans reproche*."

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—June 12, 1849.

Thos. Addison, Esq., M.D., President.

A paper was read entitled

On Tumours of the Mammary Gland. By John Birkett, Assistant-Surgeon to Guy's Hospital.

The Author commenced his paper by introducing extracts from the works of various Authors who have written on tumours of the breast during the last thirty years. He then proceeds to relate cases illustrative of the general characters and structural anatomy of the morbid productions or new growths, which it was his especial object to direct attention to. They are characterised by a remarkably lobulated exterior, and a succulent, glistening aspect on section. They consist of a large quantity of uniting, or areolar tissue, and present, when carefully examined by the aid of the microscope, the cœcal terminations of gland tissue. Nucleated bodies are found in these hypertrophic growths, but these are merely interposed elements, possessed in common by all new growths. The origin of these growths the Author considers due to excess of nutrition: they resemble the healthy gland structure, but have no lactiferous tubes. They usually occur before the age of thirty, and are more frequent in the unmarried than in the married. The function of the mammary gland is generally unimpaired. Their more ordinary position is on the surface of the gland; and they may attain to a very large size, their existence not being necessarily accompanied by pain. The hypertrophic growths under consideration are harmless, but usually not amenable to general remedies, or any local treatment short of excision. The Author concluded his paper by some remarks on hypertrophic growths, generally of the breast, dividing them into perfect and imperfect hypertrophy. The former most commonly occurs about the age of puberty, and consists in great increase in size of the breast, from a continued development of true gland tissue. The latter, or imperfect hypertrophy, he subdivides into lobular, general, and cystic. The first is that which had been alluded to already. In the second, the true gland is atrophied by the encroachment of the new growth, so as to be no longer recognisable. The cystic form is regarded by the author as imperfect gland tissue, (hydatid disease of Cooper, cystosarcoma of Müller.) He proposes reserving the consideration of this question for a future opportunity.

Mr. C. Hawkins took exception to the name

given to the disease by the author of the paper, observing that hypertrophy was increased growth of the natural structure, whereas, if he had understood the paper rightly, these growths were said to be new and isolated in their formation; in which case they could no more be denominated hypertrophy than could a fatty tumor. The paper added to our knowledge of what we knew of these tumors, in that of their containing epithelial cells and imperfect ducts; but still he should abide by the old name. He had examined a tumor with Mr. Quekett, and it assumed as much the structure of the mammary gland as of the salivary gland; and observed that generally they partake of the character of the parts near which they are situated.

Mr. Birkett: Some obscurity must necessarily attach to my communication in consequence of the first part not having been read. My great object was to simplify the matter, in consequence of authors having used such indefinite terms in regard to these growths. I have not seen one of these tumours which could be so distinctly detached from the mammary gland tissue, as Mr. Hawkins has described. I believe, with him, that they are connected with the mammary gland tissue, but differ from him in believing them to be a new growth.

Case of Popliteal Aneurism. By J. D. WRIGHT, Surgeon-Major, Grenadier Guards.

This case derives its interest from the fact of a favourable termination having followed the application of a ligature on the femoral artery after the aneurismal sac was ruptured,—compression having previously failed in effecting its obliteration.

The patient was aged thirty-seven. Six days prior to his admission into the Hospital he had become aware of a popliteal swelling, to which his attention was directed by pain in the knee. The tumor, on examination, was found to be as large as an orange, and presented all the characteristics of true aneurism. He was bled, and the pad of an Italian tourniquet applied over the femoral artery, just before it enters Hunter's canal. Effectual pressure could not be borne continuously, but the limb gradually became accustomed to partial interruption of the flow of blood through the artery, and the tumor became smaller and more solid. On the eighth day, however, the sac burst whilst the patient was at rest, and it was deemed advisable to tie the femoral artery, which was done after the lapse of only three hours. The ligature separated on the twenty-sixth day, and the wound healed kindly. A twelvemonth has since elapsed; the man is well, and the tumor is reduced two-thirds of its volume.

Mr. C. Hawkins: In connexion with this case, I may mention one treated successfully by pressure, under the care of Sir B. Brodie. The patient was an old man. Seven or eight months before death, a pulsating tumour was discovered in the hand. There was no appearance of any other disease of the vascular system. A bandage of emadon plaster was placed over it and kept on four or five months. A month previous to death, all pulsation had ceased. After death, I removed the tumour in the popliteal space, and a more perfect specimen of cure I never saw.

The President: Was the artery extensively diseased?

Mr. Hawkins: No. About two or three inches on each side of the tumor was taken out.

Cases Illustrating a Peculiar variety of Closed Pupil. By P. C. DELAGARDE, Surgeon of the Devon and Exeter Hospital, and of the West of England Eye Infirmary.

The form of closed pupil referred to by the Author is characterised by the existence of dark brown pellicles, extending from the iris to the capsule of the lens,—the consequence of inflammation of the former texture, and conjectured by him to be portions of the uvea retained at their point of adhesion, and partially detached from the retracted iris: these pellicles may cross one another, occupy the pupil, and close its aperture. The Author cites three illustrative cases, and details their treatment. In the first, which occurred in a man of fifty-four, the crystalline and its capsule had been previously removed, and the dark elongations of the uvea filled the whole area of the pupil. The iris and obstructing uvea were divided transversely by introducing a sharp-pointed knife through the sclerotic, behind the ciliary body; and the cure was permanent. In the second dark matted bands of uvea concealed the crystalline lens and adhered to its capsule. The patient, a female of fifty-three, had been the subject of syphilitic iritis six years before, which attack terminated in loss of vision. The crystalline lens of the right eye (being opaque) was first dispersed, and the capsule torn up, and the pupil cleared of uvea in four operations, the needle being introduced twice in front of, and twice behind, the iris. Belladonna was afterwards freely employed. A similar operation was twice repeated on the left eye; after which she suffered from rheumatic iritis, resulting from imprudent exposure, which was followed by hypopyum, and the pupil was permanently closed. Some months after this, the perception of light was strong; but the author did not recommend the division of the iris, as the new pupil could not have corresponded with its fellow. She has now sight sufficient to follow her household duties.

The third case occurred in a wayward boy of fourteen, opacity of the cornea, and attachment of the iris to it, constituting a further complication; the sight had been lost some years before by severe inflammation, and an ulcer had penetrated the cornea of the left eye five years later. This ulcer existed at the date of his admission, and the pupil was occupied with a broad film of very dark uvea; the lens was opaque, but pale. Keratonyxis was twice performed, the capsule of the lens being opened, and the uvea freely divided. The capsule was subsequently detached from the iris, after three or four attempts, the boy's resistance rendering the operations through the sclerotic very difficult. The pupil subsequently expanded freely. The needle was subsequently introduced three times through the cornea, to cut off a large conjunctival vessel, and detach the lower edge of the pupil from the back of the cornea, at the seat of the perforating ulcer. A satisfactory result followed, the lad having sight sufficient for all common purposes.

Mr. Dixon: The author speaks of a *peculiar* form of obstructed pupil, treated by a peculiar operation. But the obstruction, after all, was a common one, and the operation is just that which is performed every day in London.

The sitting was then adjourned.

REVIEWS.

Surgical Anatomy. By JOSEPH MACLISE, Surgeon. Fasciculus III. London: John Churchill. 1849.

We have received the third part of Mr. Maclise's Surgical Anatomy. It contains plates 9 to 12, illustrative of the surgery of the wrist and hand; the relative position of the cranial, nasal, oral, and pharyngeal cavities; the relative position of the superficial organs of the thorax and abdomen; and, lastly, the relative position of the deeper organs of the thorax and those of the abdomen. The plates continue to be of the same excellent character that we have before ascribed to them, and their description all that might naturally be expected from so good an anatomist as Mr. Maclise. The work ought to be in the possession of every one, for it really forms a valuable addition to a surgical library. We are happy, moreover, to inform those to whom the Author is only known by his "Comparative Osteology," "Morphological Studies," and "Archetype Skeletons of Vertebrated Animals," that the letter-press is perfectly intelligible to those who cannot understand the language of transcendental anatomy. We transcribe the following eloquent, though still somewhat obscure, passage:—"A member of such vast importance as the human hand necessarily claims a high place in regard to surgery. The hand is typical of the mind; it is the material symbol of the immaterial spirit; it is the prime agent of the will; and it is that instrument by which the human intellect manifests its presence in creation. The human hand has a language of its own. While the tongue demonstrates the thought through the word, the hand realizes and renders visible the thought through the work. This organ, therefore, by whose fitness of form the mind declares its own entity in nature, by the invention and creation of the thing which is, as it were, the mind's autograph, claims a high interest in surgical anatomy; and accordingly the surgeon lays it down as a rule, strictly to be observed, that when this beautiful and valuable member happens to be seriously mutilated, in any of those various accidents to which it is exposed, the prime consideration should be, not as to the fact of how much of its quantity, or parts, it can be deprived of in operation; but rather, as to how little of its quantity should it be deprived, since no mechanical ingenuity can fashion an apparatus capable of supplying the loss of a finger, or even of one of its joints."

When the present undertaking is completed, and we have obtained a copy of the book to which we have above alluded, we may probably devote a lengthened review to Mr. Maclise's works as a whole.

Medical Portraits.

We have just received from Mr. Bixo, Lithographic Portraits of Dr. Babington and of Mr. Bransby Cooper, of Guy's Hospital. They are faithful likenesses of the distinguished originals, more particularly the former.

Mr. Stone has also enriched the series now publishing under his superintendence, by the production of a capital likeness of that popular teacher, Mr. Hancock, of the Charing cross Hospital; and of an equally clever likeness of that eminent naturalist, Professor Edward Forbes, of King's College. They are executed in Mr. Maguire's best style, and printed by Hanhart on India paper. M. Claudet is also following the good example of Mr. Stone, in producing lithographic portraits, taken from daguerreotypes, of various distinguished men. He has sent us admirable likenesses of Professor Faraday, and of Mr. Grove, Vice-President of the Royal Society. That of the latter possesses high merit. The portrait of Faraday has rather suffered a diminution in its spirit in the working up. The lithographing of these portraits is calculated to enhance the reputation of Mr. Bosley as an artist.

ON DR. STEVENS' SALINE TREATMENT OF ASIATIC CHOLERA; BEING THE EIGHTH AND CONCLUDING LETTER OF E. A. TURLEY, M.D., IN CORRESPONDENCE WITH G. ROSS, ESQ.

MY DEAR SIR,—I read your last letter of the 9th inst. with infinite pleasure. It fully confirms the high opinion I had formed during our correspondence of your love for truth and justice. I was perfectly convinced from your lectures and letters, that you were unacquainted with important facts respecting the saline treatment of cholera by Dr. Stevens, at Cold-bath-fields Prison, Greville-street Hospital, and at the Abchurch-lane Hospital. In the absence of these facts, your deductions would naturally be such as you have drawn. I am perfectly satisfied with the conditional retraction contained in your last letter; and, as this will for the present conclude our correspondence, I shall endeavour to offer for your consideration a few more facts on this important subject. Your able lectures have been the cause of a wide dissemination of the true nature and only rational treatment of the pestilential cholera; and the gentleman-like conduct you have manifested throughout our discussion will, I am convinced, produce a favourable impression on the Profession, exhibiting, as it has done, the possibility of conducting a medical "war of opinion" without acrimony or feelings of animosity.

My last letter concluded with a short outline of the first introduction of the saline treatment of cholera into the Free Hospital in Greville-street, as well as Mr. Marsden's statement of its favourable results: and now, relying on the same source from which I obtained that information, I shall try to explain how, in the progress of time, it came to be supposed that two separate and distinct systems of saline treatment existed,—how that recommended by Dr. Stevens was affirmed to be the worst; whilst the second, or that which was alleged to have been matured by Mr. Marsden, was stated to have been the best treatment that had ever been pursued, either in London or elsewhere.

Those who were behind the scenes, and knew the secret springs which moved the opinion of the medical world, were well aware that the opposition to the new treatment derived its origin chiefly from the three medical members of the then Central Board of *Health*. (?) Two of these members had recently given official opinions relative to the nature and

treatment of cholera, which were the obverse of the theory and practice recommended by Dr. Stevens. It was, therefore, clear, that if their theory and practice were right, his must be the reverse; and if, on the other hand, his views were right, theirs must be wrong.

At that period, Sir Wm. Pym and Dr. Russell seem to have been the passive, and Dr. Barry the active member of the Board.

At first, the evidence that had been brought forward in favour of the new practice, made considerable impression on the public mind. Dr. Turner, Dr. Prout, Dr. O'Shaunessy, Mr. Preton, and many others, had published most favourable opinions with respect to the accuracy and importance of Dr. Stevens' views; whilst Mr. Wakefield, Mr. Whitmore, Mr. Marsden, Dr. Cambridge, Dr. Rance, Mr. Moss, Dr. Bassey, and a host of others, had given ample testimony of the *practical* value of the neutral salts in the treatment of the new disease.

On the other hand, the three medical members of the Central Board were exerting every means in their power to counteract the impressions that had been made on many minds in favour of Dr. Stevens' plan.

At this time the cholera patients in the City Hospital in Abchurch-lane were under the charge of Dr. A. Tweedie,* a young practitioner, who had given proof of some talent in a paper on the contagious nature of cholera, in the *Medical Gazette* for April, 1832, which did him great credit, and by another in June of the same year, in which he gives two cases wherein saline injection into the veins had not been successful, both of which were tolerably correct, although he somewhat mistook the cause of death in one of the cases. At this period Dr. A. Tweedie was evidently a lover of justice; for, though he brings forward these two cases of failure under saline treatment, he says, on the other hand, "As an offset to the above case, it may be stated, that Mr. Whitmore has had in all about thirty cases of cholera since he commenced the saline treatment, and of this number he has lost only two; one of these cases was that of a man who was brought into the above hospital in the very last stage of cholera, and died soon after admission." He adds, "In addition to these there have been lately, in the same hospital, seven cases, six of which were very severe. They have all been under the saline treatment, four of them have been dismissed cured, and the other three are now considered as out of danger." †

Shortly after this period, Dr. A. Tweedie became one of the chosen scions of the Central Board of Health; and though his first and best papers had appeared in the *Medical Gazette*, soon after he became a convert he was mentioned with praise in the *Lancet*, which was then, through Dr. O'Shaunessy, the chief organ of the Barry party. Under this new state of things, Dr. A. Tweedie not only abandoned his advocacy of the saline treatment, but ere long became one of its most bitter enemies.

It was in the end of June, 1832, that Dr. Barry made his attack upon Dr. Stevens and his saline treatment in the prison at Cold-bath-fields; but finding that it was still successfully practised both in that prison and at the Greville-street Hospital, a fresh attack upon Dr. Stevens was determined, and the Cholera Hospital, at Abchurch-lane, selected for the experiment. Drs. Barry and O'Shaunessy were well aware that Dr. A. Tweedie's recantation and evidence against the saline treatment would not be received without sufficient proof by the Medical Profession; and to obtain this there is reason to believe that Dr. Barry acted on Dr. A. Tweedie, and Dr. A. Tweedie on the Medical members of the City Board. Some of these gentlemen were well known to have been honourable men, and that they had no conception of the deep-laid plot that was going on to prove the saline treatment not only to be a complete failure in the City Hospital, but, if possible, to render it a complete failure even in the hands of Dr. Stevens himself. Early on the morning of the 18th of July, 1832, Dr. Stevens received the following communication from the City Board of Health:—

(Copy.)

"Guildhall, July 17, 1832.

"Sir,—I am instructed by the Medical Officers attached to the Board of Health for the City of London, to state, that, in consequence of the success you mention in your late work to have attended your treatment of the spasmodic cholera, they feel great anxiety to put that treatment into practice in the Cholera Hospital in Abchurch-lane, and think it would be most satisfactory to yourself, as well as to them, that the application should be made under your personal superintendence.

"If such an arrangement should be compatible with your convenience, I trust it is unnecessary to assure you of the most cordial co-operation and support of the officers connected with the establishment.

"I have the honour to be, Sir,

"Yours respectfully,

"J. F. De Grave, Hon. Med. Sec."

If Dr. Stevens had refused to comply with the above request, it would have been said that he had no confidence in his own treatment, and was afraid to trust to another experiment. On the other hand, Dr. Stevens' suspicions being awakened by other circumstances, he determined not to risk any experiment until he could withdraw Mr. Crooke from Cold-bath-fields, which at that moment could not well be done, and, therefore, he found it expedient to request time.

On the 18th of July, Dr. Stevens made a communication to the City Board, expressing his willingness to superintend a certain number of cases as soon as he could get Mr. Crooke to remain in the Hospital to attend to the Cholera patients when he, Dr. Stevens, might not be there to take care of them himself. At this time Mr. Crooke was in constant attendance on some severe cases in the Prison, and it was this circumstance and other causes that prevented Dr. Stevens from attending to the request of the City Board so soon as he wished. In consequence of this delay, he received on the morning of the 1st August the following communication from Mr. De Grave:—

(Copy.)

Guildhall, July 31st, 1849.

Sir,—I am instructed by the Medical Officers of the City of London Board of Health to express their regret that they have not yet had the opportunity of witnessing the application of the saline treatment in spasmodic cholera under the superintendence proposed by yourself, when they had the pleasure of meeting you at the Guildhall. According to the arrangement agreed upon, immediate information was sent to Mr. Crooke on the admission of the first three cases that occurred. Of this information, no notice whatever has been taken. The Medical Officers are still anxious, even at this late period of the epidemic, that the saline treatment should be tried, and that in a manner most satisfactory to yourself. I am, therefore, desired once more to offer you the uncontrolled management and treatment of the next twelve cases which may be brought into the establishment in Abchurch-lane.

I have the honour to be, Sir,

Your most obedient servant,

J. F. De Grave, Hon. Med. Sec.

As Dr. Stevens had been successful in the conversion of Mr. Marsden and many others, he hoped, by the force of facts, to convert Dr. A. Tweedie also; and, therefore, in his reply to the City Board, he expressed a wish, that Dr. Tweedie might be allowed to attend the cases with Mr. Crooke.

On the 2nd of August, at the appointed hour, Mr. Crooke went to the Hospital; and, at noon, on the following day, the 3rd of August, a new case of cholera was admitted into the City Hospital. The name of this patient was Margaret Hinchie, aged twenty-five. She had been suddenly taken ill, and was sent to the Hospital as a cholera patient, by Mr. Miles, surgeon of Broad-street. When first admitted, this woman had severe premonitory symptoms, but she was not yet in a state of collapse. According to the agreement, Mr. Crooke wished to take charge of the case, but he was disappointed, for Dr. A. Tweedie told him it was not one in which the saline treatment was to be tried; for that he himself could easily cure this patient with opium, stimulants, and the other valuable remedies recommended by the Central Board. He added, that as soon as a really bad case of cholera came in, then Mr. Crooke might try his new treatment on it. Mr. Crooke said that the present was a well marked case of cholera—that the agreement of the City Board with Dr. Stevens was, that the saline treatment was to be tried on the first twelve cases of cholera admitted after twelve o'clock on the preceding day. But his observations made no impression. Mr. Crooke's first determination was instantly to quit the Hospital, but on reflection he determined to remain and watch the result of Dr. Tweedie's narcotic and stimulant treatment. As already stated, this patient had been admitted on the 3rd of August, and the moment Mr. Crooke saw that she was in a hopeless state, he intimated to Dr. A. Tweedie his opinion of the treatment he had experienced, and left the hospital. On the following day, Dr. Stevens went to the City Board, related to the Medical members of that establishment what had occurred, and announced his intention to have nothing more to do with any experiment in their hospital, being satisfied that any benefit effected by the saline remedies would be counteracted by the Physicians to the hospital.

One of the members of the City Board (Dr. Roupel) proposed that Dr. A. Tweedie should be dismissed from the hospital, at least for a time; others refused to consent to the proposal, and Dr. Stevens put an end to the subject by declaring, that, as Mr. Crooke was determined never to enter their hospital again, he also must beg leave to decline having anything to do with it.

Instead of allowing many of our readers interested in our correspondence to wade through the detail of the ten letters on cholera, I will briefly recapitulate the motives and assertions contained in the series.

In my first private note to you I begged to know on what authority you constructed the third table of the results of the saline treatment of cholera. The same candour and love of truth which, I am bound to say, has distinguished your conduct since I have had the pleasure of being acquainted with you, induced you to desire that our letters might be published. You have now found that the data on which you depended were not correct. I investigated them with the strictest scrutiny, and, finding that Dr. Stevens was, at the time, precluded from writing himself, I was moved by a desire to vindicate one whose integrity and honour I have been witness of for many years. Moreover, as cholera was then spreading, I believed I was aiding the cause of justice, truth, and of humanity, in advocating and showing the saline treatment to be correct. In my first letter I gave the history of Dr. Stevens' peculiar views, the facts from which they spring, and the results of their practical application. I promised the Profession a general *resumé* of our inquiry. I explained the basis on which Dr. Stevens' claims to the attention of our Profession stood. I quoted some of the Authors who passed high encomiums on his discoveries, after having repeated his experiments. In my third letter, I reviewed the first introduction of the saline treatment at Cold-bath-fields Prison, and the statistics thence resulting. In the fourth communication, I proved these on the authority of Mr. Wakefield's and Mr. Whitmore's letters, also those of Colonel Chesterton and the chaplain, as well as on the testimony of several of the magistrates and others.

In my fifth letter, I quoted the authenticated documents from the prison of all the cases that had occurred there, and found the mortality to have been only 7 per cent.; indeed I know it to have been less, though the mortality, under other treatment, in London alone, was 5,273 out of 11,018 cases. In the same letter, I put you in possession of the results my investigations had led to; and I also gave, in a condensed view, for the guidance of the Profession, the method of employing the saline treatment. (Pages 423 and 424.) You replied, still doubting the assertions that Dr. Stevens' treatment had been successful, and the veracity of his facts. You still relied on the authority of Drs. Barry and O'Shaunessy's report.

In the sixth letter, I explained where you were led into error, and quoted the blunders of Dr. Barry, as well as his duplicity and dishonesty, which were pronounced and fully proved by the magistrates, at a general meeting at the prison.

In my seventh Letter I gave you an account of Mr. Marsden's avowed objection to try the saline treatment under the eye of Dr. Stevens, at the Free Hospital, his subsequent change of opinion, as to its value, and his written declaration of the entire *bouleversement* of his prejudices against it, as well as his high compliment to, and praise of, its honoured inventor.

You then admitted the satisfaction you had felt in perusing the documents, &c., relative to the affairs at Cold-bath-fields Prison, as well as acknowledged Dr. Stevens' just claim to the discovery of the saline treatment of cholera. You disclaimed your intention of giving Mr. Marsden credit for the discovery of the above treatment. As to this I submit for your further perusal your 5th Lecture, in which the "note of admiration" alone, confirms my former assertion.

Finally, you have placed Dr. Stevens' character in its true light before the Profession, a consummation in which I would have spent the rest of my life in attaining, so much am I his debtor for information more valuable than any I ever before received, from either the savans of Britain or from those of the continent.

But, unhappily for science, these views will not be appreciated in our day, nor until the cold materialism

* The reader must not confound this person with the distinguished gentleman of the same name who is physician to the Fever Hospital.

† See *Medical Gazette* for June, 1832, page 323.

of the present school shall have met its merited extinction in "the grave of all the Capulets."

I cordially thank you for the patience and candour with which you have treated me, and for the opportunity afforded me of doing what I consider a solemn duty to my Profession, to truth, and justice. I more than ever feel that I am, very sincerely, yours,

E. A. Turley.

Ivy-house, Worcester, June 18, 1849.

INCREASED ACUTENESS OF VISION IN RHEUMATIC FEVER.

[To the Editor of the Medical Times.]

Sir,—I beg to forward to you, for insertion in your ably-conducted Journal, the following case:—

I was requested, a few days ago, to visit, with the surgeon of the family, a Professional gentleman of distinguished reputation and of high intellectual powers, suffering from acute rheumatism, affecting the knees, ankles, and hands. When I saw him, he had been confined to bed about ten days, and was incapable of changing his position without assistance. The thirst was intolerable, and the excessive heat of skin and copious perspirations alternated throughout the twenty-four hours. The mental faculties were peculiarly clear, nor had there been the slightest confusion or incoherence in his ideas during the progress of the disease. It is not necessary to describe the symptoms at length, as they present few points of interest, nor shall I bring under consideration the treatment which was successfully pursued,

At my first visit, two things strongly arrested my attention: 1st. The comparatively tranquil state of the circulatory system. The pulse was full, soft, and regular, and exceeded only by a few beats the standard of health. 2nd. The mental excitement was evidently greater than is usually observed in such cases, manifested in the quickness and justness of his perceptions—a degree of mental activity that would, under ordinary circumstances, have been regarded as amounting almost to an exuberance of spirits, although his sufferings were occasionally extremely acute.

In the course of his remarks, he said, one thing had struck him as extraordinary, viz., the increased power of vision. He had for years been under the necessity of using glasses when reading moderately large print; but, from the commencement of the present attack, he found he did not require them, and he gave evidence of the fact. The power, however, was temporary, and disappeared with the cessation of the fever.

All the senses are liable to similar modifications in various severe forms of disease, particularly hearing and feeling. Taste and smell are much more frequently blunted than heightened in the acuteness of their perceptions. In regard to sight this has seldom been noticed by writers, and from the circumstance, that the occasions are few by which it can be detected. In the first place, it will scarcely be possible, except in those in whom the sense has become impaired, and even then the discovery will rest with the patient and not with his friends or Medical attendant, which is not the case with similar modified conditions of the other senses—save, perhaps, the sense of taste. To attempt to account for the phenomenon, would lead to lengthened and elaborate considerations concerning the functions of the nervous system, and the mode in which they may be variously influenced, which, out of respect for the patience of your readers, and the value of your columns, I shall forego.

Your obedient servant,

G. Calvert Holland, M.D.

88, Mount-street, Grosvenor-square.

THE JOHN HUNTER CLUB AND MR. WORMALD.

[To the Editor of the Medical Times.]

Sir,—I beg to transmit to you two inclosures, copies of letters, I have felt it my duty to write:—

The original of the document marked "A," I have addressed to the President and Council of the Royal College of Surgeons of England, and also to the President and Court of Examiners. The original of that marked "B," I have sent to all the Fellows of the College, who reside within reasonable distances of London.

As I consider that, for the present, I have, in these letters, sufficiently expressed my sentiments of the "John Hunter Club," and the object of those who have voluntarily formed themselves into that body, I do not, on this occasion, further trouble you, than to request you will oblige *me*, (and I hope I may say the *Profession*,) by giving circulation to what I now send you, in the next Number of your Journal.

I have the honour to remain, Sir,

Your very obedient Servant,

Thomas Wormald.

42, Bedford-row, June 25, 1849.

(B)

Sir,—It is with great reluctance I have to solicit the favour of your perusal of a letter that I have felt under the necessity of addressing to the President and Council of the Royal College of Surgeons, of which the following is a copy:—

(A)

"To the President and Council of the Royal College of Surgeons of England.

"Mr. President and Gentlemen,—As my name stands amongst those Fellows of the College who are eligible to fill the present vacancies in your Council, I feel it to be an imperative duty to you, to myself, and to the Profession, respectfully to call your attention to a circumstance of vital importance.

"It is a fact that a number of Fellows have formed themselves into a Club, called the "John Hunter Club," and that a principal, if not the sole, object of this Club is to control the election of members into the Council, by excluding such Fellows from a seat in it as may on any ground whatever be objectionable to the members of this Club; and that they may accomplish their purpose with greater certainty, one of the regulations by which they are governed is, that their minority, upon a vote being taken in their Club, shall vote with their majority at the College.

"By such proceedings, if sanctioned or endured, it must be evident, that at every election the most meritorious and honourable aspirants to the distinction of being members of your Council may have their views capriciously and most unjustly frustrated; and as it has come to my knowledge that my introduction into the Council will be opposed at the approaching election by this Club, I feel bound to submit to you that a Club organised for the purpose I have mentioned (avowedly or not), and assuming to interfere as I have been informed the members of that Club do intend to interpose, on the 5th of July next, must be regarded by you as subversive of every principle of fair election, and as a most unwarrantable usurpation of the high and important rights and privileges of honourable, independent, and honest electors.

"I protest even against the legality of the acts of such a combination of persons, and earnestly solicit your very serious attention to proceedings, so likely to effect irreparable injury, to entail dishonour on the Profession, and, in my humble opinion, so eminently deserving the immediate notice of the Council.

"I have the honour to remain,

"Mr. President and Gentleman,

"Your very obedient servant,

"Thos. Wormald.

"Bedford-row, June 25, 1849."

I cannot entertain a doubt that the great majority of the Fellows of the College will feel, that the formation of the "John Hunter Club," and its object, are inimical to their own most valued interests, independence, honour, and dignity. If gentlemen will consent to belong to such a Club, and should the Profession countenance it, every Fellow who may hereafter desire to become a member of the Council, must descend from a reliance upon the public reputation, a long series of laborious years in his profession has earned for him, to seek favour at the hands of such a body as I have referred to, or be reduced to the necessity of making a personal canvass of the electors, previous to every election, to which I am persuaded the Fellows at large will not and ought not to submit. It is well known, that, for fourteen years, I was uninterruptedly occupied as a public lecturer on Practical Anatomy at St. Bartholomew's Hospital, which, during that period, boasted of being the largest school in the empire, and hundreds, if it were necessary, would willingly testify to my capability and usefulness throughout that time; that I have for the last eleven years, been Assistant-Surgeon at the same hospital, and as no man can adduce one solitary objection to my character as a properly educated and experienced Surgeon, I confidently put it to every Fellow of the College, whether he can approve of this self-constituted body meeting in private, and for reasons wholly concealed from the individual they may be about to injure, combining to detract from his character, and to deprive him of his legitimate position in his profession.

I entertain the unhesitating assurance, that you will view the circumstances I have now detailed as I believe every upright mind must regard them, as being undeniably prejudicial to the best interests of the profession, and only meriting general condemnation.

I have the honour to remain, Sir,

Your obedient servant,

Thomas Wormald.

[To the Editor of the Medical Times.]

Sir,—Finding doubts are entertained as to the correctness of my statements regarding the regulations of the "John Hunter Club," I think it right to forward you a copy of the last circular to its members, and I should feel obliged if you would append it to my letter of the 25th instant. You will observe there is neither date nor signature to it.

I am, Sir,

Your obedient servant,

Thos. Wormald.

Bedford-row, June 27th, 1849.

"To ——

"The John Hunter Club.

"The next meeting of the 'John Hunter Club' will be held on Wednesday, June 13th, at the Freemasons' Tavern.

"Dinner on the table at half-past six precisely.

"This will be the last meeting previous to the annual election at the College of Surgeons.

"Law 8.

"The decision of any meeting the Club, shown by a majority of two-thirds of the votes of the members present, taken by ballot, shall be considered as the expression of the Club.

"The opinion of the Club thus expressed shall be considered as binding in honour on the minority with regard to their conduct in relation with other Fellows of the College of Surgeons."

[To the Editor of the Medical Times.]

Sir,—As I cannot but suppose that you would wish to make use of what influence you may possess as a journalist in a legitimate way, and would have your statements founded in truth, I trouble you with this, that you may have the opportunity of putting yourself right with the Profession in your next Number, with regard to a Club of which some of the Fellows of the College of Surgeons are members, which has been greatly misrepresented. In the first place, permit me, as a member, to say, that the club has no wish that there should be any secrecy in the affair, and I have no doubt, if you were to apply for the names of the members, that they would be furnished you. Indeed, you would confer a favour on them by making their intentions public, and so save them some trouble, as they wish it to be known whom they are going to support at the ensuing election at the College of Surgeons. So far from it being an object of the Club, that none but Hospital Surgeons shall be elected, their only object, and one they intend to pursue at all hazards, even though it should meet with your opposition, is, to do all that lies in their power to promote the election of only the *most fitting person*, and who is most likely to maintain the dignity and honour of the College, quite regardless as to whether he belongs to a hospital or not (which every Fellow is bound by his oath to do). As an earnest of this I may mention that, previous to the appearance of your last number, the Club had agreed to support, and intend to do so with all their proper and legitimate influence, first, Mr. Luke, who goes out of office, but is eligible for re-election. Then there are two other vacancies caused by death (there ought to be another if the Council declare one of the present members of Council ineligible on account of not *bona fide* practising his profession as a *surgeon*, which they are empowered to do by the new Charter.) In this case Mr. Luke would remain, and there will be three vacancies, and the Club have decided to support, and support only, Mr. Hodgson, Mr. Kiernan and Mr. John Dalrymple, *not one of them hospital surgeons*, and only one in any way connected with the Club, whom I need scarcely say was not present at the meeting at which this decision was come to. It is necessary to say, that three gentlemen have been passed by, because they were not (according to the Charter) eligible; Mr. Perry, Mr. Gulliver, and Mr. Owen. But I need hardly add how proud the Club will be to see such names adorn the Council, when they may have become eligible; in arriving at this decision the members of the club have been influenced but by one motive, to do honestly their duty, notwithstanding the umbrage and dissatisfaction it may give to some parties. They have not supported *private* friends whom they may esteem on account of their personal or social qualities; but those alone have been selected whom they

thought were *bonâ fide* the best men, and most likely to do honour to their selection. The Club do not think that because a gentleman may have been attached for a long time to a hospital, *therefore* he is an eligible candidate for the Council of the College of Surgeons;—on the contrary, should he have not taken advantage of his position, and in some manner have advanced the science or practice of his Profession, that would be a reason for not giving him their support; and though a gentleman may have been a teacher for a long period, if by his teaching he has not attempted to raise the *moral* as well as scientific standard of his pupils, but if his teaching may have had a contrary tendency, that would be a valid reason also for not supporting him. The club are quite aware that their proceedings will meet with opposition (and they are prepared for such), from those whose position may not have entitled them to their support; but they saw that, to prevent any one, whether eligible or not—some, indeed, most ineligible, — *creeping* into the Council according to seniority, that it was quite necessary, and *their duty*, to do all that lay in their power to remove this stigma from themselves as electors of so important a body as the Council of Surgeons. Any number of gentlemen meeting together to decide how they can best promote the interest and welfare of a body to which they may belong, and after due deliberation determining how they shall act, has ever been considered as quite *a legitimate* mode of proceeding. The great object of the Club is publicity—that Fellows from the country, and others, may have the opportunity of informing themselves of the qualifications of the candidates *before the* Election. The Club have no wish or intention *to dictate* to the Fellows, but, having determined on their own course, leave the Fellows to form their own opinions also.

I am, Sir, yours,

J. H. C.

P.S.—It may be as well to state that no member of Council is a member of the Club.

[To the Editor of the Medical Times.]

SIR,—As much ill feeling has been engendered among many of the Fellows of the Royal College of Surgeons, in consequence of its having come to their knowledge, that a secret Club, styling itself the "John Hunter Club," has been formed for the avowed object of controlling the election of Fellows into the Council, I may perhaps be permitted to state some particulars respecting an application which was made to myself to join this Club. It will be seen from this statement that the motives of its members are laudable, however questionable the propriety of the means they have adopted to carry out their intentions. My friend stated his case, as far as I remember, somewhat in this fashion. That there was an opinion prevalent amongst many of the Fellows, in which several members of the Council participated; that, as this body was now powerless to select its own members, and as the number of Fellows was on the increase, many of whom resided in the country, and therefore had not the means of judging of the qualifications of the candidates, it seemed expedient that some steps should be taken to insure a return of proper individuals to the Council, with the view of keeping up its high character, and preventing it being swamped by an influx of inferior men. With this object it was proposed to establish a Club, for the express purpose of making a selection from the Fellows of such as, in the opinion of its members, were worthy of the honour of sitting on the Council, and giving them the united support of the Club; by this means it was hoped that the return of good men would be insured, while the same machinery would be equally effectual in excluding the bad. I at once declined joining this Association, and gave the following reasons for doing so, though urged by my friend to reconsider the matter, and let him know my determination in a day or two:—

1st. I considered the scheme impracticable, from the impossibility of keeping the existence of such a Club a secret, and the certainty that its discovery would give rise to a counter movement, and so defeat the objects it had in view.

2ndly. I doubted whether every member of the Club considered each of his colleagues fit for the honour of sitting on the Council; and, if not, jealousies and disagreements would inevitably arise fatal to the existence of the Club.

3rdly. I questioned the possibility of getting so large a body of Fellows as was necessary to give efficacy to the measures of the Club, to vote together; the minority, on a vote being taken in their Club would not always vote with their majority at the College.

4thly. I objected to its formation on principle, as an engine calculated to excite much angry feeling and ill-blood among the Fellows, which would more than counterbalance any good that the Association was likely to accomplish by its formation; and that, while I believed no really good men would be excluded from the Council, I considered that the admission of a few men into their body whose claims were less strong was a minor evil, in comparison with the results which I had reason to anticipate would ensue, if the proposed scheme were carried into operation.

Whether some of these anticipations have not been already realized, I leave to my readers to determine

F.R.C.S., BUT NOT A MEMBER OF THE "JOHN HUNTER CLUB."

MEDICAL REFORM.

[To the Editor of the Medical Times.]

SIR,—My proposition (June 2nd) on the subject of Medical Reform, having received so worthy and influential a seconder as yourself, in this day's Number, in an article on the duty of petitioning for Medical Reform, I beg to trouble you with a few additional remarks, thanking you, at the same time, for the earnest manner in which you appear to have taken up the call for the settlement of this teasing question.

A very great deal has been said on Medical Reform, and the subject has been agitated now above a dozen years; for I find, on looking over old medical periodicals, that the Profession suffered as now,—that, perhaps, not so much,—from the yoke which binds it. Then I was a juvenile, and cared nothing about it; but now, my senses having seen and felt, being awakened from my slumbers, after a few rubs of my eye-lids, I find that I, having now a post in the professional army,—that I, also, am as much bound by oppression as my seniors, who now, alas! are dropping, one by one, into their tombs, after having exerted themselves to gain for the Profession, and for the public, too, what is nothing but just and reasonable.

The voyage has been long, and many a storm has been raised against the Reform vessel,—oft has it been nigh wrecked,—but, made of sound material, the storms have abated without producing any other effect than to harden the crew, who now, like good, deserving, and hopeful sailors, are waiting to be steered into the harbour. Vessels, however, are wrecked on landing,—the wind which has hitherto been favourable, suddenly changes its point,—and how many have suffered and died on the eve of a joyful hope of planting a firm foot on land.

This allegory will illustrate the necessity of a good, faithful, and experienced pilot; and the question,—the only question that requires answering—(if arrangements have been made and the Bill is ready)—is, Have the Profession made a happy choice in the man who is to steer the vessel into port?

"There is a tide in the affairs of men,
Which, when taken at the flood,
Leads on to fortune."

Is there a tide in the affairs of reform, now at the flood, that will lead to success? I fear some quicksand—rocks there are none. You propose to spur on the doctor's grey dobbin of reform. We are late in our journey. The spur, Sir, should have been given before, and I am afraid that, after this long and tedious travel, our horse will fall, and will not come in at the right time. Had not the steed better be put up till the dawning of the new session, when a new Bill can be introduced that shall be fairly discussed, and passed or rejected. To introduce the Bill now, in my opinion, would be a failure. It might be read a first time, and, by some crafty management, be put off and put off till too late, when the worthy introducer would withdraw his Bill till early in the ensuing session, when it would be forgotten or laid aside as one unlikely to meet the exigencies of the Profession. This is a delightful prospect, to be sure! The eyes of the majority of the Profession are on it, and thinking of palmy days, and grasping a leaf from the olive-branch; but, alas! they will soon know that their hopes have been delusive as a dream, through the interference of two in the Council of the College. What do you say on the 2nd of June. The remark, if true, or even if near the truth, leads me to think the decision far, very far, from just:—"The chief difficulty seems to be the reluctance of the College of Surgeons to allow the right of the proposed College of General Practitioners to examine in surgery. It is said, that, by a resolution of the Council carried *by a small majority, the admission assented to, and regularly signed* (mark this!) by the delegates of the Conference at the College of Physicians, has been disallowed; and that, in fact, two *unimportant members* (and this) of the Council, have been instrumental in nullifying the better judgments of the Presidents and Vice-Presidents, who were empowered to negotiate in the name of the whole body." This story, Sir, falls like a thunderbolt, and like that body, may or may not have a serious effect. What does the quotation imply? It implies "a breach of promise of marriage." A breach of promise on the part of an individual who promises a female, in connubial alliances, is a serious matter, at least is so regarded. The individuals go to law, and the man of course loses. If it be serious in such a case, it must be serious in our case; nay more, when a breach will affect a whole country, as this will. How is it we did not hear of this dissent before? We would wish to know who the "two unimportant members" are, who have caused this nullification. Do they belong to the small majority? Are they, Sir, to rule the whole Profession? Are they to throw out any stumbling-block in the way they choose, to the annoyance of the 20,000 General Practitioners in the country? I have a judgment, and shall form my own opinion. Though a member of that College, I will be an independent member, nor will I be ruled by any individuals as regards my course of action, by one or two important or unimportant, as long as I see that such individuals are not acting in a morally lawful course. You may well be emphatic in your appeal. Petition, yea, men and brethren Petition; and let us see the day when we shall be rid of this vexation and trouble, this anxiety and distress, this oppression and trickery.

I am glad, very glad, to find, that the Council of the College are not unanimous. There are some in that Council, I doubt not, who are honourable—and honourable to the last. As well might one or two of the Examiners of the Apothecaries' Company act as the "unimportant members," and as easily endeavour, with bristly hair and enraged countenances, to nullify the agreement made and signed at the Conferences; but they have all had confidence in the good judgment of the delegates whom they appointed.

Mr. Guthrie, in the fourth paragraph of his letter, makes remarks which, to me at least, appear to indicate that the business of the Committee at the College of Physicians has been done in a very loose and unsatisfactory way. Why should matters be left till the last, for the whole Council to have the liberty to approve or disapprove of anything or everything which may be contained in the new Bill, and why there should be a want of acquaintance in the propositions agreed to by the Conference Committee, seems to be somewhat curious; and why it is so I cannot imagine. One College is enough for the exigencies of the Profession; and, if the Council of the College of Surgeons will not allow a re-organization or modification of their Charter—let us have a College, an independent College of General Practitioners.

Your remarks on Medical Reform and the Colleges, (June 2,) I would advise the Profession to read, mark, learn, and inwardly digest, that they might come to a clearer knowledge of its position. These remarks you certainly follow up well in advising the Profession to Petition. Sir, I must conclude. I would draw up a Petition, but I am not accustomed to framing such things; but if you will be good enough to draw a copy up yourself and publish its contents, I will send you my name, little though it be, to put on the face of it, and I hope that many will be induced to do likewise.

I am, Sir, yours respectfully,

A REFORMER OF ABUSES.

June 23, 1849.

NERVOUS PHENOMENA.

[To the Editor of the Medical Times.]

SIR,—In your Number for June 16, 1849, Dr. R. Tuthill Massey has recorded some interesting "Cases illustrative of nervous phenomena."

May I ask him on what grounds he states, in the relation of his second case—"Here we had the brain alive after the death of the heart"?

A man *leaps out of bed, seizes* his wife, and cuts her throat,—goes into *the adjoining room*, his daughter's, finds her absent—returns, and cuts his own throat.

Dr. Massey finds the dead woman's "face turned round towards the man," "her eyes fixed on the cut in his throat, and her index finger pointed at the cut;" "her whole expression exhibited accusation"

Dr. Massey says—"The tragedy MUST have engaged at least five minutes;" the heart's action MUST have ceased, ALL THE BLOOD having escaped through the arteries and veins of the neck." Then comes the pertinent question—"Without this vital fluid, could the brain act?" I believe most men who know anything of physiology will say No; but did Dr. R. Tuthill Massey make himself certain that these occurrences occupied *five minutes*, or, has he discovered a new stimulus which can excite the various organs without the presence of blood?

I am, your obedient servant,

DUBLINENSIS.

MEDICINAL POWERS OF ARSENIC.

[To the Editor of the Medical Times.]

SIR,—In a not less just than severe review (of a work on the Skin), which appeared in the *Medical Times* of last week, the writer incidentally remarks that "arsenic may remove temporarily certain skin diseases, but *none permanently*." I need not say that, as a member of the Profession, desirous of maintaining its respectability, I repudiate all sympathy with such a person as "Thomas Innes, M.D.," and marvel that a respectable journalist should have condescended to notice either the man or his book. But I am most anxious to make a few remarks on the somewhat hasty statement above quoted, as to the limitation of the medicinal powers of arsenic. I say hasty, because I am sure the writer yielded somewhat inconsiderately to the impulse of his honest zeal for the exposure of false pretensions. It is now nearly three years since I first published some cases demonstrative of the important fact, that arsenic, when administered under certain conditions, will not only cure many diseases of the skin of the non-contagious class, but that, if continued in reduced doses, for a certain period subsequent to their disappearance,—a period proportioned to the previous duration of the disease,—it will very frequently destroy all tendency to skin disease, at least for many years, and probably for life: and that, where it does not prevent future outbreaks at certain seasons, it materially mitigates their severity and limits their duration. Quacks have not failed to catch at this hint, and, if the Profession heed it not, the treatment of these diseases will be in the hands of quacks. I have had great pleasure, however, in receiving assurances from eminent practitioners in all parts of the country, that they have verified the truth of my observations on the wonderful powers of this mineral. I will not intrude further on your valuable space, but refer the reader to the cases in my work on the Skin, and to a "Memoir on the Medicinal Action of Arsenic" in the forthcoming Volume of the "Transactions of the Provincial Medical and Surgical Association," Vol. xvi., Part 2, in which will be found the collated experience of some scores of practitioners, both in public and private practice.

I am, Sir, yours respectfully,

THOMAS HUNT.

Bedford-square, June 25, 1849.

INFLUENCE OF THE ATMOSHERE ON THE RATE OF MORTALITY.

[To the Editor of the Medical Times.]

SIR,—In reference to the observation made by you, that "the modern practice of the healing art has been remarkably defective, inasmuch as it has been directed almost exclusively to the cure of diseases, and not to their prevention," I beg to inclose for insertion in your widely circulating journal a statement showing the relative electrical condition of our portion of the atmosphere and of the upper crust of the earth, and of the rate of mortality in the metropolis, which affords evidence of a character, when properly worked out, that cannot fail, I think, in its application, in greatly mitigating several complaints to which the human frame is subject, more especially those of the epidemic character.

I annex also a sketch of the apparatus referred to, and should any of your scientific readers be desirous of investigating this interesting question, I shall feel great pleasure, personally or otherwise, in conferring with them upon the subject.

The differences of evaporation are registered every morning at nine o'clock, and at about ten o'clock at night.

I am, Sir, your obedient servant,

FRANKLIN COXWORTHY.

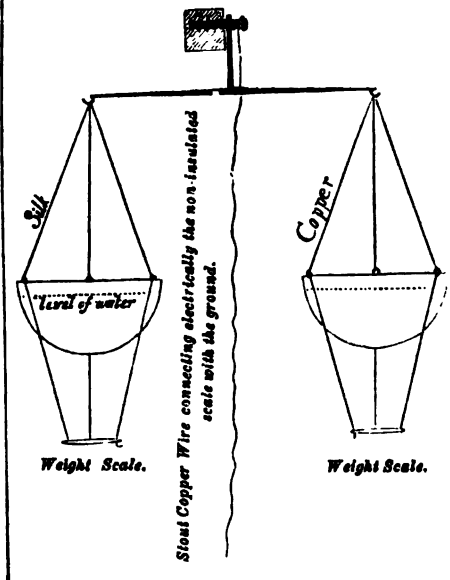
Author of "Electrical Condition," &c.

Westminster-road, May 31, 1849.

STATEMENT

Showing the relative electrical condition of the earth and the atmosphere during the years 1845, 1846, 1847, and 1848, as indicated by the evaporation of water from two copper vessels or scales, one insulated and the other not. The vessels are seven and a half inches diameter, containing each about thirty-two ounces of water, and suspended under a lean-to roof on the north side of a wall, where they are protected from the influence of wind, sun, and rain. They are fourteen feet from the ground, with which one is electrically connected by a stout copper wire. Also showing the mortality per cent. in the Metropolis for the same period.

Date.	1845. Insulated.	1845. Not Insulated.	1846. Insulated	1846. Not Insulated.	1847. Insulated.	1847. Not Insulated.	1848. Insulated.	1848. Not Insulated.	Remarks.
January	The vessels were first filled on the 10th Oct., 1845.			270	115	140	40	325	The rate of Mortality is taken from a Table, published by the Registrar-General, in 1849.
February				70	280	105	100	65	
March			385	33	370	130	145	170	
April			215	75	195	195	60	295	
May			210	345	225	185	240	275	
June			445	460	290	175	425	145	
July			900	100	215	225	335	175	
August			245	35	355	65	340	65	
September			225	120	245	65	165	130	
October	960		280	145	150	275	310	145	
November			130	195	90	290	140	95	
December			245	135	80	320	160	150	
Grains	960		3,360	1,983	2,630	2,170	2,400	2,075	
Mortality	Per cent. 2·879		Per cent. 2·879		Per cent. 2·783		Per cent. 2·662		



GLYCERINE IN DEAFNESS.

[To the Editor of the Medical Times.]

SIR,—In the *Lancet* of June 16th, I observe there is a history of a number of cases, stated to be deafness, treated with *glycerine* by Mr. Wakley, jun., who, after several excellent remarks on a too favourite mode of treatment by cotton and water, introduces that of *glycerine* as an invention or discovery of his own, which I am apt to fancy is rather premature.

If there be any merit in the introduction of *glycerine* as a new article in the treatment of diseases of the ear, I beg leave to claim that merit, as I used the *glycerine* for diseases of that organ about two years ago. And as a further proof that Mr. Wakley, although an excellent and enterprising surgeon, is not the original applicator of glycerine in diseases of the ear, I refer to the new and improved synoptical Table of the diseases of the ear by Harvey and Buchanan, 1848, where the *glycerine* is recommended several times.

I remain, Sir, most respectfully,

Your most obedient servant,

THO. BUCHANAN, C.M.

Hull, June 25, 1849.

POISONING BY A DELETERIOUS QUACK MEDICINE.

[To the Editor of the Medical Times.]

SIR,—Since the death of Jane Garner, as reported in your *Times* of the 23rd inst., I received a note from Mr. Pearson, of Maryport, in Cumberland, requesting me to give him the result of the *post-mortem*, and all other particulars connected with the lobelia, as administered to her. Mr. Pearson says, "I was lately called to an inquest, under nearly the same circumstances, and the case has assumed considerable importance, in consequence of a verdict of Manslaughter having been found against one John Wood, who professes to be an agent to Dr. Coffin, a medical botanist." Mr. Pearson is associated with other medical gentlemen in his neighbourhood, all being very anxious to collect any kind of information, as to be armed at all points by the time the trial comes on before the superior Judges. I wish, through your Journal, to inform them of the difficulties which we had to encounter before the inquest terminated to the satisfaction of the Profession.

The Coroner exhibited the strongest possible tendency, as he does upon all similar occasions, to talk the jury into finding a verdict of death from *natural causes*. He even began writing out such a verdict. But we stood by the Profession, and unflinchingly maintained the truths of our science. On the jury were some intelligent men, who were with us; had it been otherwise, the whole affair would have been stifled, and the quacks could have gone on destroying the lives of the public as before, without observation or hindrance.

The following is, in substance, the manner of examination pursued by the Coroner upon the occasion:—

Coroner: I have never heard of lobelia before in any former inquests. What is it?

Witness: It is a kind of tobacco, first used by the aborigines of America for an emetic, and is, therefore, called the emetic weed.

Coroner: In what quantities is it administered?

Witness: Coffin recommends a tea-spoonful of the powder, or even more, if necessary, as an emetic.

Coroner: How much was administered in this case?

Witness: The brother of the deceased said he gave a tea-spoonful, which would be about 140 grains. The legitimate Practitioners, who have used it in America and in England, give from *one to five* grains, as an expectorant, and from 10 to 20 grains as an emetic. In this case it did not operate either as an emetic or purgative, but remained insoluble on her stomach and caused her death.

Coroner: You say her left lung was wasted and almost useless, the heart and kidneys flabby and enlarged: would not these have been a sufficient cause of death if the lobelia had not been administered?

Witness: We found no traces of recent inflammation of any kind, or other appearances to account for death, beyond the lobelia which had been given to her, and here is the quantity of the powdered lobelia which amounts to about 400 grains, which we yesterday took from the stomach of the deceased Jane Garner.

Coroner: Nevertheless, it is not sufficient to prove the cause of her death, even though you did find it in the stomach. How does it act?

Witness: On the nervous system, as do all the other acro-narcotic poisons,—like tobacco, by paralysing the vital functions, ending in spasms of the muscles, convulsion, and death, and leaving no trace behind.

Coroner: Notwithstanding all this, we have

proof of its being the cause of her death. If it leave no traces, how can you say it caused death?

Witness: By analogy. We know that if certain things are introduced into the system they will produce death, and that is how we arrive at a conclusion in such cases as the present; otherwise the science of medicine would be a nonentity. Surely the time and money expended upon our education cannot go for nothing. Your construction of the evidence will only produce a great many more inquests.

Coroner: I do not mean to say that medical science is of no use; but I mean to say, that her previous illness might cause her death, and not the lobelia.

Witness: Then you would say, if you had been presiding over an inquest where a person had been under treatment for typhus fever, or any other affection, even phthysis itself, and that a medical assistant, in a mistake, had sent a strong opiate liniment, instead of an aperient draught, or a mild fever draught, to be taken instead, that death resulted from the affection which that person then laboured under, and not from the mistake of swallowing the opiate liniment?

Here the subject was dropped, and the Coroner began to make out a verdict such as has been already reported in your Journal. The gentleman who reported the particulars of the inquest to you did so extremely well; but these little particulars are necessary to make it complete for scientific readers, as well as for the gentlemen who are now engaged upon a similar case in Cumberland.

I make it a rule to call for assistance in any *post-mortem* examination which I am instructed to make by magisterial authority. I do this because it leads to useful employment, and to an extension of knowledge in this peculiar branch of medical science. Mr. Davis, who assisted me, I am bound to say, discharged his duty in a manner which, if generally adopted, would elevate the character of the Profession in public opinion. Instead of putting himself forward, by trying to get at the head of the case, he remained, very properly, in a secondary position, giving me all his opinions in the most unreserved manner, and leaving me, as being the first employed, as the mouthpiece of our joint opinions. Thus, perfectly organized, we were strong and irresistible before the jury,—a just verdict was returned,—and medical science lost no portion of its value in public estimation. If gentlemen would, among themselves, adopt these regulations, the Profession, as a body, would become too strong for those who take all possible pains to depreciate its value and importance. It is an old adage, that the veriest fool, who is accustomed to any profession or calling, will know more of that than the cleverest person who is not so accustomed. If these positions be correct, a regularly-educated medical man will know more than a Coroner, a Judge, or any other person whatever who happens to be non-medical. Yet I have seen men, exceedingly well-informed in their Profession, and well up in every point of the case in which they were concerned, so unnerved and so beaten down by the bullying and badgering of magistrates, barristers, and judges, having no knowledge whatever of any branch of medical science, that put me quite to shame for the character and honour of my Profession. Such persons were made to look like mere simpletons in public court, because it was the policy of the law to procure a sentence different from that which would have been inflicted had the true evidence been admitted. In cases of infanticide, and other cases of judicial inquiry, medical evidence is almost always right; and yet it never harmonises with the results of trial by jury, or the bias of the Judge in his charge to the jury; and the consequence is, that medical men are made to look like fools in the eyes of the public, and crimes of their description increase every year throughout the country. Some judges twist, turn, and so distort the true evidence of the medical man, that it becomes in no way like itself,—it is made a puzzle for the jury,—the Judge gains his point,—the criminal gets off,—and crime increases as before mentioned. If hanging a mother for the murder of her infant offspring be repugnant to the feelings of humanity, or to the people of a country where civilization is constantly on the increase, let it be so; the medical man can have no objection, as a member of a Profession whose habits of life are to alleviate human suffering. On the contrary, he would be the most ready to abolish so sanguinary a law. All he can wish for is, to have his Profession protected and honoured by the legal institutions of his country.

Under present circumstances, wherever he is connected in criminal trials, the results are so contrary to his facts, as often to make him grieve that he ever entered the Profession. Instead of being supported and upheld by judicial authority, he is too often sacrificed and disgraced; and so it will continue, until the Profession itself will make a firm stand against such unseemly and oppressive systems of judicial management. The young men who are destined to succeed us ought to be informed of the true position in which they now stand. They should join together, and set at defiance all those who appear incapable of appreciating the importance of their public or private service; and thus would they confer honour on themselves and benefit to their country.

I am, Sir, your humble Servant,
JOHN LEESON.

4, Finsbury-square, June 24, 1849.

LAW OF LUNACY.

[To the Editor of the Medical Times.]

SIR,—In our present palmy state of civilization, the lines of refinement being refined upon almost to a point, the social phase continually exhibiting contrasts the most striking and appalling, it is no wonder that so large a number of our fellow-creatures come within the category of lunacy. My attention has been attracted to this subject by the admirable articles contained in your later numbers, and perfectly do I coincide with the writer, "that there can be no subject of greater public interest than that of the law of lunacy," in which "personal liberty and the disposition of an enormous amount of property are alike involved." Personal liberty is of primary importance; and how that may be affected by the lax provision or vicious administration of this law, let the following fact suffice:—A young gentleman, known to me, became attached to a dissolute woman, and was on the point of marriage, the equipages being even at the door of her dwelling; when his friends, by a most extraordinary circumstance, became aware of his position, and had just time by the utmost exertion and influence, to obtain medical certificates of his insanity, and incarcerate him in a "mad-house," thus preventing him from bringing disgrace on his family and ruin on himself; but the wonder is—the sequel, that he ever came out thence again a sane man. Looking at your observations, I would ask, what would Mr. Justice Coleridge say to this case? Would he prevent the interference of the Commissioners here, and thus confirm the confinement of this young man? Would it not be equally just in the family of a young nobleman or gentleman, whose propensities for the turf might lead him, like an ass, to stake a large portion of his patrimony on the stride of a horse, to use the like coercive means? And how many of us, from one cause or other, would escape entirely incarceration within the "four walls," if this were the rule. No. Depend on it, His Grace of Newcastle uttered a more philosophical sentiment than probably he perceived or intended, when he declared that a man had a right to do as he liked with his own. To the above instance, affecting personal liberty, may be added the following, also within our knowledge, relating to property:—A gentleman, about forty years since, was placed by his family in an asylum; he has remained there to the present day; he never exhibited any violent symptoms, is inoffensive, healthful, and tractable; his mind, had it been dealt with judiciously, would probably have been capable of allowing him to take part in society, instead of being curbed by confinement; but then, his property, amounting to several hundreds a year, would not have flowed into its present channel. Strict, honest, and regular revision of all kinds of establishments devoted to this purpose is, therefore, imperatively demanded, and also a generous and just support of the constituted authorities in all cases, when coming into contact with our Courts of Common Law.

Yours, &c., A LAYMAN.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, 21st June, 1849:—James Morris; Frederick Gardner, Paington, Devon; Henry Watts, London; Joseph German, Derby; Robert Moore Bowman, Ripon, Yorkshire.

NEW FELLOWS OF THE ROYAL COLLEGE OF PHYSICIANS.—Dr. Stroud, Great Coram-street; Dr. Swaine, Upper Seymour-street; Dr. Philp, Kensington; Dr. Collier, Fitzroy-square; Dr. Wells, Reading; Dr. Shaan, York; Dr. Munk, Finsbury-place; Dr. Abercrombie, Cheltenham; Dr. C. Handfield Jones, Sloane-street.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 22nd instant:—Messrs. Robert Coker Nash Davies, Worcester; Edward Buckell, Chichester; Charles Alworthy, Newtownards, County of Down; Dudley Clifton Wodsworth, Cambridge-street, Hyde-park; Charles Hall Chambers, Lifford, Donegal; Thomas Francis, Welchpool, Montgomeryshire; Walter Robert Crouch, Burton, Somerset; Frederick William Napoleon Wilson, Newcastle-upon-Tyne; Harvey Ludlow, London; Henry Christian Hare, Marlborough Villas, St. John's-wood; and William Francis Noot, Portsmouth. At the same meeting of the court, Messrs. Joseph Coulter, Frederick William Blake, and John Colmer Austin, passed their examinations for naval surgeons; these gentlemen had previously been admitted members of the College, their diplomas bearing date respectively, February 23, 1844; April 14 and 21, 1845.

WAR OFFICE, June 22.—Royal Malta Fencible Regiment.—Assistant-Surgeon Ludovico Bernard, M.D., to be surgeon, *vice* Montanaro, deceased.

APPOINTMENTS.—Dr. Alexander Rosel Brown has just been elected Physician to the Sussex County Hospital, having resigned the appointment of Physician to the Stamford Infirmary. The contest was one of the severest ever known for a similar appointment in Brighton, notwithstanding which the Doctor was elected by a majority of seventy-four. Mr. George Robert Skinner, an under-graduate of the London University, and formerly of King's College, has just been elected one of the students in Human and Comparative Anatomy at the Royal College of Surgeons, in the vacancy occasioned by the retirement of Edward Charles Hulme, Esq., late of St. Bartholomew's Hospital.

OBITUARY.—At Paris, on the 15th inst., of cholera, after a few hours' illness, James Scratchley, M.D., aged 65, late of the Royal Artillery, and Fellow of the Royal College of Surgeons.—On the 19th inst., at his house, 105, Albany-street, Regent's-park, Mr. George Hall Lambert, surgeon-apothecary, in his 48th year.

THE CHOLERA, during the past week, has been on the increase in the metropolis and in various parts of the country. It is still spreading in America, and causing a frightful mortality. The magnetical instruments at Greenwich indicated but a small amount of electricity in the atmosphere throughout the week. Among the thousand and one cures for cholera, we have one published within the last week as a certain remedy. The British Ambassador, in a letter to his brother the Bishop of Derry, states that dissolved camphor, administered in the early stages of the disease, cures in *less than an hour*. [How comes it to pass, then, that the mortality from cholera, is not diminished?—ED.]

HEALTH OF LONDON DURING THE WEEK.—(From the Registrar-General's Report.)—The total deaths registered in the week were 985, and exhibit an excess, but not more than 22 above the average. The increase, as in the previous week, arises almost exclusively from epidemic diseases, for the deaths in this class were in the last three weeks 251, 251, 277, whilst the average does not exceed 198. Hooping-cough and cholera are alone predominant on the list; the former having been fatal to 55 children, more than the average by 19; and the latter to 49 persons at all ages. Of these 49 deaths from cholera, 11 occurred under 15 years of age, 32 between that age and 60, and 6 at 60 years and upwards. They principally occurred in the south and eastern districts. The progress of mortality from this disease, during the last four weeks, is marked by the following numbers:—9, 22, 42, 49. The mortality from diarrhœa has rather decreased; for the deaths from it, which in the previous week were 36, in the last week were only 17, whilst the average is 12. All the other fatal causes which make the largest contributions to the weekly mortality now exhibit the usual amount, or fall considerably under it. The deaths from phthisis have been for a long period less than the average; last week they were 127,

or 18 under the estimated number. A man of fifty-eight years died, according to the return of the medical attendant, of "general decay, probably accelerated by voluntary abstinence, after an illness of ten days." Two deaths from destitution occurred in Islington workhouse. In Goswell-street sub-district a lady died at the extreme age of 103 years, within two hours after having taken a dose of laudanum, which had been prescribed by a druggist. The mean reading of the barometer at Greenwich was 29,890 inches for the week; the mean daily reading was above 30 inches on Wednesday. The mean daily temperature rose from 54°9 on Sunday to 67°.1 on Saturday, on which day it was highest. The highest reading also occurred on that day, when it was 78°.6 in the shade, and 106°.8 in the sun. The mean temperature of Saturday was 6°.8 above the average of the same day in seven years, though the temperature of the whole week was rather less than the average.

MEETING OF CHEMISTS AND DRUGGISTS AT LIVERPOOL.—On Friday week a meeting of chemists and druggists was held in the Clarendon-rooms, to consider a series of resolutions passed by a Committee, appointed at a recent meeting called by Mr. Jacob Bell (of the London Pharmaceutical Society), with the view of associating chemists in this town for mutual improvement, and carrying into effect the objects of the Pharmaceutical Society. The meeting was very numerously attended. The affairs of the Society are to be conducted by a council, consisting of a President, Vice-President, &c. Messrs. Clay, Thompson, Johnson, Lathbury, Rawle, E. Evens, Tiernan, Wagstaff, and Rowland form the present council. The following gentlemen have already offered their services as lecturers:—Doctors Dickinson, Muspratt, Brett, Inman, and Messrs. Hamilton, Waldie, and Edwards. Dr. Dickinson's lectures are to be delivered at the Botanic Gardens, and the Committee intend to apply to the Directors of the gardens to have the plants arranged in their natural families (not, as they are now, merely for ornament), with a view to the study of botany.

DEATH FROM INHALING HYDROGEN GAS.—The *Brussels Herald* mentions that M. Van Alsten, of Rotterdam, has recently fallen a victim to his devotion to science. He was the author of a great work on chemistry; and was desirous, it seems, before terminating it, of testing to what degree a man might without danger inhale a quantity of hydrogen gas. He tried the experiment in his own person, and died in a few hours.

A JUDGE'S OPINION ON CONFINING LUNATICS.—The Lord Chief Baron, in a trial which took place last week, "Nottidge *v.* Ripley and another," in which the plaintiff, a young lady, brought an action against the defendants for confining her in a lunatic asylum, said, "If the notion has got abroad that any person may be confined in a lunatic asylum or a madhouse, who has any absurd or even mad opinion upon any religious subject, and is safe and harmless upon every other topic, I altogether and entirely differ with such an opinion; and I desire to impress that opinion with as much force as I can in the hearing of one of the Commissioners."

THE MEDICAL STAFF OF THE FRENCH ARMY.—It is said, that the medical staff of the expeditionary army before Rome will have to be considerably increased; and a number of surgeons have already received orders to proceed to Civita Vecchia.

SANATORIUM IN MADEIRA.—On Monday afternoon a meeting was held at the Hanover-square-rooms for the purpose of founding an establishment in Madeira for the reception of consumptive patients in the middle classes of life, Lord R. Grosvenor in the chair. His Lordship, in his address to the meeting, explained that their object in proposing this Institution was not the formation of a hospital, where patients could reside and be attended gratuitously, but an establishment where patients in the better class of life could reside at a very moderate expense, and it was also proposed to lessen the expenses of the voyage to Madeira for such patients.

DISCOVERY OF ETHYL.—Mr. Frankland, who has for some time been pursuing his chemical studies in the laboratory of Prof. Bunsen, of Marburg, has discovered ethyl, the base of æther.

MORTALITY TABLE.

For the Week ending Saturday, June 23, 1849.

CAUSES OF DEATH.	Total.	Average of Five Springs.
ALL CAUSES	985	963
SPECIFIED CAUSES	974	959
Zymotic (or Epidemic, Endemic, and Contagious) Diseases	277	198
SPORADIC DISEASES:		
Dropsy, Cancer, and other Diseases of uncertain or variable seat	37	48
Tubercular Diseases	177	200
Diseases of the Brain, Spinal Marrow, Nerves, and Senses	121	123
Diseases of the Heart and Blood-vessels	31	34
Diseases of the Lungs, and of the other Organs of Respiration	119	131
Diseases of the Stomach, Liver, and other Organs of Digestion	58	62
Diseases of the Kidneys, &c.	8	11
Childbirth, Diseases of the Uterus, &c.	5	8
Rheumatism, Diseases of the Bones, Joints, &c.	4	8
Diseases of the Skin, Cellular Tissue, &c.	..	1
Malformations	4	3
Premature Birth and Debility	24	21
Atrophy	23	17
Age	27	50
Sudden	16	11
Violence, Privation, Cold, and Intemperance	43	33
Causes not Specified	11	4

TO CORRESPONDENTS.

The present Number concludes the 19th Volume of the "Medical Times." Next week we hope to publish the Index.

"Tyro" wishes us to inform him of the earliest recorded Lunatic Asylum. We believe the earliest mention of an institution of this kind is in the Life of St. Theodosius, who lived at the close of the fifth century. He founded, near Bethlehem, a monastery, to which were annexed three infirmaries,—one for the sick, another for the aged, and a third for such as had lost their senses; in which all assistance, spiritual and temporal, was afforded "with admirable order, care, and affection."

"N.B."—We have had no personal experience of the efficacy of carbonate of soda as a remedy for severe burns. Some time ago, however, a Correspondent in the pages of this Journal recommended a single layer of lint soaked in a saturated solution of the carbonate of soda to be applied to burns. He stated that, besides acting as a direct sedative upon the nervous structure of the skin, it may possibly relieve pain by neutralising the acidulous quality of the prespiration as it passes off through the irritated skin. As "N. B." wishes for information on the subject, perhaps, amongst our numerous readers, there may be some who have tested the efficacy of this application, and will favour us with their opinions.

"Observer."—(1) In this climate the mean temperature of the same month in different years varies much less in summer than in winter. In the summer and early autumn months, the mean of the thermometer hardly differs more than 5 or 6 degrees in one year from what it does in any other year. The case is different, however, in the winter and early spring months, when the same range of mean temperature in different years extends to 11 or 12 degrees of Fahrenheit. (2) The statistics we cannot furnish.

"A Subscriber, M.D."—(1) Glanders when communicated to the human subject produces the most intense suffering. (2) We know of no means by which a cure may be effected, but in case of inoculation in any part where a cupping glass can be employed, we should recommend its application, and the free use of nitrate of silver.

"Scotus."—Cancer cells in the early stages of their development are easily confounded with groups of epithelial cells which have been long steeped in fluid.

"Inquirer."—A candidate for the degree of M.B. at Cambridge must have entered on his sixth year, computed from the date of his first admission at the University, have resided nine terms, and have passed the previous examination.

"Aliquis."—The warrant ought not to have been addressed to the person mentioned.

"M.R.C.S."—asks if a medical witness can object to make an autopsy, excusing himself on the ground that he might by accident wound himself, and in consequence endanger his life. He cannot.

"Mr. Estcourt."—We very much doubt the efficacy of the remedy in the cases alluded to.

"Petitioner."—There is no redress.

"B. T. L., Leeds."—On receiving a proper address, the question shall be answered.

"Bethnal-green."—We are not acquainted with any analysis of the substance.

"B. —."—A Licentiate of the College of Physicians cannot become a General Practitioner without forfeiting his corporate privileges as a physician.

"Legal Practitioner."—The license can be obtained by applying to the Inspector of Anatomy. Fee, £2 2s.

"Paul Pry"—wishes us to inform him how many medical students entered the various hospitals in the metropolis during the past year, and how many were admitted as members of the College of Surgeons and Licentiates of the Apothecaries' Company. We would recommend our Correspondent to apply to the different hospitals himself, and to the medical corporations, as the only way of gratifying his curiosity.

"Philo-Chirurgus."—The University of London does not confer at present any legal privileges on the possessor of the degree.

"An Old College Member" wishes us to publish the names of the Members of the John Hunter Club. We may probably gratify our correspondent's wish in a short time.

"Psoriasis."—Mr. Startin's lectures, published in the "Medical Times," on skin diseases, give a lucid description of the use of glycerine in the treatment of such affections.

"Antiquask."—We shall feel obliged by the information in reference to the doings of the Cœlinites in our correspondent's neighbourhood.

"Querist."—The case should be examined by an educated medical practitioner. It is impossible for us to offer an opinion upon the nature of the malady from the letter of our correspondent, and we never prescribe in our columns.

"An English M.D."—The chairs of clinical surgery, military surgery, and medical jurisprudence in the University of Edinburgh, are in the patronage of the Crown.

"L. M. (Birmingham)."—We do not think it possible to distinguish arterial from venous blood by any physical or chemical characters, when it has been effused for some days, and has fallen upon articles of dress.

"J. G., a Subscriber."—The Black drop is said to be three or four times stronger than the tincture of opium. It is made by macerating half a pound of opium in three pints of the expressed juice of the wild crab.

"Hibernicus."—The Certificate of the Dublin Apothecaries' Society confers on the possessor no right to practice in England.

"An Occasional Correspondent."—The fee for graduation is 25*l*.

"Gulielmus," (Manchester).—The University insists on six months' residence.

"Medicus."—The Faculty of Medicine requires foreign graduates to pass the five examinations, and to present and defend a thesis.

"M."—The solid nitrate of silver is the most effectual application.

"A Medical Student."—A Petition should be addressed at once to the Board of Examiners of the College.

"Socius."—A member of the College, on his admission to the Fellowship, pays ten guineas; and a person not previously a member pays thirty guineas, which does not include charges for stamp.

"Mr. Atkins" is thanked for his communication.

"Delta."—We cannot agree to the proposal.

"R. L., Edinburgh."—Neither the English College of Surgeons nor the Apothecaries' Company states any particular number of midwifery cases for the student to attend.

"Mr. L. F. Crummey, Stokesley."—Communication received.

"Alpha, Bristol."—1. Yes; by courtesy. 2. Yes; when he resides more than seven miles from the metropolis. 3. Yes; if he is not engaged in general practice.

"Mr. F. S. Gaulie, Halifax."—Communication received.

"Hillsborough" shall receive an answer next week.

"Mr. Ancell Ball, Spalding," asks:—"Will some of your numerous subscribers state the most elegant and economical mode of administering chloroform, as it will not mix with water?"

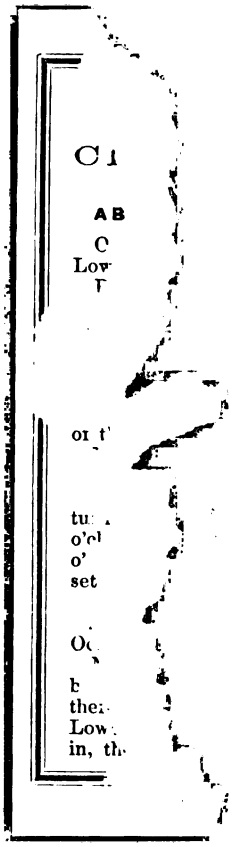
"A Correspondent" has sent us the following card:—"Mr. Mark W. Jackson, M.R.C.S., Consulting Surgeon, Oculist, and Aurist, Senior Surgeon and twenty years Surgeon to the Stamford General Infirmary, will visit Boston professionally every Wednesday, and may be consulted from eleven till four, at Mr. Hobson's, Hatter, Market place, in all surgical cases, and in all cases of ophthalmic and acoustic surgery, and of eruptive diseases of the skin and scalp, so often connected with affections of the eye and ear. Advice to the poor, gratis."—We think that this Hospital Surgeon has acted a little *infra dig.* in publishing such a card. We would advise him by all means to write a book.

"Medicus" should apply to Mr. McDougall, who will, we are sure, readily answer his inquiries.

"A Very Old Subscriber, Manchester."—The method of preparing chloride of zinc may be found in most works on chemistry. As regards its effects as a disinfectant agent it is not patented.

"Dr. W. Reed Clanny."—Our Paris correspondent adverted to the subject last week.

"Mr. J. B. Stedman, Whittlesea."—The dose is about the same as quinine. It has failed to maintain that reputation which it once acquired in the treatment of ague.

"A Student."—(1) Both works are very good. (2) The degree does not qualify to practice as a physician out of London.

"Medicus."—An M.R.C.S. is qualified to sign a certificate of lunacy.